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ACCkee 大研刀具

2025版

ACCkee大研

Higher! Productivity Faster! Cutting Speed Longer! Tool Life

企业简介：

浙江甬岭数控刀具有限公司为国家高新科技企业，设计研发生产高端孔加工刀具-U钻，镗刀和深孔钻。

“甬岭”创立于1982年，2020年公司斥资近2亿建立数字化智能U钻生产基地，占地面积50余亩，建筑面积5万平方米.配备36条自动生产线，年产500万支U钻，40万套镗刀及枪钻。

公司拥有专业的研发中心和检测中心，是“专精特新”小巨人企业。产品主要出口欧洲，中东，美洲等30多个国家和地区。公司拥有近百项专利，参与多个国家级团体标准和行业标准的制定，拥有2项团体标准，通过ISO9001质量管理体系认证。

公司的目标是：成为全球高端孔加工刀具的研发者和引领者。

ABOUT US

ACCkee is a high-tech engineering group specialized in drilling and hard material technologies. Was established in 1983, covers an area of 80,000 square meters in Wenling, Zhejiang,China. And since then we fully dedicated to develop and produce boring tools，rapid drilling tools.

After 40 years of struggle, we are continuously improving and enlarging our product range for customers. we finally do the market through a distribution network covering Europe, Japan, Korea, Mid-East, Russia,India and more than 30 countries and areas.

In 2020, ACCkee invested 25 million USD to build the first phase of the project-a digital smart U drill production base, to start the project with an annual output of **5 million U drills and 400,000 sets of boring head.** It has more than 300 machining centers.

For product development we set up a lab for inspection according to the world standard. Such as German HAIMER Balancing Machine, Universal Tooling Microscope, CMM, direct-reading spectrometer, Metallographic analyzer and so on. Till now, all of equipment’s and testing means reached the international advanced level.

Your vision, our innovation

Boring head series: ϕ14-ϕ750 high-precision finish boring head, rough boring head, combined boring head;

Shallow hole drill series: ϕ8.5-ϕ100 SP/SO/SC, WC/WD/PDL

Deep hole drill series: 6D 7D 8D 9D 10D with centering adjustable drill

To fully adapt to the needs of your market, we will find the optimal solution for the demands. If our presentation of the standard tools in this catalogue does not fit your needs, please contact us to design and making special tools for your customized solution.

Our mission: To be the high-tech engineering group sepcialised in Drilling and Boring.


POL200D2S25
POL200D2S25

TDR-2 X D (Φ 10-60) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 2 D

Holder diameter 2D:Φ10~ 60.0mm

加工公差標準 -0.25~+0.25
Range of machining tolerance:-0.25~+0.25

最大加工深度 ℓ 2 × ΦDc
Drilling depth: 2xdiameter

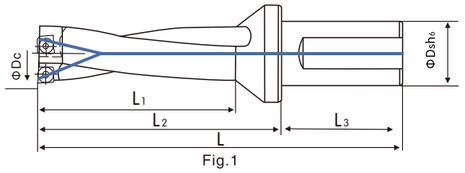


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
10	20	2D10-22SP04	●	85.5	22	35.5	44	SP..04T102	0.2
10.5		2D10.5-23SP04	●	86.5	22	35.5			0.2
11		2D11-24SP04	●	87.5	24	36.5			0.2
11.5		2D11.5-24SP04	●	88	24	38			0.2
12		2D12-26SP04	●	90	25	40			0.2
12.5		2D12.5-27SP04	●	93	27	43			0.2
13	20 / 25	2D13-29SP05	●	88	29	44	44 / 56	SP..050204	0.2
13.5		2D13.5-30SP05	●	89	30	45			0.2
14		2D14-31SP05	●	90	31	46			0.2
14.5		2D14.5-32SP05	●	91	32	47			0.2
15		2D15-33SP05	●	92	33	48			0.2
15.5		2D15.5-34SP05	●	93	34	49			0.2
16		2D16-35SP06	●	94	35	50		SP..060204	0.2
16.5		2D16.5-36SP06	●	95	36	51			0.2
17		2D17-37SP06	●	96	37	52			0.2
17.5	25	2D17.5-38SP06	●	109	38	53	56		0.2
18		2D18-39SP06	●	110	39	54			0.3
18.5		2D18.5-40SP06	●	111	40	55			0.3
19		2D19-41SP06	●	112	41	56			0.3
19.5		2D19.5-42SP06	●	113	42	57			0.3
20		2D20-43SP06	●	114	43	58			0.3
20.5		2D20.5-44SP06	●	115	44	59			0.3
21		2D21-45SP06	●	116	45	60			0.3
21.5		2D21.5-46SP06	●	117	46	61			0.3
22		2D22-47SP07	●	118	47	62		SP..07T308	0.4
22.5		2D22.5-48SP07	●	119	48	63			0.4
23		2D23-49SP07	●	123	49	67			0.4
23.5		2D23.5-50SP07	●	124	50	68			0.4
24		2D24-51SP07	●	125	51	69			0.4
24.5		2D24.5-52SP07	●	126	52	70			0.4
25		2D25-53SP07	●	127	53	71			0.4
25.5	32	2D25.5-54SP07	●	134	54	74	60		0.6
26		2D26-55SP07	●	135	55	75			0.6
26.5		2D26.5-56SP07	●	136	56	76			0.6
27		2D27-57SP07	●	137	57	77			0.6
27.5		2D27.5-58SP07	●	138	58	78			0.6
28		2D28-59SP07/09	●	139	59	79		SP..07T308	0.6
28.5		2D28.5-60SP07/09	●	140	60	80		SP..090408	0.6
29		2D29-62SP09	●	143	62	83		SP..090408	0.7
29.5		2D29.5-63SP09	●	144	63	84			0.7
30		2D30-64SP09	●	148	64	88			0.7
30.5		2D30.5-65SP09	●	149	65	89			0.7
31		2D31-66SP09	●	150	66	90			0.7
31.5		2D31.5-67SP09	●	151	67	91			0.7
32		2D32-68SP09	●	152	68	92			0.8
32.5		2D32.5-69SP09	●	153	69	93			0.8
33		2D33-70SP09	●	154	70	94			0.8
33.5		2D33.5-71SP09	●	155	71	95			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
34	32	2D34-72SP09/11	●	156	72	96	60	SP..090408	0.8
34.5		2D34.5-73SP09/11	●	157	73	97		SP..110408	0.8
35		2D35-74SP11	●	158	74	98		SP..110408	0.8
35.5		2D35.5-75SP11	●	159	75	99			0.8
36		2D36-76SP11	●	160	76	100			0.9
36.5		2D36.5-77SP11	●	161	77	101			0.9
37		2D37-79SP11	●	169	79	109			0.9
37.5		2D37.5-80SP11	●	170	80	110			0.9
38		2D38-81SP11	●	171	81	111			0.9
38.5		2D38.5-82SP11	●	172	82	112			0.9
39		2D39-83SP11	●	173	83	113			1.0
39.5		2D39.5-84SP11	●	174	84	114			1.1
40	40	2D40-85SP11	●	185	85	115	70		1.1
40.5		2D40.5-86SP11	○	186	86	116			1.1
41		2D41-87SP11	○	187	87	117		SP..140512	1.1
41.5		2D41.5-88SP11	○	188	88	118			1.1
42		2D42-89SP14	○	189	89	119			1.1
42.5		2D42.5-90SP14	○	190	90	120			1.3
43		2D43-91SP14	○	191	91	121			1.5
43.5		2D43.5-92SP14	○	192	92	122			1.5
44		2D44-93SP14	○	193	93	123			1.6
44.5		2D44.5-94SP14	○	194	94	124			1.6
45		2D45-95SP14	○	195	95	125			1.7
45.5		2D45.5-96SP14	○	196	96	126			1.7
46		2D46-97SP14	○	197	97	127			1.7
46.5		2D46.5-98SP14	○	198	98	128			1.8
47		2D47-99SP14	○	199	99	129			1.8
47.5		2D47.5-100SP14	○	200	100	130			1.8
48		2D48-101SP14	○	201	101	131			1.8
48.5		2D48.5-102SP14	○	202	102	132			1.8
49		2D49-103SP14	○	203	103	133			1.9
49.5		2D49.5-105SP14	○	204	104	134			1.9
50		2D50-105SP14	○	205	105	135			1.9
51		2D51-107SP09	○	207	107	137			2.0
52		2D52-109SP09	○	209	109	139			2.0
53		2D53-111SP09	○	211	111	141			2.1
54		2D54-113SP09	○	213	113	143			2.2
55		2D55-115SP09	○	215	115	145		SP..090408	2.3
56		2D56-120SP09	○	222	120	152			2.4
57		2D57-122SP09	○	224	122	154			2.5
58		2D58-124SP09	○	226	124	156			2.6
59		2D59-126SP09	○	228	126	158			2.7
60		2D60-128SP09	○	230	128	160			2.8

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

TDR-3 X D (Φ 10-60) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 3 D

Holder diameter 3D:Φ10 ~ 60.0mm

加工公差標準 -0.25~+0.25
Range of machining tolerance:-0.25~+0.25

最大加工深度 ℓ 3 × ΦDc
Drilling depth: 3xdiameter

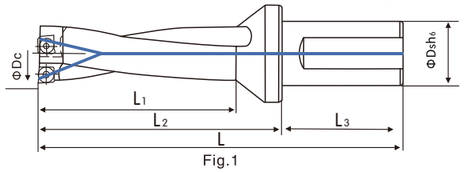


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
10	20	3D10-32SP04	●	97	32	47	44	SP..04T102	0.2
10.5		3D10.5-34SP04	●	97.5	34	47.5			0.2
11		3D11-34SP04	●	98.5	34	48.5			0.2
11.5		3D11.5-37SP04	●	100	37	50			0.2
12		3D12-38SP04	●	102	38	52			0.2
12.5		3D12.5-41SP04	●	105	41	55			0.2
13	20 / 25	3D13-42SP05	●	101	42	57	44 / 56	SP..050204	0.2
13.5		3D13.5-44SP05	●	103	44	59			0.2
14		3D14-45SP05	●	104	45	60			0.2
14.5		3D14.5-47SP05	●	106	47	62			0.2
15		3D15-48SP05	●	107	48	63			0.2
15.5		3D15.5-50SP05	●	109	50	65			0.2
16		3D16-51SP06	●	110	51	66			0.2
16.5		3D16.5-53SP06	●	112	53	68			0.2
17		3D17-54SP06	●	113	54	69			0.2
17.5	25	3D17.5-56SP06	●	127	56	71	56	SP..060204	0.2
18		3D18-57SP06	●	128	57	72			0.3
18.5		3D18.5-59SP06	●	130	59	74			0.3
19		3D19-60SP06	●	131	60	75			0.3
19.5		3D19.5-62SP06	●	133	62	77			0.3
20		3D20-63SP06	●	134	63	78			0.3
20.5		3D20.5-65SP06	●	136	65	80			0.3
21		3D21-66SP06	●	137	66	81			0.3
21.5		3D21.5-68SP06	●	139	68	83			0.3
22		3D22-69SP07	●	140	69	84		SP..07T308	0.4
22.5		3D22.5-71SP07	●	142	71	86			0.4
23		3D23-72SP07	●	146	72	90			0.4
23.5		3D23.5-74SP07	●	148	74	92			0.4
24		3D24-75SP07	●	149	75	93			0.4
24.5		3D24.5-77SP07	●	151	77	95			0.4
25		3D25-78SP07	●	152	78	96			0.4
25.5	32	3D25.5-80SP07	●	160	80	100	60		0.6
26		3D26-81SP07	●	161	81	101			0.6
26.5		3D26.5-83SP07	●	163	83	103			0.6
27		3D27-84SP07	●	164	84	104			0.6
27.5		3D27.5-86SP07	●	166	86	106			0.6
28		3D28-87SP07/09	●	167	87	107		SP..07T308	0.6
28.5		3D28.5-89SP07/09	●	169	89	109		SP..090408	0.6
29		3D29-91SP09	●	172	91	112		SP..090408	0.7
29.5		3D29.5-93SP09	●	174	93	114			0.7
30		3D30-94SP09	●	178	94	118			0.7
30.5		3D30.5-96SP09	●	180	96	120			0.7
31		3D31-97SP09	●	181	97	121			0.7
31.5		3D31.5-99SP09	●	183	99	123			0.7
32		3D32-100SP09	●	184	100	124			0.8
32.5		3D32.5-102SP09	●	186	102	126			0.8
33		3D33-103SP09	●	187	103	127			0.8
33.5		3D33.5-105SP09	●	189	105	129			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
34	32	3D34-106SP09/11	●	190	106	130	60	SP..090408	0.8
34.5		3D34.5-108SP09/11	●	192	108	132		SP..110408	0.8
35		3D35-109SP11	●	193	109	133		SP..110408	0.8
35.5		3D35.5-111SP11	●	195	111	135			0.8
36		3D36-112SP11	●	196	112	136			0.9
36.5		3D36.5-114SP11	●	198	114	138			0.9
37		3D37-116SP11	●	206	116	146			0.9
37.5		3D37.5-181SP11	●	208	118	148			0.9
38		3D38-119SP11	●	209	119	149			0.9
38.5		3D38.5-121SP11	●	211	121	151			0.9
39		3D39-122SP11	●	212	122	152			1.0
39.5		3D39.5-124SP11	●	214	124	154			1.1
40	40	3D40-125SP11	●	225	125	155	70		1.1
40.5		3D40.5-127SP11	○	227	127	157			1.1
41		3D41-128SP11	○	228	128	158			1.1
41.5		3D41.5-129SP11	○	229	129	159			1.1
42		3D42-131SP14	○	231	131	161			1.1
42.5		3D42.5-133SP14	○	233	133	163			1.3
43		3D43-134SP14	○	234	134	164			1.5
43.5		3D43.5-136SP14	○	236	136	166			1.5
44		3D44-137SP14	○	237	137	167			1.6
44.5		3D44.5-137SP14	○	237	137	167			1.6
45		3D45-140SP14	○	240	140	170			1.7
45.5		3D45.5-142SP14	○	242	142	172		SP..140512	1.7
46		3D46-143SP14	○	243	143	173			1.7
46.5		3D46.5-145SP14	○	245	145	175			1.8
47		3D47-146SP14	○	246	146	176			1.8
47.5		3D47.5-146SP14	○	246	146	176			1.8
48		3D48-149SP14	○	249	149	179			1.8
48.5		3D48.5-152SP14	○	252	152	182			1.8
49		3D49-152SP14	○	252	152	182			1.9
49.5		3D49.5-155SP14	○	255	155	185			1.9
50		3D50-155SP14	○	255	155	185			1.9
51		3D51-158SP09	○	258	158	188			2.4
52		3D52-161SP09	○	261	161	191			2.5
53		3D53-164SP09	○	264	164	194			2.6
54		3D54-167SP09	○	267	167	197			2.7
55		3D55-170SP09	○	270	170	200		SP..090408	2.8
56		3D56-176SP09	○	278	176	208			2.8
57		3D57-179SP09	○	281	179	211			3.0
58		3D58-182SP09	○	284	182	214			3.2
59		3D59-185SP09	○	287	185	217			3.3
60		3D60-188SP90	○	290	188	220			3.3

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SP	8.5-9.5	SP03	M1.8	X	3.6	T6
	10-12.5	SP04	M1.8	X	4	T6
	13-14.5	SP05	M2	X	4	T6

TDR-4 X D (Φ 11.5-60) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 4 D

Holder diameter 4D:Φ11.5 ~ 60.0mm

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ 4 × ΦDc
Drilling depth: 4xdiameter

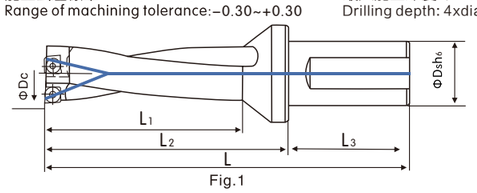


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
11.5	20	4D11.5-47SP04	●	111	47	61	44	SP..04T102	0.2
12		4D12-50SP04	●	115	50	65			0.2
12.5		4D12.5-52SP04	●	117	52	67			0.2
13	20 / 25	4D13-55SP05	●	114	55	70	44 / 56	SP..050204	0.2
13.5		4D13.5-57SP05	●	116	57	72			0.2
14		4D14-59SP05	●	118	59	74			0.2
14.5		4D14.5-61SP05	●	120	61	76			0.2
15		4D15-63SP05	●	122	63	78			0.2
15.5		4D15.5-65SP05	●	124	65	80			0.2
16		4D16-67SP06	●	126	67	82		SP..060204	0.2
16.5		4D16.5-69SP06	●	128	69	84			0.2
17		4D17-71SP06	●	130	71	86			0.2
17.5	25	4D17.5-73SP06	●	144	73	88	56		0.2
18		4D18-75SP06	●	146	75	90			0.3
18.5		4D18.5-77SP06	●	148	77	92			0.3
19		4D19-79SP06	●	150	79	94			0.3
19.5		4D19.5-81SP06	●	152	81	96			0.3
20		4D20-83SP06	●	154	83	98			0.3
20.5		4D20.5-85SP06	●	156	85	100			0.3
21		4D21-87SP06	●	158	87	102			0.3
21.5		4D21.5-89SP06	●	160	89	104			0.3
22		4D22-91SP07	●	162	91	106		SP..07T308	0.4
22.5		4D22.5-93SP07	●	164	93	108			0.4
23		4D23-95SP07	●	169	95	113			0.4
23.5		4D23.5-97SP07	●	171	97	115			0.4
24		4D24-99SP07	●	173	99	117			0.4
24.5		4D24.5-101SP07	●	175	101	119			0.4
25		4D25-103SP07	●	177	103	121			0.4
25.5	32	4D25.5-105SP07	●	185	105	125	60		0.6
26		4D26-107SP07	●	187	107	127			0.6
26.5		4D26.5-109SP07	●	189	109	129			0.6
27		4D27-111SP07	●	191	111	131			0.6
27.5		4D27.5-113SP07	●	193	113	133			0.6
28		4D28-115SP07/09	●	195	115	135		SP..07T308	0.6
28.5		4D28.5-117SP07/09	●	197	117	137		SP..090408	0.6
29		4D29-120SP09	●	201	120	141		SP..090408	0.7
29.5		4D29.5-122SP09	●	203	122	143			0.7
30		4D30-124SP09	●	208	124	148			0.7
30.5		4D30.5-126SP09	●	210	126	150			0.7
31		4D31-128SP09	●	212	128	152			0.7
31.5		4D31.5-130SP09	●	214	130	154			0.7
32		4D32-132SP09	●	216	132	156			0.8
32.5		4D32.5-134SP09	●	218	134	158			0.8
33		4D33-136SP09	●	220	136	160			0.8
33.5		4D33.5-138SP09	●	222	138	162			0.8
34		4D34-140SP09/11	●	224	140	164		SP..090408	0.8
34.5		4D34.5-142SP09/11	●	226	142	166		SP..110408	0.8
35		4D35-144SP11	●	228	144	168		SP..110408	0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
35.5	32	4D35.5-146SP11	●	230	146	170	60	SP..110408	0.8
36		4D36-148SP11	●	232	148	172			0.9
36.5		4D36.5-150SP11	●	236	150	174			0.9
37		4D37-153SP11	●	243	153	183			0.9
37.5		4D37.5-155SP11	●	245	155	185			0.9
38		4D38-157SP11	●	247	157	187			0.9
38.5		4D38.5-159SP11	●	249	159	189			0.9
39		4D39-161SP11	●	251	161	191			1.0
39.5		4D39.5-163SP11	●	253	163	193			1.1
40	40	4D40-165SP11	●	265	165	195	70		1.1
40.5		4D40.5-167SP11	○	267	167	197			1.1
41		4D41-169SP11	○	269	169	199			1.1
41.5		4D41.5-171SP11	○	271	171	201		SP..140512	1.1
42		4D42-173SP14	○	273	173	203			1.1
42.5		4D42.5-175SP14	○	275	175	205			1.3
43		4D43-177SP14	○	277	177	207			1.5
43.5		4D43.5-179SP14	○	279	179	209			1.5
44		4D44-181SP14	○	281	181	211			1.6
44.5		4D44.5-183SP14	○	283	183	213			1.6
45		4D45-185SP14	○	285	185	215			1.7
45.5		4D45.5-187SP14	○	287	187	217			1.7
46		4D46-189SP14	○	289	189	219			1.7
46.5		4D46.5-191SP14	○	291	191	221			1.7
47		4D47-193SP14	○	293	193	223			1.8
47.5		4D47.5-193SP14	○	295	195	225			1.8
48		4D48-197SP14	○	297	197	227			1.8
48.5		4D48.5-199SP14	○	299	199	229			1.8
49		4D49-201SP14	○	301	201	231			1.9
49.5		4D49.5-204SP14	○	303	203	233			1.9
50		4D50-205SP14	○	305	205	235			1.9
51		4D51-209SP09	○	309	209	239		SP..090408	2.9
52		4D52-213SP09	○	313	213	243			3.0
53		4D53-217SP09	○	317	217	247			3.1
54		4D54-221SP09	○	321	221	251			3.2
55		4D55-225SP09	○	325	225	255			3.3
56		4D56-232SP09	○	334	232	264			3.5
57		4D57-236SP09	○	338	236	268			3.7
58		4D58-240SP09	○	342	240	272			3.8
59		4D59-244SP09	○	346	244	276			4.0
60		4D60-248SP09	○	350	248	280			4.1

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SP	15-15.5	SP05	M2	X	5	T7
	16-21.5	SP06	M2.2	X	5	T7
	22-28.5	SP07	M2.5	X	6	T8

TDR-5 X D (Φ 13-60) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 5 D

Holder diameter 5D:Φ13.0 ~ 60.0mm

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ 5 × ΦDc
Drilling depth: 5xdiameter

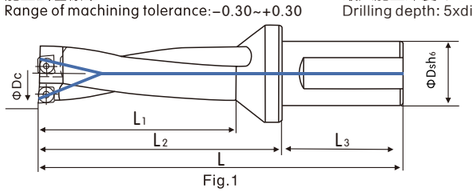


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13	20 / 25	5D13-68SP05	●	129	68	85	44 / 56	SP..050204	0.3
13.5		5D13.5-71SP05	●	131	71	87			0.3
14		5D14-73SP05	●	133	73	89			0.3
14.5		5D14.5-76SP05	●	135	76	91			0.3
15		5D15-78SP05	●	137	78	93			0.3
15.5		5D15.5-80SP05	●	140	80	95			0.3
16		5D16-83SP06	●	142	83	98		SP..060204	0.4
16.5		5D16.5-86SP06	●	145	86	101			0.4
17		5D17-88SP06	●	147	88	103			0.4
17.5		5D17.5-91SP06	●	162	91	106			0.4
18		5D18-93SP06	●	164	93	108			0.5
18.5		5D18.5-96SP06	●	167	96	111			0.5
19		5D19-98SP06	●	169	98	113			0.5
19.5		5D19.5-101SP06	●	172	101	116			0.5
20		5D20-106SP06	●	174	103	118			0.5
20.5		5D20.5-106SP06	●	177	106	121			0.5
21		5D21-108SP06	●	179	108	123			0.5
21.5		5D21.5-111SP06	●	182	111	126			0.5
22		5D22-113SP07	●	184	113	128		SP..07T308	0.5
22.5		5D22.5-116SP07	●	187	116	131			0.5
23		5D23-118SP07	●	192	118	136			0.6
23.5		5D23.5-121SP07	●	195	121	139			0.6
24		5D24-123SP07	●	197	123	141			0.6
24.5		5D24.5-126SP07	●	200	126	144			0.8
25		5D25-128SP07	●	202	128	146			0.8
25.5	32	5D25.5-131SP07	●	213	131	153	60		0.8
26		5D26-133SP07	●	216	133	156			0.8
26.5		5D26.5-136SP07	●	217	136	157			0.8
27		5D27-138SP07	●	218	138	158			0.8
27.5		5D27.5-141SP07	●	221	141	161			0.8
28		5D28-143SP07/09	●	223	143	163		SP..07T308	0.9
28.5		5D28.5-146SP07/09	●	226	146	166		SP..090408	0.9
29		5D29-149SP09	●	230	149	170			0.9
29.5		5D29.5-151SPO5	●	233	151	173		SP..090408	0.9
30		5D30-154SP09	●	238	154	178			1.0
30.5		5D30.5-157SP09	●	241	157	181			1.0
31		5D31-159SP09	●	243	159	183			1.0
31.5		5D31.5-162SP09	●	245	162	185			1.0
32		5D32-164SP09	●	248	164	188			1.1
32.5		5D32.5-167SP09	●	251	167	191			1.1
33		5D33-169SP09	●	253	169	193			1.1
33.5		5D33.5-172SP09	●	255	172	195			1.1
34		5D34-174SP11	●	258	174	198		SP..090408	1.2
34.5		5D34.5-177SP11	●	261	177	201		SP..110408	1.2
35		5D35-179SP11	●	263	179	203		SP..110408	1.2
35.5		5D35.5-182SP11	●	265	182	205			1.2

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
36	32	5D36-184SP11	●	268	184	208	60	SP..110408	1.3
36.5		5D36.5-187SP11	●	271	187	211			1.3
37		5D37-190SP11	●	280	190	220			1.3
37.5		5D37.5-193SP11	●	283	193	223			1.3
38		5D38-195SP11	●	285	195	225			1.4
38.5		5D38.5-198SP11	●	288	198	228			1.4
39		5D39-200SP11	●	290	200	230			1.9
39.5		5D39.5-203SP11	●	293	203	233			1.9
40	40	5D40-205SP11	●	305	205	235	70		1.9
40.5		5D40.5-207SP11	●	307	207	237			1.9
41		5D41-210SP11	●	310	210	240			2.0
41.5		5D41.5-212SP11	●	312	212	242			2.0
42		5D42-215SP14	●	315	215	245			2.1
42.5		5D42.5-217SP14	●	317	217	247			2.1
43		5D43-220SP14	●	320	220	250			2.2
43.5		5D43.5-223SP14	●	323	223	253			2.2
44		5D44-225SP14	●	325	225	255			2.3
44.5		5D44.5-225SP14	●	325	225	255			2.3
45		5D45-230SP14	●	330	230	260			2.4
45.5		5D45.5-232SP14	●	332	232	262		SP..140512	2.4
46		5D46-235SP14	●	335	235	265			2.5
46.5		5D46.5-235SP14	●	335	235	265			2.5
47		5D47-240SP14	●	340	240	270			2.6
47.5		5D47.5-240SP14	●	340	240	270			2.6
48		5D48-245SP14	●	345	245	275			2.7
48.5		5D48.5-250SP14	●	350	250	280			2.7
49		5D49-250SP14	●	350	250	280			2.8
49.5		5D49.5-252SP14	●	352	252	282			2.9
50		5D50-255SP14	●	355	255	285			3.0
51		5D51-260SP09	○	360	260	290		SP..090408	3.0
52		5D52-265SP09	○	365	265	295			3.1
53		5D53-270SP09	○	370	270	300			3.2
54		5D54-275SP09	○	375	275	305			3.3
55		5D55-280SP09	○	380	280	310			3.4
56		5D56-285SP09	○	385	285	315			3.6
57		5D57-290SP09	○	390	290	320			3.8
58		5D58-295SP09	○	395	295	325			3.9
59		5D59-300SP09	○	400	300	330			4.1
60		5D60-305SP09	○	405	305	335			4.2

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SP	29-34.5	SP09	M3.5	X	8.5	T15
	35-41.5	SP11	M4	X	10	T20
	42-50	SP14	M5	X	11	T20

TOP-2 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潜孔钻/ U 钻　2 D

Holder diameter 2D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.25~+0.25
Range of machining tolerance:-0.25~+0.25

最大加工深度 ℓ 2 × ΦDc
Drilling depth: 2xdiameter

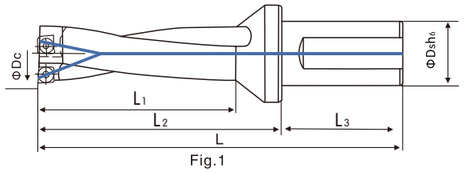


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13	20 / 25	2D13-29SOMT05	●	88	29	44	44 / 56	SOMT050204	0.2
13.5		2D13.5-30SOMT05	●	89	30	45			0.2
14		2D14-31SOMT05	●	90	31	46			0.2
14.5		2D14.5-32SOMT05	●	91	32	47			0.2
15		2D15-33SOMT05	●	92	33	48			0.2
15.5		2D15.5-34SOMT05	●	93	34	49			0.2
16		2D16-35SOMT05	●	94	35	50			0.2
16.5		2D16.5-36SOMT06	●	95	36	51		SOMT060204	0.2
17		2D17-37SOMT06	●	96	37	52			0.2
17.5	25	2D17.5-38SOMT06	●	109	38	53	56		0.2
18		2D18-39SOMT06	●	110	39	54			0.3
18.5		2D18.5-40SOMT06	●	111	40	55			0.3
19		2D19-41SOMT06	●	112	41	56			0.3
19.5		2D19.5-42SOMT07	●	113	42	57		SOMT070306	0.3
20		2D20-43SOMT07	●	114	43	58			0.3
20.5		2D20.5-44SOMT07	●	115	44	59			0.3
21		2D21-45SOMT07	●	116	45	60			0.3
21.5		2D21.5-46SOMT07	●	117	46	61			0.3
22		2D22-47SOMT07	●	118	47	62			0.4
22.5		2D22.5-48SOMT08	●	119	48	63		SOMT08T306	0.4
23		2D23-49SOMT08	●	123	49	67			0.4
23.5		2D23.5-50SOMT08	●	124	50	68			0.4
24		2D24-51SOMT08	●	125	51	69			0.4
24.5		2D24.5-52SOMT08	●	126	52	70			0.4
25		2D25-53SOMT08	●	127	53	71			0.4
25.5	32	2D25.5-54SOMT08	●	134	54	74	60		0.6
26		2D26-55SOMT08	●	135	55	75			0.6
26.5		2D26.5-56SOMT09	●	136	56	76		SOMT09T308	0.6
27		2D27-57SOMT09	●	137	57	77			0.6
27.5		2D27.5-58SOMT09	●	138	58	78			0.6
28		2D28-59SOMT09	●	139	59	79			0.6
28.5		2D28.5-60SOMT09	●	140	60	80			0.6
29		2D29-62SOMT09	●	143	62	83			0.7
29.5		2D29.5-63SOMT09	●	144	63	84			0.7
30		2D30-64SOMT09	●	148	64	88			0.7
30.5		2D30.5-65SOMT09	●	149	65	89			0.7
31		2D31-66SOMT09	●	150	66	90			0.7
31.5		2D31.5-67SOMT09	●	151	67	91			0.7
32		2D32-68SOMT11	●	152	68	92		SOMT11T308	0.8
32.5		2D32.5-69SOMT11	●	153	69	93			0.8
33		2D33-70SOMT11	●	154	70	94			0.8
33.5		2D33.5-71SOMT11	●	155	71	95			0.8
34		2D34-72SOMT11	●	156	72	96			0.8
34.5		2D34.5-73SOMT11	●	157	73	97			0.8
35		2D35-74SOMT11	●	158	74	98			0.8
35.5		2D35.5-75SOMT11	●	159	75	99			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
36	32	2D36-76SOMT11	●	160	76	100	60	SOMT11T308	0.9
36.5		2D36.5-77SOMT11	○	161	77	101			0.9
37		2D37-79SOMT13	○	169	79	109		SOMT130408	0.9
37.5		2D37.5-80SOMT13	○	170	80	110			0.9
38		2D38-81SOMT13	○	171	81	111			0.9
38.5		2D38.5-82SOMT13	○	172	82	112			0.9
39		2D39-83SOMT13	○	173	83	113			1.0
39.5		2D39.5-84SOMT13	○	174	84	114			1.1
40	40	2D40-85SOMT13	○	185	85	115	70		1.1

SO鑽頭記號
Part number structure of SO type holder

C20 - 2D　14 - 45　SOMT05

- C20: 接口尺寸 Shank Diameter
- 2D: 倍徑 Drill Length
- 14: 鑽頭尺寸 Diameter
- 45: 長度 Length
- SOMT05: 刀片型號 Inserts type

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SO	13-16	SO05	M2	X	5	T6
	16.5-19	SO06	M2.2	X	5	T7
	19.5-22	SO07	M2.2	X	5	T7
	22.5-26	SO08	M2.5	X	6	T8
	26.5-31.5	SO09	M3.5	X	8.5	T15
	32-36.5	SO11	M3.5	X	8.5	T15
	37-43	SO13	M4	X	10	T20
	44-50	SO15	M5	X	11	T20

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品

TOP-3 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潜孔钻/ U 钻 3 D

Holder diameter 3D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.25~+0.25
Range of machining tolerance:-0.25~+0.25

最大加工深度 ℓ 3 × ΦDc
Drilling depth: 3xdiameter

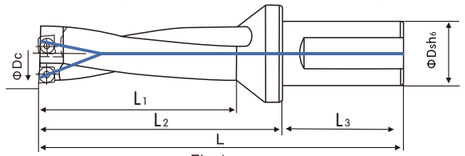


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13		3D13-42SOMT05	●	101	42	57			0.2
13.5		3D13.5-44SOMT05	●	103	44	59			0.2
14		3D14-45SOMT05	●	104	45	60			0.2
14.5	20	3D14.5-47SOMT05	●	106	47	62	44	SOMT050204	0.2
15	/	3D15-48SOMT05	●	107	48	63	/		0.2
15.5	25	3D15.5-50SOMT05	●	109	50	65	56		0.2
16		3D16-51SOMT05	●	110	51	66			0.2
16.5		3D16.5-53SOMT06	●	112	53	68			0.2
17		3D17-54SOMT06	●	113	54	69			0.2
17.5		3D17.5-56SOMT06	●	127	56	71			0.2
18		3D18-57SOMT06	●	128	57	72		SOMT060204	0.3
18.5		3D18.5-59SOMT06	●	130	59	74			0.3
19		3D19-60SOMT06	●	131	60	75			0.3
19.5		3D19.5-62SOMT07	●	133	62	77			0.3
20		3D20-63SOMT07	●	134	63	78			0.3
20.5		3D20.5-65SOMT07	●	136	65	80			0.3
21		3D21-66SOMT07	●	137	66	81		SOMT070306	0.3
21.5	25	3D21.5-68SOMT07	●	139	68	83	56		0.3
22		3D22-69SOMT07	●	140	69	84			0.4
22.5		3D22.5-71SOMT08	●	142	71	86			0.4
23		3D23-72SOMT08	●	146	72	90			0.4
23.5		3D23.5-74SOMT08	●	148	74	92			0.4
24		3D24-75SOMT08	●	149	75	93		SOMT08T306	0.4
24.5		3D24.5-77SOMT08	●	151	77	95			0.4
25		3D25-78SOMT08	●	152	78	96			0.4
25.5		3D25.5-80SOMT08	●	160	80	100			0.6
26		3D26-81SOMT08	●	161	81	101			0.6
26.5		3D26.5-83SOMT09	●	163	83	103			0.6
27		3D27-84SOMT09	●	164	84	104			0.6
27.5		3D27.5-86SOMT09	●	166	86	106			0.6
28		3D28-87SOMT09	●	167	87	107			0.6
28.5		3D28.5-89SOMT09	●	169	89	109			0.6
29		3D29-91SOMT09	●	172	91	112		SOMT09T308	0.7
29.5		3D29.5-93SOMT09	●	174	93	114			0.7
30		3D30-94SOMT09	●	178	94	118			0.7
30.5	32	3D30.5-96SOMT09	●	180	96	120	60		0.7
31		3D31-97SOMT09	●	181	97	121			0.7
31.5		3D31.5-99SOMT09	●	183	99	123			0.7
32		3D32-100SOMT11	●	184	100	124			0.8
32.5		3D32.5-102SOMT11	●	186	102	126			0.8
33		3D33-103SOMT11	●	187	103	127			0.8
33.5		3D33.5-105SOMT11	●	189	105	129		SOMT11T308	0.8
34		3D34-106SOMT11	●	190	106	130			0.8
34.5		3D34.5-108SOMT11	●	192	108	132			0.8
35		3D35-111SOMT11	●	193	109	133			0.8
35.5		3D35.5-111SOMT11	●	195	111	135			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
36		3D36-112SOMT11	●	196	112	136		SOMT11T308	0.9
36.5		3D36.5-114SOMT11	○	198	114	138			0.9
37		3D37-136SOMT13	○	206	116	146			0.9
37.5	32	3D37.5-181SOMT13	○	208	118	148	60	SOMT130408	0.9
38		3D38-139SOMT13	○	209	119	149			0.9
38.5		3D38.5-121SOMT13	○	211	121	151			0.9
39		3D39-122SOMT13	○	212	122	152			1.0
39.5		3D39.5-124SOMT13	○	214	124	154			1.1
40	40	3D40-125SOMT13	○	225	125	155	70		1.1

SO鑽頭記號
Part number structure of SO type holder

C20 - 3D 14 - 45 SOMT05

接口尺寸 Shank Diameter | 倍徑 Drill Length | 鑽頭尺寸 Diameter | 長度 Length | 刀片型號 Inserts type

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SO	13-16	SO05	M2	X	5	T6
	16.5-19	SO06	M2.2	X	5	T7
	19.5-22	SO07	M2.2	X	5	T7
	22.5-26	SO08	M2.5	X	6	T8
	26.5-31.5	SO09	M3.5	X	8.5	T15
	32-36.5	SO11	M3.5	X	8.5	T15
	37-43	SO13	M4	X	10	T20
	44-50	SO15	M5	X	11	T20

● Mark:Standard stock item,
No mark:Made to order item.

◎● 表示库存 ○ 表示库存预定品

TOP-4 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潜孔钻/ U 钻 4 D

Holder diameter 4D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ 4 × ΦDc
Drilling depth: 4xdiameter

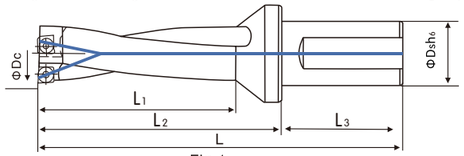


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13		4D13-55SOMT05	●	114	55	70			0.2
13.5		4D13.5-57SOMT05	●	116	57	72			0.2
14		4D14-59SOMT05	●	118	59	74			0.2
14.5	20	4D14.5-61SOMT05	●	120	61	76	44	SOMT050204	0.2
15	/	4D15-63SOMT05	●	122	63	78	/		0.2
15.5	25	4D15.5-65SOMT05	●	124	65	80	56		0.2
16		4D16-67SOMT05	●	126	67	82			0.2
16.5		4D16.5-69SOMT06	●	128	69	84			0.2
17		4D17-71SOMT06	●	130	71	86			0.2
17.5		4D17.5-73SOMT06	●	144	73	88		SOMT060204	0.2
18		4D18-75SOMT06	●	146	75	90			0.3
18.5		4D18.5-77SOMT06	●	148	77	92			0.3
19		4D19-79SOMT06	●	150	79	94			0.3
19.5		4D19.5-81SOMT07	●	152	81	96			0.3
20		4D20-83SOMT07	●	154	83	98			0.3
20.5		4D20.5-85SOMT07	●	156	85	100		SOMT070306	0.3
21		4D21-87SOMT07	●	158	87	102			0.3
21.5	25	4D21.5-89SOMT07	●	160	89	104	56		0.3
22		4D22-91SOMT07	●	162	91	106			0.4
22.5		4D22.5-93SOMT08	●	164	93	108			0.4
23		4D23-95SOMT08	●	169	95	113			0.4
23.5		4D23.5-97SOMT08	●	171	97	115			0.4
24		4D24-99SOMT08	●	173	99	117		SOMT08T306	0.4
24.5		4D24.5-101SOMT08	●	175	101	119			0.4
25		4D25-103SOMT08	●	177	103	121			0.4
25.5		4D25.5-105SOMT08	●	185	105	125			0.6
26		4D26-107SOMT08	●	187	107	127			0.6
26.5		4D26.5-109SOMT09	●	189	109	129			0.6
27		4D27-111SOMT09	●	191	111	131			0.6
27.5		4D27.5-113SOMT09	●	193	113	133			0.6
28		4D28-115SOMT09	●	195	115	135			0.6
28.5		4D28.5-117SOMT09	●	197	117	137			0.6
29		4D29-120SOMT09	●	201	120	141		SOMT09T308	0.7
29.5		4D29.5-122SOMT09	●	203	122	143			0.7
30		4D30-124SOMT09	●	208	124	148			0.7
30.5	32	4D30.5-126SOMT09	●	210	126	150	60		0.7
31		4D31-128SOMT09	●	212	128	152			0.7
31.5		4D31.5-130SOMT09	●	214	130	154			0.7
32		4D32-132SOMT11	●	216	132	156			0.8
32.5		4D32.5-134SOMT11	●	218	134	158			0.8
33		4D33-136SOMT11	●	220	136	160			0.8
33.5		4D33.5-138SOMT11	●	222	138	162		SOMT11T308	0.8
34		4D34-140SOMT11	●	224	140	164			0.8
34.5		4D34.5-142SOMT11	●	226	142	166			0.8
35		4D35-144SOMT11	●	228	144	168			0.8
35.5		4D35.5-146SOMT11	●	230	146	170			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
36		4D36-148SOMT11	●	232	148	172		SOMT11T308	0.9
36.5		4D36.5-150SOMT11	○	236	150	174			0.9
37		4D37-153SOMT13	○	243	153	183			0.9
37.5	32	4D37.5-155SOMT13	○	245	155	185	60		0.9
38		4D38-157SOMT13	○	247	157	187			0.9
38.5		4D38.5-159SOMT13	○	249	159	189		SOMT130408	0.9
39		4D39-161SOMT13	○	251	161	191			1.0
39.5		4D39.5-163SOMT13	○	253	163	193			1.1
40	40	4D40-165SOMT13	○	265	165	195	70		1.1

SO鑽頭記號
Part number structure of SO type holder

C20 - 4D 14 - 59 SOMT05

接口尺寸 Shank Diameter | 倍徑 Drill Length | 鑽頭尺寸 Diameter | 長度 Length | 刀片型號 Inserts type

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SO	13-16	SO05	M2	X	5	T6
	16.5-19	SO06	M2.2	X	5	T7
	19.5-22	SO07	M2.2	X	5	T7
	22.5-26	SO08	M2.5	X	6	T8
	26.5-31.5	SO09	M3.5	X	8.5	T15
	32-36.5	SO11	M3.5	X	8.5	T15
	37-43	SO13	M4	X	10	T20
	44-50	SO15	M5	X	11	T20

● Mark:Standard stock item,
No mark:Made to order item.

◎● 表示库存 ○ 表示库存预定品

TOP-5 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潜孔钻/ U 钻 5 D

Holder diameter 5D: ϕ 16.0 ~ 40.0mm

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ5 × ΦDc
Drilling depth: 5xdiameter

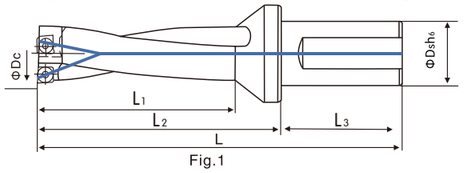


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
16	20	5D16-83SOMT05	●	142	83	98	44	SOMT050204	0.4
16.5	/	5D16.5-86SOMT06	●	145	86	101	/	SOMT060204	0.4
17	25	5D17-88SOMT06	●	147	88	103	56		0.4
17.5	25	5D17.5-91SOMT06	●	162	91	106	56		0.4
18		5D18-93SOMT06	●	164	93	108			0.5
18.5		5D18.5-96SOMT06	●	167	96	111			0.5
19		5D19-98SOMT06	●	169	98	113			0.5
19.5		5D19.5-101SOMT07	●	172	101	116		SOMT070306	0.5
20		5D20-107SOMT07	●	174	103	118			0.5
20.5		5D20.5-107SOMT07	●	177	106	121			0.5
21		5D21-108SOMT07	●	179	108	123			0.5
21.5		5D21.5-111SOMT07	●	182	111	126			0.5
22		5D22-113SOMT07	●	184	113	128			0.5
22.5		5D22.5-116SOMT08	●	187	116	131		SOMT08T306	0.5
23		5D23-118SOMT08	●	192	118	136			0.6
23.5		5D23.5-121SOMT08	●	195	121	139			0.6
24		5D24-123SOMT08	●	197	123	141			0.6
24.5		5D24.5-126SOMT08	●	200	126	144			0.8
25		5D25-128SOMT08	●	202	128	146			0.8
25.5	32	5D25.5-131SOMT08	●	213	131	153	60		0.8
26		5D26-133SOMT08	●	216	133	156			0.8
26.5		5D26.5-136SOMT09	●	217	136	159		SOMT09T308	0.8
27		5D27-138SOMT09	●	218	138	160			0.8
27.5		5D27.5-141SOMT09	●	221	141	161			0.8
28		5D28-143SOMT09	●	223	143	163			0.9
28.5		5D28.5-146SOMT09	●	226	146	166			0.9
29		5D29-149SOMT09	●	230	149	170			0.9
29.5		5D29.5-151SOMTO5	●	233	151	173			0.9
30		5D30-154SOMT09	●	238	154	178			1.0
30.5		5D30.5-157SOMT09	●	241	157	181			1.0
31		5D31-159SOMT09	●	243	159	183			1.0
31.5		5D31.5-162SOMT09	●	245	162	185			1.0
32		5D32-164SOMT11	●	248	164	188		SOMT11T308	1.1
32.5		5D32.5-167SOMT11	●	251	167	191			1.1
33		5D33-169SOMT11	●	253	169	193			1.1
33.5		5D33.5-172SOMT11	●	255	172	195			1.1
34		5D34-174SOMT11	●	258	174	198			1.2
34.5		5D34.5-177SOMT11	●	261	177	201			1.2
35		5D35-179SOMT11	●	263	179	203			1.2
35.5		5D35.5-182SOMT11	●	265	182	205			1.2
36		5D36-184SOMT11	○	268	184	208			1.3
36.5		5D36.5-187SOMT11	○	271	187	211			1.3
37		5D37-190SOMT13	○	280	190	220		SOMT130408	1.3
37.5		5D37.5-193SOMT13	○	283	193	223			1.3
38		5D38-195SOMT13	○	285	195	225			1.4
38.5		5D38.5-198SOMT13	○	288	198	228			1.4

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
39	32	5D39-200SOMT13	○	290	200	230	60	SOMT130408	1.9
39.5		5D39.5-203SOMT13	○	293	203	233			1.9
40	40	5D40-205SOMT13	○	305	205	235	70		1.9

SO鑽頭記號
Part number structure of type holder

C20 - 5D 16 - 88 SOMT05

- C20: 接口尺寸 Shank Diameter
- 5D: 倍徑 Drill Length
- 16: 鑽頭尺寸 Diameter
- 88: 長度 Length
- SOMT05: 刀片型號 Inserts type

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
SO	13-16	SO05	M2	X	5	T6
	16.5-19	SO06	M2.2	X	5	T7
	19.5-22	SO07	M2.2	X	5	T7
	22.5-26	SO08	M2.5	X	6	T8
	26.5-31.5	SO09	M3.5	X	8.5	T15
	32-36.5	SO11	M3.5	X	8.5	T15
	37-43	SO13	M4	X	10	T20
	44-50	SO15	M5	X	11	T20

● Mark:Standard stock item,
No mark:Made to order item.

◎● 表示库存 ○ 表示库存预定品

Customised Solution-0.2/0.3/0.4/0.7/0.8/0.9 (bottom hole of the thread)

非标/小数点螺纹底孔专用U钻-0.2/0.3/0.4/0.7/0.8/0.9

加工公差標準 -0.05 ~ +0.15
Range of machining tolerance:-0.05 ~ +0.15

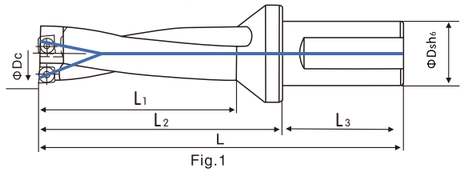


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item
8.8		KSD088-2D-S20-SP03
9		KSD090-2D-S20-SP03
9.3		KSD093-2D-S20-SP03
9.5		KSD095-2D-S20-SP03
10.5		KSD105-2D-S20-SP04
10.8		KSD108-2D-S20-SP04
11		KSD110-2D-S20-SP04
11.5		KSD115-2D-S20-SP04
12.5		KSD125-2D-S20-SP04
13		C20-2D13-29SP05
14.5		C20-2D14.5-32SP05
15		C20-2D15-33SP05
16	20	C20-2D16-35SP06
16.5		C20-2D16.5-36SP06
17		C20-2D17-37SP06
18		C20-2D18-39SP06
18.5		C20-2D18.5-40SP06
19		C20-2D19-41SP06
20		C20-2D20-43SP06
20.5		C20-2D20.5-44SP06
21		C20-2D21-45SP06
22		C20-2D22-47SP07
22.5		C20-2D22.5-48SP07
23		C20-2D23-49SP07
25		C20-2D25-53SP07
25.5		C32-2D25.5-54SP07
26		C32-2D26-55SP07
26.5		C32-2D26.5-56SP07
27	32	C32-2D27-57SP07
28		C32-2D28-59SP07
28.5		C32-2D28.5-60SP07
29		C32-2D29-62SP09

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item
13.3		C20-3D13.3-42SP05
14.8		C20-3D14.8-48SP05
15.8	20	C20-3D15.8-50SP05
16.3		C20-3D16.3-54SP06
16.8		C20-3D16.8-53SP06
17.3		C25-3D17.3-56SP06
19.8		C25-3D19.8-62SP06
20.8		C25-3D20.8-66SP06
21.7		C25-3D21.7-68SP06
21.8		C25-3D21.8-69SP07
22.7	25	C25-3D22.7-71SP07
22.8		C25-3D22.8-71SP07
23.2		C25-3D23.2-72SP07
23.3		C25-3D23.3-72SP07
23.8		C25-3D23.8-75SP07
24.3		C25-3D24.3-77SP07
24.8		C25-3D24.8-77SP07
23.3		C32-3D23.3-74SP07
26.7		C32-3D26.7-83SP07
26.8		C32-3D26.8-84SP07
27.2		C32-3D27.2-84SP07
27.3		C32-3D27.3-83SP07
27.7		C32-3D27.7-86SP07
27.8		C32-3D27.8-87SP09
27.9		C32-3D27.9-87SP09
28.3	32	C32-3D28.3-89SP09
28.7		C32-3D28.7-91SP09
28.8		C32-3D28.8-91SP09
28.9		C32-3D28.9-91SP09
29.2		C32-3D29.2-93SP09
29.3		C32-3D29.3-93SP09
29.8		C32-3D29.8-94SP09

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item
30.2		C32-3D30.2-94SP09
30.3		C32-3D30.3-94SP09
30.7		C32-3D30.7-96SP09
30.8		C32-3D30.8-97SP09
31.2		C32-3D31.2-97SP09
31.2		C32-3D31.2-96SP09
31.3		C32-3D31.3-99SP09
31.7		C32-3D31.7-100SP09
31.8		C32-3D31.8-100SP09
32.2		C32-3D32.2-100SP09
32.7		C32-3D32.7-103SP09
32.8		C32-3D32.8-103SP09
33.2		C32-3D33.2-103SP09
33.3		C32-3D33.3-105SP09
33.7		C32-3D33.7-105SP09
33.8	32	C32-3D33.8-106SP11
34.2		C32-3D34.2-106SP11
34.3		C32-3D34.3-106SP11
34.8		C32-3D34.8-109SP11
35.2		C32-3D35.2-109SP11
35.3		C32-3D35.3-108SP11
35.7		C32-3D35.7-111SP11
35.8		C32-3D35.8-112SP11
36.2		C32-3D36.2-112SP11
36.3		C32-3D36.3-114SP11
36.7		C32-3D36.7-116SP11
36.8		C32-3D36.8-116SP11
37.2		C32-3D37.2-116SP11
37.3		C32-3D37.3-118SP11
37.7		C32-3D37.7-118SP11
38.2		C32-3D38.2-119SP11
38.3		C32-3D38.3-119SP11

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item
38.7		C32-3D38.7-121SP11
38.8		C32-3D38.8-122SP11
39.2	32	C32-3D39.2-122SP11
39.3		C32-3D39.3-124SP11
39.7		C32-3D39.7-124SP11
39.8		C40-3D39.8-125SP11
40.2		C40-3D40.2-125SP11
40.7		C40-3D40.7-127SP11
40.8		C40-3D40.8-128SP11
41.2		C40-3D41.2-128SP11
41.3		C40-3D41.3-128SP11
41.7		C40-3D41.7-129SP11
41.8		C40-3D41.8-131SP14
42.2		C40-3D42.2-131SP14
42.8	40	C40-3D42.8-134SP14
42.7		C40-3D42.7-134SP14
43.7		C40-3D43.7-137SP14
43.8		C40-3D43.8-137SP14
44.7		C40-3D44.7-137SP14
44.8		C40-3D44.8-140SP14
45.2		C40-3D45.2-140SP14
46.2		C40-3D46.2-143SP14
48.2		C40-3D48.2-149SP14
49.2		C40-3D49.2-152SP14
50.2		C40-3D50.2-155SP14

◎ 刀片详细参数见前页

WC－2XD（Φ10-80）Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻　2 D

Holder diameter 2D:Φ10.0～80.0mm

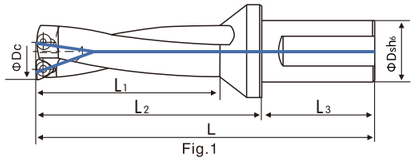


Fig.1

加工公差標準 －0.25~+0.25
Range of machining tolerance:－0.25~+0.25

最大加工深度 ℓ 2 × ΦDc
Drilling depth: 2xdiameter

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
10	20	2D10-22WC02	●	85.5	22	35.5	44	WC..020104	0.2
10.5		2D10.5-23WC02	●	86.5	22	35.5			0.2
11		2D11-24WC02	●	87.5	24	36.5			0.2
11.5		2D11.5-24WC02	●	88	24	38			0.2
12		2D12-26WC02	●	90	25	40			0.2
12.5		2D12.5-27WC02	●	93	27	43			0.2
13	20 / 25	2D13-29WC02	●	88	29	44	44 / 56		0.2
13.5		2D13.5-30WC02	●	89	30	45			0.2
14		2D14-31WC02/03	●	90	31	46		WC..020104	0.2
14.5		2D14.5-32WC02/03	●	91	32	47		WC..030208	0.2
15		2D15-33WC03	●	92	33	48		WC..030208	0.2
15.5		2D15.5-34WC03	●	93	34	49			0.2
16		2D16-35WC03	●	94	35	50			0.2
16.5		2D16.5-36WC03	●	95	36	51			0.2
17		2D17-37WC03	●	96	37	52			0.2
17.5	25	2D17.5-38WC03	●	109	38	53	56		0.2
18		2D18-39WC03	●	110	39	54			0.3
18.5		2D18.5-40WC03	●	111	40	55			0.3
19		2D19-41WC03	●	112	41	56			0.3
19.5		2D19.5-42WC03	●	113	42	57			0.3
20		2D20-43WC03	●	114	43	58			0.3
20.5		2D20.5-44WC03	●	115	44	59			0.3
21		2D21-45WC04	●	116	45	60		WC..040208	0.3
21.5		2D21.5-46WC04	●	117	46	61			0.3
22		2D22-47WC04	●	118	47	62			0.4
22.5		2D22.5-48WC04	●	119	48	63			0.4
23		2D23-49WC04	●	123	49	67			0.4
23.5		2D23.5-50WC04	●	124	50	68			0.4
24		2D24-51WC04	●	125	51	69			0.4
24.5		2D24.5-52WC04	●	126	52	70			0.4
25		2D25-53WC05	●	127	53	71		WC..050308	0.4
25.5	32	2D25.5-54WC05	●	134	54	74	60		0.6
26		2D26-55WCO5	●	135	55	75			0.6
26.5		2D26.5-56WC05	●	136	56	76			0.6
27		2D27-57WC05	●	137	57	77			0.6
27.5		2D27.5-58WC05	●	138	58	78			0.6
28		2D28-59WC05	●	139	59	79			0.6
28.5		2D28.5-60WC05	●	140	60	80			0.6
29		2D29-62WC05	●	143	62	83			0.7
29.5		2D29.5-63WCO5	●	144	63	84			0.7
30		2D30-64WC05	●	148	64	88			0.7
30.5		2D30.5-65WC05	●	149	65	89			0.7
31		2D31-66WC06	●	150	66	90		WC..06T308	0.7
31.5		2D31.5-67W06	●	151	67	91			0.7
32		2D32-68WC06	●	152	68	92			0.8
32.5		2D32.5-69WCO6	●	153	69	93			0.8
33		2D33-70WC06	●	154	70	94			0.8
33.5		2D33.5-71WC06	●	155	71	95			0.8
34		2D34-72WC06	●	156	72	96			0.8
34.5		2D34.5-73WC06	●	157	73	97			0.8
35		2D35-74WC06	●	158	74	98			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
35.5	32	2D35.5-75WC06	●	159	75	99	60	WC..06T308	0.8
36		2D36-76WC06	●	160	76	100			0.9
36.5		2D36.5-77WC06	●	161	77	101			0.9
37		2D37-79WC06	●	169	79	109			0.9
37.5		2D37.5-80WC06	●	170	80	110			0.9
38		2D38-81WC06	●	171	81	111			0.9
38.5		2D38.5-82WC06	●	172	82	112			0.9
39		2D39-83WC06	●	173	83	113			1.0
39.5		2D39.5-84WC06	●	174	84	114			1.1
40	40	2D40-85WC06	●	185	85	115	70		1.1
41		2D41-87WC06	●	187	87	117			1.1
42		2D42-89WC08	●	189	89	119			1.1
43		2D43-91WC08	●	191	91	121			1.5
44		2D44-93WC08	●	193	93	123			1.6
45		2D45-95WC08	●	195	95	125			1.7
46		2D46-97WC08	●	197	97	127			1.7
47		2D47-99WC08	●	199	99	129			1.8
48		2D48-101WC08	●	201	101	131			1.8
49		2D49-103WC08	●	203	103	133			1.9
50		2D50-105WC08	●	205	105	135			1.9
51		2D51-107WC08	●	207	107	137		WC..080412	2.0
52		2D52-109WC08	●	209	109	139			2.0
53		2D53-111WC08	●	211	111	141			2.1
54		2D54-113WC08	●	213	113	143			2.2
55		2D55-115WC08	●	215	115	145			2.3
56		2D56-120WC08	●	222	120	152			2.4
57		2D57-122WC08	●	224	122	154			2.5
58		2D58-124WC08	●	226	124	156			2.6
59		2D59-126WC08	●	228	126	158			2.7
60		2D60-128WC08	●	230	128	160			2.8
61		2D61-130WC06	●	232	130	162		WC..06T308	
62		2D62-132WC06	●	234	132	164			
63		2D63-134WC06	●	236	134	166			
64		2D64-136WC06	●	238	136	168			
65		2D65-138WC06	●	240	138	170			
66		2D66-140WC06	●	242	140	172			
67		2D67-142WC06	●	244	142	174			
68		2D68-144WC06	●	246	144	176			
69		2D69-146WC06	●	248	146	178			
70		2D70-148WC06	●	250	148	180			
71		2D71-150WC06	●	252	150	182			
72		2D72-152WC06	●	254	152	184			
73		2D73-154WC06	●	256	154	186			
74		2D74-156WC06	●	258	156	188			
75		2D75-158WC06	●	260	158	190			
76		2D76-160WC06	●	262	160	192			
77		2D77-162WC06	●	264	162	194			
78		2D78-164WC06	●	266	164	196			
79		2D79-166WC06	●	268	166	198			
80		2D80-168WC06	●	270	168	200			

◎ ● 表示库存　○ 表示库存预定品

WC -3 X D（Φ10-80）Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻　3 D

Holder diameter 3D:Φ10.0 ~ 80.0mm

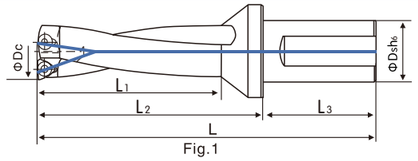


Fig.1

加工公差標準 -0.25~+0.25
Range of machining tolerance:-0.25~+0.25

最大加工深度 ℓ 3 × ΦDc
Drilling depth: 3xdiameter

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert		kg
10	20	3D10-32WC02	●	97	32	47	44	WC..020104		0.2
10.5		3D10.5-34WC02	●	97.5	34	47.5				0.2
11		3D11-34WC02	●	98.5	34	48.5				0.2
11.5		3D11.5-37WC02	●	100	37	50				0.2
12		3D12-38WC02	●	102	38	52				0.2
12.5		3D12.5-41WC02	●	105	41	55				0.2
13	20 / 25	3D13-42WC02	●	101	42	57	44 / 56			0.2
13.5		3D13.5-44WC02	●	103	44	59				0.2
14		3D14-45WC02/03	●	104	45	60		WC..020104		0.2
14.5		3D14.5-47WC02/03	●	106	47	62		WC..030208		0.2
15		3D15-48WC03	●	107	48	63		WC..030208		0.2
15.5		3D15.5-50WC03	●	109	50	65				0.2
16		3D16-51WC03	●	110	51	66				0.2
16.5		3D16.5-53WC03	●	112	53	68				0.2
17		3D17-54WC03	●	113	54	69				0.2
17.5	25	3D17.5-56WC03	●	127	56	71	56			0.3
18		3D18-57WC03	●	128	57	72				0.3
18.5		3D18.5-59WC03	●	130	59	74				0.3
19		3D19-60WC03	●	131	60	75				0.3
19.5		3D19.5-62WC03	●	133	62	77				0.3
20		3D20-63WC03	●	134	63	78				0.4
20.5		3D20.5-65WC03	●	136	65	80				0.4
21		3D21-66WC04	●	137	66	81		WC..040208		0.4
21.5		3D21.5-68WC04	●	139	68	83				0.4
22		3D22-69WC04	●	140	69	84				0.4
22.5		3D22.5-71WC04	●	142	71	86				0.4
23		3D23-72WC04	●	146	72	90				0.4
23.5		3D23.5-74WC04	●	148	74	92				0.4
24		3D24-75WC04	●	149	75	93				0.4
24.5		3D24.5-77WC04	●	151	77	95				0.4
25		3D25-78WC05	●	152	78	96				0.4
25.5	32	3D25.5-80WC05	●	160	80	100	60	WC..050308		0.6
26		3D26-81WCO5	●	161	81	101				0.6
26.5		3D26.5-83WC05	●	163	83	103				0.7
27		3D27-84WC05	●	164	84	104				0.7
27.5		3D27.5-86WC05	●	166	86	106				0.7
28		3D28-87WC05	●	167	87	107				0.7
28.5		3D28.5-89WC05	●	169	89	109				0.7
29		3D29-91WC05	●	172	91	112				0.7
29.5		3D29.5-93WCO5	●	174	93	114				0.7
30		3D30-94WC05	●	178	94	118				0.7
30.5		3D30.5-96WC05	●	180	96	120				0.8
31		3D31-97WC06	●	181	97	121		WC..06T308		0.8
31.5		3D31.5-99W06	●	183	99	123				0.9
32		3D32-100WC06	●	184	100	124				0.9
32.5		3D32.5-102WCO6	●	186	102	126				0.9
33		3D33-103WC06	●	187	103	127				0.9
33.5		3D33.5-105WC06	●	189	105	129				0.9
34		3D34-106WC06	●	190	106	130				0.9
34.5		3D34.5-108WC06	●	192	108	132				1.0
35		3D35-109WC06	●	193	109	133				1.0

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert		kg
35.5	32	3D35.5-111WC06	●	195	111	135	60	WC..06T308		1.0
36		3D36-112WC06	●	196	112	136				1.0
36.5		3D36.5-114WC06	●	198	114	138				1.1
37		3D37-116WC06	●	206	116	146				1.1
37.5		3D37.5-118WC06	●	208	118	148				1.1
38		3D38-119WC06	●	209	119	149				1.1
38.5		3D38.5-121WC06	●	211	121	151				1.1
39		3D39-122WC06	●	212	122	152				1.2
39.5		3D39.5-124WC06	●	214	124	154				1.3
40	40	3D40-125WC06	●	225	125	155	70			1.6
41		3D41-128WC06	●	228	128	158				1.7
42		3D42-131WC08	●	231	131	161				1.7
43		3D43-134WC08	●	234	134	164				1.8
44		3D44-137WC08	●	237	137	167				1.8
45		3D45-140WC08	●	240	140	170				1.9
46		3D46-143WC08	●	243	143	173				2.0
47		3D47-146WC08	●	246	146	176				2.1
48		3D48-149WC08	●	249	149	179				2.2
49		3D49-152WC08	●	252	152	182				2.2
50		3D50-155WC08	●	255	155	185				2.3
51		3D51-158WC08	●	258	158	188		WC..080412		2.4
52		3D52-161WC08	●	261	161	191				2.5
53		3D53-164WC08	●	264	164	194				2.6
54		3D54-167WC08	●	267	167	197				2.7
55		3D55-170WC08	●	270	170	200				2.8
56		3D56-176WC08	●	278	176	208				2.8
57		3D57-179WC08	●	281	179	211				3.0
58		3D58-182WC08	●	284	182	214				3.2
59		3D59-185WC08	●	287	185	217				3.3
60		3D60-188WC08	●	290	188	220				3.3
61		3D61-191WC06	●	291	191	221		WC..06T308		
62		3D62-194WC06	●	296	194	226				
63		3D63-197WC06	●	299	197	229				
64		3D64-200WC06	●	302	200	232				
65		3D65-203WC06	●	305	203	235				
66		3D66-206WC06	●	308	206	238				
67		3D67-209WC06	●	311	209	241				
68		3D68-212WC06	●	314	212	244				
69		3D69-215WC06	●	317	215	247				
70		3D70-218WC06	●	320	218	250				
71		3D71-221WC06	●	323	221	253				
72		3D72-224WC06	●	326	224	256				
73		3D73-227WC06	●	329	227	259				
74		3D74-230WC06	●	332	230	262				
75		3D75-233WC06	●	335	233	265				
76		3D76-236WC06	●	338	236	268				
77		3D77-239WC06	●	341	239	271				
78		3D78-242WC06	●	344	242	274				
79		3D79-245WC06	●	347	245	277				
80		3D80-248WC06	●	350	248	280				

◎ ● 表示库存　○ 表示库存预定品

WC -4 X D（Φ11.5-80）Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻　4 D

Holder diameter 4D:Φ11.5 ~ 80.0mm

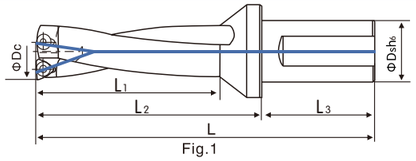


Fig.1

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ 4 × ΦDc
Drilling depth: 4xdiameter

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert		kg
11.5	20	4D11.5-47WC02	●	111	47	61	44	WC..020104		0.2
12		4D12-50WC02	●	115	50	65				0.2
12.5		4D12.5-52WC02	●	117	52	67				0.2
13	20 / 25	4D13-55WC02	●	114	55	70	44 / 56			0.2
13.5		4D13.5-57WC02	●	116	57	72				0.2
14		4D14-59WC02/03	●	118	59	74		WC..020104		0.2
14.5		4D14.5-61WC02/03	●	120	61	76		WC..030208		0.2
15		4D15-63WC03	●	122	63	78				0.2
15.5		4D15.5-65WC03	●	124	65	80				0.2
16		4D16-67WC03	●	126	67	82				0.3
16.5		4D16.5-69WC03	●	128	69	84				0.3
17		4D17-71WC03	●	130	71	86				0.3
17.5	25	4D17.5-73WC03	●	144	73	88	56			0.3
18		4D18-75WC03	●	146	75	90				0.4
18.5		4D18.5-77WC03	●	148	77	92				0.4
19		4D19-79WC03	●	150	79	94				0.4
19.5		4D19.5-81WC03	●	152	81	96				0.4
20		4D20-83WC03	●	154	83	98				0.4
20.5		4D20.5-85WC03	●	156	85	100				0.4
21		4D21-87WC04	●	158	87	102				0.4
21.5		4D21.5-89WC04	●	160	89	104				0.4
22		4D22-91WC04	●	162	91	106				0.4
22.5		4D22.5-93WC04	●	164	93	108		WC..040208		0.4
23		4D23-95WC04	●	169	95	113				0.5
23.5		4D23.5-97WC04	●	171	97	115				0.5
24		4D24-99WC04	●	173	99	117				0.5
24.5		4D24.5-101WC04	●	175	101	119				0.7
25		4D25-103WC05	●	177	103	121				0.7
25.5	32	4D25.5-105WC05	●	185	105	125	60			0.7
26		4D26-107WCO5	●	187	107	127				0.7
26.5		4D26.5-109WC05	●	189	109	129				0.7
27		4D27-111WC05	●	191	111	131				0.7
27.5		4D27.5-113WC05	●	193	113	133		WC..050308		0.7
28		4D28-115WC05	●	195	115	135				0.8
28.5		4D28.5-117WC05	●	197	117	137				0.8
29		4D29-120WC05	●	201	120	141				0.8
29.5		4D29.5-122WCO5	●	203	122	143				0.8
30		4D30-124WC05	●	208	124	148				0.9
30.5		4D30.5-126WC05	●	210	126	150				0.9
31		4D31-128WC06	●	212	128	152				0.9
31.5		4D31.5-130W06	●	214	130	154				0.9
32		4D32-132WC06	●	216	132	156				1.0
32.5		4D32.5-134WCO6	●	218	134	158				1.0
33		4D33-136WC06	●	220	136	160				1.0
33.5		4D33.5-138WC06	●	222	138	162		WC..06T308		1.0
34		4D34-140WC06	●	224	140	164				1.1
34.5		4D34.5-142WC06	●	226	142	166				1.1
35		4D35-144WC06	●	228	144	168				1.1
35.5		4D35.5-146WC06	●	230	146	170				1.1
36		4D36-148WC06	●	232	148	172				1.2
36.5		4D36.5-150WC06	●	236	150	174				1.2

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert		kg
37	32	4D37-153WC06	●	243	153	183	60	WC..06T308		1.2
37.5		4D37.5-155WC06	●	245	155	185				1.2
38		4D38-157WC06	●	247	157	187				1.3
38.5		4D38.5-159WC06	●	249	159	189				1.3
39		4D39-161WC06	●	251	161	191				1.8
39.5		4D39.5-163WC06	●	253	163	193				1.8
40	40	4D40-165WC06	●	265	165	195	70			1.8
41		4D41-169WC06	●	269	169	199				1.9
42		4D42-173WC08	●	273	173	203				2.0
43		4D43-177WC08	●	277	177	207				2.1
44		4D44-181WC08	●	281	181	211				2.2
45		4D45-185WC08	●	285	185	215				2.3
46		4D46-189WC08	●	289	189	219				2.4
47		4D47-193WC08	●	293	193	223				2.5
48		4D48-197WC08	●	297	197	227				2.6
49		4D49-201WC08	●	301	201	231				2.7
50		4D50-205WC08	●	305	205	235				2.8
51		4D51-209WC08	●	309	209	239				2.9
52		4D52-213WC08	●	313	213	243		WC..080412		3.0
53		4D53-217WC08	●	317	217	247				3.1
54		4D54-221WC08	●	321	221	251				3.2
55		4D55-225WC08	●	325	225	255				3.3
56		4D56-232WC08	●	334	232	264				3.5
57		4D57-236WC08	●	338	236	268				3.7
58		4D58-240WC08	●	342	240	272				3.8
59		4D59-244WC08	●	346	244	276				4.0
60		4D60-248WC08	●	350	248	280				4.1
61		4D61-252WC06	●	354	252	284				
62		4D62-256WC06	●	358	256	288				
63		4D63-260WC06	●	362	260	292				
64		4D64-264WC06	●	366	264	296				
65		4D65-268WC06	●	370	268	300				
66		4D66-272WC06	●	374	272	304				
67		4D67-276WC06	●	378	276	308				
68		4D68-280WC06	●	382	280	312				
69		4D69-284WC06	●	386	284	316				
70		4D70-288WC06	●	390	288	320				
71		4D71-292WC06	●	394	292	324		WC..06T308		
72		4D72-296WC06	●	398	296	328				
73		4D73-300WC06	●	402	300	332				
74		4D74-304WC06	●	406	304	336				
75		4D75-308WC06	●	410	308	340				
76		4D76-312WC06	●	414	312	344				
77		4D77-316WC06	●	418	316	348				
78		4D78-320WC06	●	422	320	352				
79		4D79-324WC06	●	426	324	356				
80		4D80-328WC06	●	430	328	360				

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品

WC -5 X D（Φ13-70）Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻　5 D

Holder diameter 5D:Φ13.0～70.0mm

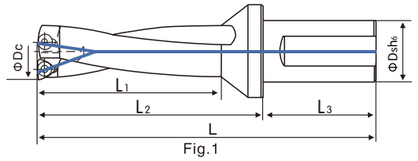


Fig.1

加工公差標準 -0.30~+0.30
Range of machining tolerance:-0.30~+0.30

最大加工深度 ℓ 5 × ΦDc
Drilling depth: 5xdiameter

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
13	20 / 25	5D13-68WC02	●	129	68	85	44 / 56	WC..020104	
13.5		5D13.5-71WC02	●	131	71	87			
14		5D14-73WC03	●	133	73	89		WC..030208	
14.5		5D14.5-76WC03	●	135	76	91			
15		5D15-78WC03	●	137	78	93			
15.5		5D15.5-81WC03	●	140	81	95			
16		5D16-83WC03	●	142	83	98			0.4
16.5		5D16.5-86WC03	●	145	86	101			0.4
17		5D17-88WC03	●	147	88	103			0.4
17.5	25	5D17.5-91WC03	●	162	91	106	56		0.4
18		5D18-93WC03	●	164	93	108			0.5
18.5		5D18.5-96WC03	●	167	96	111			0.5
19		5D19-98WC03	●	169	98	113			0.5
19.5		5D19.5-101WC03	●	172	101	116			0.5
20		5D20-103WC03	●	174	103	118			0.5
20.5		5D20.5-106WC03	●	177	106	121			0.5
21		5D21-108WC04	●	179	108	123		WC..040208	0.5
21.5		5D21.5-111WC04	●	182	111	126			0.5
22		5D22-113WC04	●	184	113	128			0.5
22.5		5D22.5-116WC04	●	187	116	131			0.5
23		5D23-118WC04	●	192	118	136			0.6
23.5		5D23.5-121WC04	●	195	121	139			0.6
24		5D24-123WC04	●	197	123	141			0.6
24.5		5D24.5-126WC04	●	200	126	144			0.8
25		5D25-128WC05	●	202	128	146			0.8
25.5	32	5D25.5-131WC05	●	213	131	153	60		0.8
26		5D26-133WCO5	●	216	133	156			0.8
26.5		5D26.5-136WC05	●	217	136	157			0.8
27		5D27-138WC05	●	218	138	158			0.8
27.5		5D27.5-141WC05	●	221	141	161			0.8
28		5D28-143WC05	●	223	143	163		WC..050308	0.9
28.5		5D28.5-146WC05	●	226	146	166			0.9
29		5D29-149WC05	●	230	149	170			0.9
29.5		5D29.5-151WCO5	●	233	151	173			0.9
30		5D30-154WC05	●	238	154	178			1.0
30.5		5D30.5-157WC05	●	241	157	181			1.0
31		5D31-159WC06	●	243	159	183			1.0
31.5		5D31.5-162W06	●	245	162	185			1.0
32		5D32-164WC06	●	248	164	188			1.1
32.5		5D32.5-167WCO6	●	251	167	191			1.1
33		5D33-169WC06	●	253	169	193			1.1
33.5		5D33.5-172WC06	●	255	172	195			1.1
34		5D34-174WC06	●	258	174	198			1.2
34.5		5D34.5-177WC06	●	261	177	201		WC..06T308	1.2
35		5D35-179WC06	●	263	179	203			1.2
35.5		5D35.5-182WC06	●	265	182	205			1.2
36		5D36-184WC06	●	268	184	208			1.3
36.5		5D36.5-187WC06	●	271	187	211			1.3
37		5D37-190WC06	●	280	190	220			1.3
37.5		5D37.5-193WC06	●	283	193	223			1.3
38		5D38-195WC06	●	285	195	225			1.4

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
38.5	32	5D38.5-198WC06	●	288	198	228	60	WC..06T308	1.4
39		5D39-200WC06	●	290	200	230			1.9
39.5		5D39.5-203WC06	●	293	203	233			1.9
40	40	5D40-205WC06	●	305	205	235	70		1.9
41		5D41-210WC06	○	310	210	240			2.0
42		5D42-215WC08	○	315	215	245		WC..080412	2.1
43		5D43-220WC08	○	320	220	250			2.2
44		5D44-225WC08	○	325	225	255			2.3
45		5D45-230WC08	○	330	230	260			2.4
46		5D46-235WC08	○	335	235	265			2.5
47		5D47-240WC08	○	340	240	270			2.6
48		5D48-245WC08	○	345	245	275			2.7
49		5D49-250WC08	○	350	250	280			2.8
50		5D50-255WC08	○	355	255	285			2.9
51		5D51-260WC08	○	360	260	290			3.0
52		5D52-265WC08	○	365	265	295			3.1
53		5D53-270WC08	○	370	270	300			3.2
54		5D54-275WC08	○	375	275	305			3.3
55		5D55-280WC08	○	380	280	310			3.4
56		5D56-285WC08	○	385	285	315			3.6
57		5D57-295WC08	○	390	295	320			3.8
58		5D58-300WC08	○	395	300	325			3.9
59		5D59-305WC08	○	400	305	330			4.1
60		5D60-310WC08	○	405	310	335			4.2
61		5D61-315WC08	○	410	315	340			4.3
62		5D62-320WC08	○	415	320	345			4.4
63		5D63-325WC08	○	420	325	350			4.5
64		5D64-330WC08	○	425	330	355			4.6
65		5D65-335WC08	○	430	335	360			4.7
66		5D66-340WC08	○	435	340	365			4.8
67		5D67-345WC08	○	440	345	370			4.9
68		5D68-350WC08	○	445	350	375			5.0
69		5D69-355WC08	○	450	355	380			5.1
70		5D70-360WC08	○	455	360	385			5.2

◎附件Spare Parts

類型 type	直徑 diameter	刀片型號 Blade model	螺絲 Screw			扳手 Wrench
WC	13-14.5	WC02	M1.8	X	5	T6
	14-14.5	WC03	M2.5	X	5.5	T8
	15-20.5	WC03	M2.5	X	6	T8
	21-24.5	WC04	M2.5	X	6	T8
	25-30.5	WC05	M3	X	7	T8
	31-41.5	WC06	M3.5	X	8.5	T15
	42-62	WC08	M4	X	10	T15
	63-80	WC06	M3.5	X	8.5	T8

● Mark:Standard stock item,
No mark:Made to order item.
◎ ● 表示库存　○ 表示库存预定品

TDR-2 X D (Φ 8.5-40) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 2 D

Holder diameter 2D:Φ8.5～40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 2× ΦDc
Drilling depth: 2xdiameter

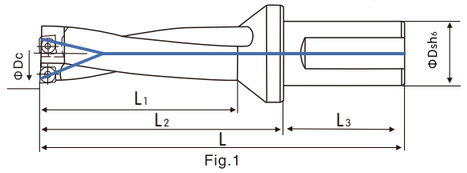


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
8.5	20	KSD085-2D-S20-SP03	●	83.5	18	33.5	44	SP..030202	0.2
9		KSD090-2D-S20-SP03	●	84.5	19	34.5			0.2
9.5		KSD095-2D-S20-SP03	●	85.5	20	35.5			0.2
10		KSD100-2D-S20-SP04	●	85.5	22	35.5		SP..04T102	0.2
10.5		KSD105-2D-S20-SP04	●	86.5	22	36.5			0.2
11		KSD110-2D-S20-SP04	●	87.5	23	37.5			0.2
11.5		KSD115-2D-S20-SP04	●	88	24	38			0.2
12		KSD120-2D-S20-SP04	●	90	25	40			0.2
12.5		KSD125-2D-S20-SP04	●	93	27	43			0.2
13	20 / 25	KSD130-2D-S20-SP05	●	88	29	44	44 / 56	SP..050204	0.2
13.5		KSD135-2D-S20-SP05	●	89	30	45			0.2
14		KSD140-2D-S20-SP05	●	90	31	46			0.2
14.5		KSD145-2D-S20-SP05	●	91	32	47			0.2
15		KSD150-2D-S20-SP05	●	92	33	48			0.2
15.5		KSD155-2D-S20-SP05	●	93	34	49			0.2
16		KSD160-2D-S20-SP06	●	94	35	50			0.2
16.5		KSD165-2D-S25-SP06	●	95	36	51			0.2
17		KSD170-2D-S25-SP06	●	96	37	52			0.2
17.5	25	KSD175-2D-S25-SP06	●	109	38	53	56	SP..060204	0.2
18		KSD180-2D-S25-SP06	●	110	39	54			0.3
18.5		KSD185-2D-S25-SP06	●	111	40	55			0.3
19		KSD190-2D-S25-SP06	●	112	41	56			0.3
19.5		KSD195-2D-S25-SP06	●	113	42	57			0.3
20		KSD200-2D-S25-SP06	●	114	43	58			0.3
20.5		KSD205-2D-S25-SP06	●	115	44	59			0.3
21		KSD210-2D-S25-SP06	●	116	45	60			0.3
21.5		KSD215-2D-S25-SP06	●	117	46	61			0.3
22		KSD220-2D-S25-SP07	●	118	47	62		SP..07T308	0.4
22.5		KSD225-2D-S25-SP07	●	119	48	63			0.4
23		KSD230-2D-S25-SP07	●	123	49	67			0.4
23.5		KSD235-2D-S25-SP07	●	124	50	68			0.4
24		KSD240-2D-S25-SP07	●	125	51	69			0.4
24.5		KSD245-2D-S25-SP07	●	126	52	70			0.4
25		KSD250-2D-S25-SP07	●	127	53	71			0.4
25.5	32	KSD255-2D-S32-SP07	●	134	54	74	60		0.6
26		KSD260-2D-S32-SP07	●	135	55	75			0.6
26.5		KSD265-2D-S32-SP07	●	136	56	76			0.6
27		KSD270-2D-S32-SP07	●	137	57	77			0.6
27.5		KSD275-2D-S32-SP07	●	138	58	78			0.6
28		KSD280-2D-S32-SP07/09	●	139	59	79		SP..07T308	0.6
28.5		KSD285-2D-S32-SP07/09	●	140	60	80		SP..090408	0.6
29		KSD290-2D-S32-SP09	●	143	62	83		SP..090408	0.7
29.5		KSD295-2D-S32-SP09	●	144	63	84			0.7
30		KSD300-2D-S32-SP09	●	148	64	88			0.7
30.5		KSD305-2D-S32-SP09	●	149	65	89			0.7
31		KSD310-2D-S32-SP09	●	150	66	90			0.7

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
31.5	32	KSD315-2D-S32-SP09	●	151	67	91	60	SP..090408	0.7
32		KSD320-2D-S32-SP09	●	152	68	92			0.8
32.5		KSD325-2D-S32-SP09	●	153	69	93			0.8
33		KSD330-2D-S32-SP09	●	154	70	94			0.8
33.5		KSD335-2D-S32-SP09	●	155	71	95			0.8
34		KSD340-2D-S32-SP09/11	●	156	72	96		SP..090408	0.8
34.5		KSD345-2D-S32-SP09/11	●	157	73	97		SP..110408	0.8
35		KSD350-2D-S32-SP11	●	158	74	98		SP..110408	0.8
35.5		KSD355-2D-S32-SP11	●	159	75	99			0.8
36		KSD360-2D-S32-SP11	●	160	76	100			0.9
36.5		KSD365-2D-S32-SP11	●	161	77	101			0.9
37		KSD370-2D-S32-SP11	●	169	79	109			0.9
37.5		KSD375-2D-S32-SP11	●	170	80	110			0.9
38		KSD380-2D-S32-SP11	●	171	81	111			0.9
38.5		KSD385-2D-S32-SP11	●	172	82	112			0.9
39		KSD390-2D-S32-SP11	●	173	83	113			1
39.5		KSD395-2D-S32-SP11	●	174	84	114			1.1
40	40	KSD400-2D-S40-SP11	●	185	85	115	70		1.1

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*3.6	T6	KSD085-2D-S20-SP03~KSD095-2D-S20-SP03
M1.8*4	T6	KSD100-2D-S20-SP04~KSD125-2D-S20-SP04
M2*4	T6	KSD130-2D-S20-SP05~KSD145-2D-S20-SP05
M2*5	T7	KSD150-2D-S20-SP05~KSD155-2D-S20-SP05
M2.2*5	T7	KSD160-2D-S20-SP06~KSD215-2D-S25-SP06
M2.5*6	T8	KSD220-2D-S25-SP07~KSD285-2D-S32-SP07
M3.5*8.5	T15	KSD280-2D-S32-SP07~KSD345-2D-S32-SP09
M4*10	T20	KSD340-2D-S32-SP11~KSD400-2D-S40-SP11

● Mark:Standard stock item,
No mark:Made to order item.

◎● 表示库存 ○ 表示库存预定品

TDR-3 X D (Φ 8.5-40) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 3 D

Holder diameter 3D:Φ8.5～40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 3× ΦDc
Drilling depth: 3xdiameter

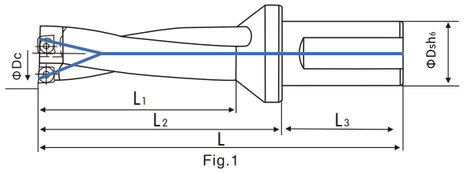


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
8.5	20	KSD085-3D-S20-SP03	●	92.5	27	42.5	44	SP..030202	0.2
9		KSD090-3D-S20-SP03	●	93.5	28	43.5			0.2
9.5		KSD095-3D-S20-SP03	●	94.5	29	44.5			0.2
10		KSD100-3D-S20-SP04	●	97	31	47		SP..04T102	0.2
10.5		KSD105-3D-S20-SP04	●	97.5	33	47.5			0.2
11		KSD110-3D-S20-SP04	●	98.5	34	48.5			0.2
11.5		KSD115-3D-S20-SP04	●	100	36	50			0.2
12		KSD120-3D-S20-SP04	●	102	37	52			0.2
12.5		KSD125-3D-S20-SP04	●	105	39	55			0.2
13	20 / 25	KSD130-3D-S20-SP05	●	101	42	57	44 / 56	SP..050204	0.2
13.5		KSD135-3D-S20-SP05	●	103	44	59			0.2
14		KSD140-3D-S20-SP05	●	104	45	60			0.2
14.5		KSD145-3D-S20-SP05	●	106	47	62			0.2
15		KSD150-3D-S20-SP05	●	107	48	63			0.2
15.5		KSD155-3D-S20-SP05	●	109	50	65			0.2
16		KSD160-3D-S20-SP06	●	110	51	66			0.2
16.5		KSD165-3D-S25-SP06	●	112	53	68			0.2
17		KSD170-3D-S25-SP06	●	113	54	69			0.2
17.5	25	KSD175-3D-S25-SP06	●	127	56	71	56	SP..060204	0.2
18		KSD180-3D-S25-SP06	●	128	57	72			0.3
18.5		KSD185-3D-S25-SP06	●	130	59	74			0.3
19		KSD190-3D-S25-SP06	●	131	60	75			0.3
19.5		KSD195-3D-S25-SP06	●	133	62	77			0.3
20		KSD200-3D-S25-SP06	●	134	63	78			0.3
20.5		KSD205-3D-S25-SP06	●	136	65	80			0.3
21		KSD210-3D-S25-SP06	●	137	66	81			0.3
21.5		KSD215-3D-S25-SP06	●	139	68	83			0.3
22		KSD220-3D-S25-SP07	●	140	69	84		SP..07T308	0.4
22.5		KSD225-3D-S25-SP07	●	142	71	86			0.4
23		KSD230-3D-S25-SP07	●	146	72	90			0.4
23.5		KSD235-3D-S25-SP07	●	148	74	92			0.4
24		KSD240-3D-S25-SP07	●	149	75	93			0.4
24.5		KSD245-3D-S25-SP07	●	151	77	95			0.4
25		KSD250-3D-S25-SP07	●	152	78	96			0.4
25.5	32	KSD255-3D-S32-SP07	●	160	80	100	60		0.6
26		KSD260-3D-S32-SP07	●	161	81	101			0.6
26.5		KSD265-3D-S32-SP07	●	163	83	103			0.6
27		KSD270-3D-S32-SP07	●	164	84	104			0.6
27.5		KSD275-3D-S32-SP07	●	166	86	106			0.6
28		KSD280-3D-S32-SP07/09	●	167	87	107		SP..07T308	0.6
28.5		KSD285-3D-S32-SP07/09	●	169	89	109		SP..090408	0.6
29		KSD290-3D-S32-SP09	●	172	91	112		SP..090408	0.7
29.5		KSD295-3D-S32-SP09	●	174	93	114			0.7
30		KSD300-3D-S32-SP09	●	178	94	118			0.7
30.5		KSD305-3D-S32-SP09	●	180	96	120			0.7
31		KSD310-3D-S32-SP09	●	181	97	121			0.7

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
31.5	32	KSD315-3D-S32-SP09	●	183	99	123	60	SP..090408	0.7
32		KSD320-3D-S32-SP09	●	184	100	124			0.8
32.5		KSD325-3D-S32-SP09	●	186	102	126			0.8
33		KSD330-3D-S32-SP09	●	187	103	127			0.8
33.5		KSD335-3D-S32-SP09	●	189	105	129			0.8
34		KSD340-3D-S32-SP09/11	●	190	106	130		SP..090408	0.8
34.5		KSD345-3D-S32-SP09/11	●	192	108	132		SP..110408	0.8
35		KSD350-3D-S32-SP11	●	193	109	133		SP..110408	0.8
35.5		KSD355-3D-S32-SP11	●	195	111	135			0.8
36		KSD360-3D-S32-SP11	●	196	112	136			0.9
36.5		KSD365-3D-S32-SP11	●	198	114	138			0.9
37		KSD370-3D-S32-SP11	●	206	116	146			0.9
37.5		KSD375-3D-S32-SP11	●	208	118	148			0.9
38		KSD380-3D-S32-SP11	●	209	119	149			0.9
38.5		KSD385-3D-S32-SP11	●	211	121	151			0.9
39		KSD390-3D-S32-SP11	●	212	122	152			1.0
39.5		KSD395-3D-S32-SP11	●	214	124	154			1.1
40	40	KSD400-3D-S40-SP11	●	225	125	155	70		1.1

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*3.6	T6	KSD085-2D-S20-SP03~KSD095-2D-S20-SP03
M1.8*4	T6	KSD100-2D-S20-SP04~KSD125-2D-S20-SP04
M2*4	T6	KSD130-2D-S20-SP05~KSD145-2D-S20-SP05
M2*5	T7	KSD150-2D-S20-SP05~KSD155-2D-S20-SP05
M2.2*5	T7	KSD160-2D-S20-SP06~KSD215-2D-S25-SP06
M2.5*6	T8	KSD220-2D-S25-SP07~KSD285-2D-S32-SP07
M3.5*8.5	T15	KSD280-2D-S32-SP07~KSD345-2D-S32-SP09
M4*10	T20	KSD340-2D-S32-SP11~KSD400-2D-S40-SP11

● Mark:Standard stock item,
No mark:Made to order item.

◎● 表示库存 ○ 表示库存预定品

TDR-4 X D (Φ 11.5-40) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 4 D

Holder diameter 4D:Φ11.5 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 4 × ΦDc
Drilling depth: 4xdiameter

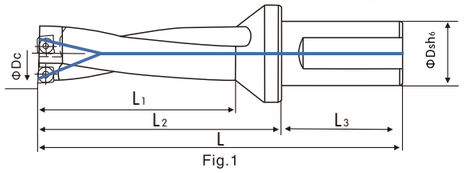


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
11.5	20	KSD115-4D-S20-SP04	●	111	47	61	44	SP..04T102	0.2
12		KSD120-4D-S20-SP04	●	115	50	65			0.2
12.5		KSD125-4D-S20-SP04	●	117	52	67			0.2
13	20 / 25	KSD130-4D-S20-SP05	●	114	55	70	44 / 56	SP..050204	0.2
13.5		KSD135-4D-S20-SP05	●	116	57	72			0.2
14		KSD140-4D-S20-SP05	●	118	59	74			0.2
14.5		KSD145-4D-S20-SP05	●	120	61	76			0.2
15		KSD150-4D-S20-SP05	●	122	63	78			0.2
15.5		KSD155-4D-S20-SP05	●	124	65	80			0.2
16		KSD160-4D-S20-SP06	●	126	67	82		SP..060204	0.2
16.5		KSD165-4D-S25-SP06	●	128	69	84			0.2
17		KSD170-4D-S25-SP06	●	130	71	86			0.2
17.5	25	KSD175-4D-S25-SP06	●	144	73	88	56		0.2
18		KSD180-4D-S25-SP06	●	146	75	90			0.3
18.5		KSD185-4D-S25-SP06	●	148	77	92			0.3
19		KSD190-4D-S25-SP06	●	150	79	94			0.3
19.5		KSD195-4D-S25-SP06	●	152	81	96			0.3
20		KSD200-4D-S25-SP06	●	154	83	98			0.3
20.5		KSD205-4D-S25-SP06	●	156	85	100			0.3
21		KSD210-4D-S25-SP06	●	158	87	102			0.3
21.5		KSD215-4D-S25-SP06	●	160	89	104			0.3
22		KSD220-4D-S25-SP07	●	162	91	106		SP..07T308	0.4
22.5		KSD225-4D-S25-SP07	●	164	93	108			0.4
23		KSD230-4D-S25-SP07	●	169	95	113			0.4
23.5		KSD235-4D-S25-SP07	●	171	97	115			0.4
24		KSD240-4D-S25-SP07	●	173	99	117			0.4
24.5		KSD245-4D-S25-SP07	●	175	101	119			0.4
25		KSD250-4D-S25-SP07	●	177	103	121			0.4
25.5		KSD255-4D-S32-SP07	●	185	105	125			0.6
26	32	KSD260-4D-S32-SP07	●	187	107	127	60		0.6
26.5		KSD265-4D-S32-SP07	●	189	109	129			0.6
27		KSD270-4D-S32-SP07	●	191	111	131			0.6
27.5		KSD275-4D-S32-SP07	●	193	113	133			0.6
28		KSD280-4D-S32-SP07/09	●	195	115	135		SP..07T308	0.6
28.5		KSD285-4D-S32-SP07/09	●	197	117	137		SP..090408	0.6
29		KSD290-4D-S32-SP09	●	201	120	141		SP..090408	0.7
29.5		KSD295-4D-S32-SP09	●	203	122	143			0.7
30		KSD300-4D-S32-SP09	●	208	124	148			0.7
30.5		KSD305-4D-S32-SP09	●	210	126	150			0.7
31		KSD310-4D-S32-SP09	●	212	128	152			0.7
31.5		KSD315-4D-S32-SP09	●	214	130	154			0.7
32		KSD320-4D-S32-SP09	●	216	132	156			0.8
32.5		KSD325-4D-S32-SP09	●	218	134	158			0.8
33		KSD330-4D-S32-SP09	●	220	136	160			0.8
33.5		KSD335-4D-S32-SP09	●	222	138	162			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
34	32	KSD340-4D-S32-SP09/11	●	224	140	164	60	SP..090408	0.8
34.5		KSD345-4D-S32-SP09/11	●	226	142	166		SP..110408	0.8
35		KSD350-4D-S32-SP11	●	228	144	168		SP..110408	0.8
35.5		KSD355-4D-S32-SP11	●	230	146	170			0.8
36		KSD360-4D-S32-SP11	●	232	148	172			0.9
36.5		KSD365-4D-S32-SP11	●	236	150	174			0.9
37		KSD370-4D-S32-SP11	●	243	153	183			0.9
37.5		KSD375-4D-S32-SP11	●	245	155	185			0.9
38		KSD380-4D-S32-SP11	●	247	157	187			0.9
38.5		KSD385-4D-S32-SP11	●	249	159	189			0.9
39		KSD390-4D-S32-SP11	●	251	161	191			1.0
39.5		KSD395-4D-S32-SP11	●	253	163	193			1.1
40	40	KSD400-4D-S40-SP11	●	265	165	195	70		1.1

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*4	T6	KSD115-4D-S20-SP04~KSD125-4D-S20-SP04
M2*4	T6	KSD130-4D-S20-SP05~KSD145-4D-S20-SP05
M2*5	T7	KSD150-4D-S20-SP05~KSD155-4D-S20-SP05
M2.2*5	T7	KSD160-4D-S20-SP06~KSD215-4D-S25-SP06
M2.5*6	T8	KSD220-4D-S25-SP07~KSD285-4D-S32-SP07
M3.5*8.5	T15	KSD280-4D-S32-SP07~KSD345-4D-S32-SP09
M4*10	T20	KSD340-4D-S32-SP11~KSD400-4D-S40-SP11

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

TDR-5 X D (Φ 15.5-40) Indexable drills with SP inserts

SP 型 潜孔钻/ U 钻 5 D

Holder diameter 5D:Φ15.5 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 5 × ΦDc
Drilling depth: 5xdiameter

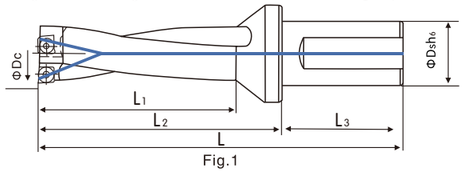


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
15.5	20 / 25	KSD155-5D-S20-SP05	●	140	80	95	44 / 56	SP..04T102	0.3
16		KSD160-5D-S20-SP06	●	142	83	98		SP..060204	0.4
16.5		KSD165-5D-S25-SP06	●	145	86	101			0.4
17		KSD170-5D-S25-SP06	●	147	88	103			0.4
17.5	25	KSD175-5D-S25-SP06	●	162	91	106	56		0.4
18		KSD180-5D-S25-SP06	●	164	93	108			0.5
18.5		KSD185-5D-S25-SP06	●	167	96	111			0.5
19		KSD190-5D-S25-SP06	●	169	98	113			0.5
19.5		KSD195-5D-S25-SP06	●	172	101	116			0.5
20		KSD200-5D-S25-SP06	●	174	103	118			0.5
20.5		KSD205-5D-S25-SP06	●	177	106	121			0.5
21		KSD210-5D-S25-SP06	●	179	108	123			0.5
21.5		KSD215-5D-S25-SP06	●	182	111	126			0.5
22		KSD220-5D-S25-SP07	●	184	113	128			0.5
22.5		KSD225-5D-S25-SP07	●	187	116	131			0.5
23		KSD230-5D-S25-SP07	●	192	118	136			0.6
23.5		KSD235-5D-S25-SP07	●	195	121	139			0.6
24		KSD240-5D-S25-SP07	●	197	123	141			0.6
24.5		KSD245-5D-S25-SP07	●	200	126	144		SP..07T308	0.8
25		KSD250-5D-S25-SP07	●	202	128	146			0.8
25.5	32	KSD255-5D-S32-SP07	●	213	131	153	60		0.8
26		KSD260-5D-S32-SP07	●	216	133	156			0.8
26.5		KSD265-5D-S32-SP07	●	217	136	157			0.8
27		KSD270-5D-S32-SP07	●	218	138	158			0.8
27.5		KSD275-5D-S32-SP07	●	221	141	161			0.8
28		KSD280-5D-S32-SP07/09	●	223	143	163		SP..07T308	0.9
28.5		KSD285-5D-S32-SP07/09	●	226	146	166		SP..090408	0.9
29		KSD290-5D-S32-SP09	●	230	149	170		SP..090408	0.9
29.5		KSD295-5D-S32-SP09	●	233	151	173			0.9
30		KSD300-5D-S32-SP09	●	238	154	178			1
30.5		KSD305-5D-S32-SP09	●	241	157	181			1
31		KSD310-5D-S32-SP09	●	243	159	183			1
31.5		KSD315-5D-S32-SP09	●	245	162	185			1
32		KSD320-5D-S32-SP09	●	248	164	188			1.1
32.5		KSD325-5D-S32-SP09	●	251	167	191			1.1
33		KSD330-5D-S32-SP09	●	253	169	193			1.1
33.5		KSD335-5D-S32-SP09	●	255	172	195			1.1
34		KSD340-5D-S32-SP09/11	●	258	174	198		SP..090408	1.2
34.5		KSD345-5D-S32-SP09/11	●	261	177	201		SP..110408	1.2
35		KSD350-5D-S32-SP11	●	263	179	203		SP..110408	1.2
35.5		KSD355-5D-S32-SP11	●	265	182	205			1.2
36		KSD360-5D-S32-SP11	●	268	184	208			1.3
36.5		KSD365-5D-S32-SP11	●	271	187	211			1.3
37		KSD370-5D-S32-SP11	●	280	190	220			1.3
37.5		KSD375-5D-S32-SP11	●	283	193	223			1.3

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
38	32	KSD380-5D-S32-SP11	●	285	195	225	60	SP..110408	1.4
38.5		KSD385-5D-S32-SP11	●	288	198	228			1.4
39		KSD390-5D-S32-SP11	●	290	200	230			1.9
39.5		KSD395-5D-S32-SP11	●	293	203	233			1.9
40	40	KSD400-5D-S40-SP11	●	305	205	235	70		1.9

SP鑽頭記號
Part number structure of SP type holder

KSD160 - 5D - S20 - SP06

- KSD160: 鑽頭尺寸 Diameter
- 5D: 倍徑 Drill Length
- S20: 接口尺寸 Shank Diameter
- SP06: 刀片型號 Inserts Type

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2*5	T7	KSD155-4D-S20-SP05~KSD155-4D-S20-SP05
M2.2*5	T7	KSD160-4D-S20-SP06~KSD215-4D-S25-SP06
M2.5*6	T8	KSD220-4D-S25-SP07~KSD285-4D-S32-SP07
M3.5*8.5	T15	KSD280-4D-S32-SP07~KSD345-4D-S32-SP09
M4*10	T20	KSD340-4D-S32-SP11~KSD400-4D-S40-SP11

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

TOP-2 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潛孔钻/ U 钻　2 D

Holder diameter 2D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 2 × ΦDc
Drilling depth: 2xdiameter

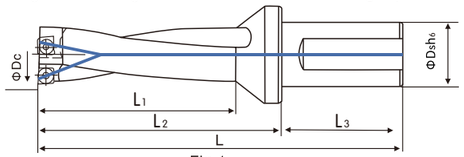


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13	20 / 25	KOD130-2D-S20/25-SO05	●	88	29	44	44 / 56	SOMT050204	0.2
13.5		KOD135-2D-S20/25-SO05	●	89	30	45			0.2
14		KOD140-2D-S20/25-SO05	●	90	31	46			0.2
14.5		KOD145-2D-S20/25-SO05	●	91	32	47			0.2
15		KOD150-2D-S20/25-SO05	●	92	33	48			0.2
15.5		KOD155-2D-S20/25-SO05	●	93	34	49			0.2
16		KOD160-2D-S20/25-SO05	●	94	35	50			0.2
16.5		KOD165-2D-S20/25-SO06	●	95	36	51		SOMT060204	0.2
17		KOD170-2D-S20/25-SO06	●	96	37	52			0.2
17.5	25	KOD175-2D-S25-SO06	●	109	38	53	56		0.2
18		KOD180-2D-S25-SO06	●	110	39	54			0.3
18.5		KOD185-2D-S25-SO06	●	111	40	55			0.3
19		KOD190-2D-S25-SO06	●	112	41	56			0.3
19.5		KOD195-2D-S25-SO07	●	113	42	57		SOMT070306	0.3
20		KOD200-2D-S25-SO07	●	114	43	58			0.3
20.5		KOD205-2D-S25-SO07	●	115	44	59			0.3
21		KOD210-2D-S25-SO07	●	116	45	60			0.3
21.5		KOD215-2D-S25-SO07	●	117	46	61			0.3
22		KOD220-2D-S25-SO07	●	118	47	62			0.4
22.5		KOD225-2D-S25-SO08	●	119	48	63		SOMT08T306	0.4
23		KOD230-2D-S25-SO08	●	123	49	67			0.4
23.5		KOD235-2D-S25-SO08	●	124	50	68			0.4
24		KOD240-2D-S25-SO08	●	125	51	69			0.4
24.5		KOD245-2D-S25-SO08	●	126	52	70			0.4
25		KOD250-2D-S25-SO08	●	127	53	71			0.4
25.5	32	KOD255-2D-S32-SO08	●	134	54	74	60		0.6
26		KOD260-2D-S32-SO08	●	135	55	75			0.6
26.5		KOD265-2D-S32-SO09	●	136	56	76		SOMT09T308	0.6
27		KOD270-2D-S32-SO09	●	137	57	77			0.6
27.5		KOD275-2D-S32-SO09	●	138	58	78			0.6
28		KOD280-2D-S32-SO09	●	139	59	79			0.6
28.5		KOD285-2D-S32-SO09	●	140	60	80			0.6
29		KOD290-2D-S32-SO09	●	143	62	83			0.7
29.5		KOD295-2D-S32-SO09	●	144	63	84			0.7
30		KOD300-2D-S32-SO09	●	148	64	88			0.7
30.5		KOD305-2D-S32-SO09	●	149	65	89			0.7
31		KOD310-2D-S32-SO09	●	150	66	90			0.7
31.5		KOD315-2D-S32-SO09	●	151	67	91			0.7
32		KOD320-2D-S32-SO11	●	152	68	92		SOMT11T308	0.8
32.5		KOD325-2D-S32-SO11	●	153	69	93			0.8
33		KOD330-2D-S32-SO11	●	154	70	94			0.8
33.5		KOD335-2D-S32-SO11	●	155	71	95			0.8
34		KOD340-2D-S32-SO11	●	156	72	96			0.8
34.5		KOD345-2D-S32-SO11	●	157	73	97			0.8
35		KOD350-2D-S32-SO11	●	158	74	98			0.8
35.5		KOD355-2D-S32-SO11	●	159	75	99			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
36	32	KOD360-2D-S32-SO11	●	160	76	100	60	SOMT11T308	0.9
36.5		KOD365-2D-S32-SO11	○	161	77	101			0.9
37		KOD370-2D-S32-SO13	○	169	79	109		SOMT130408	0.9
37.5		KOD375-2D-S32-SO13	○	170	80	110			0.9
38		KOD380-2D-S32-SO13	○	171	81	111			0.9
38.5		KOD385-2D-S32-SO13	○	172	82	112			0.9
39		KOD390-2D-S32-SO13	○	173	83	113			1.0
39.5		KOD395-2D-S32-SO13	○	174	84	114			1.1
40	40	KOD400-2D-S40-SO13	○	185	85	115	70		1.1

SO鑽頭記號
Part number structure of SO type holder

KOD160 - 2D - S20 - SOMT05

- KOD160: 鑽頭尺寸 Diameter
- 2D: 倍徑 Drill Length
- S20: 接口尺寸 Shank Diameter
- SOMT05: 刀片型號 Inserts Type

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2*5	T6	KOD130-2D-S20-SO05~KOD160-2D-S20-SO05
M2.2*5	T7	KOD165-2D-S20-SO06~KOD190-2D-S25-SO06
M2.2*5	T7	KOD195-2D-S25-SO07~KOD220-2D-S25-SO07
M2.5*6	T7	KOD225-2D-S25-SO08~KOD260-2D-S32-SO08
M3.5*8.5	T7	KOD265-2D-S32-SO09~KOD315-2D-S32-SO09
M3.5*8.5	T8	KOD320-2D-S32-SO11~KOD365-2D-S32-SO11
M4*10	T15	KOD370-2D-S32-SO13~KOD400-2D-S40-SO13

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品

TOP-3 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潛孔钻/ U 钻 3 D

Holder diameter 3D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 3 × ΦDc
Drilling depth: 3xdiameter

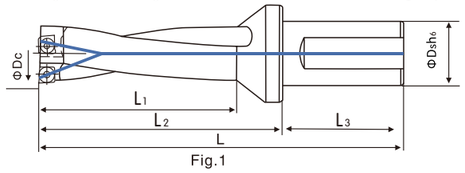


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
13		KOD130-3D-S20/25-SO05	●	101	42	57			0.2
13.5		KOD135-3D-S20/25-SO05	●	103	44	59			0.2
14		KOD140-3D-S20/25-SO05	●	104	45	60			0.2
14.5	20	KOD145-3D-S20/25-SO05	●	106	47	62	44	SOMT050204	0.2
15	/	KOD150-3D-S20/25-SO05	●	107	48	63	/		0.2
15.5	25	KOD155-3D-S20/25-SO05	●	109	50	65	56		0.2
16		KOD160-3D-S20/25-SO05	●	110	51	66			0.2
16.5		KOD165-3D-S20/25-SO06	●	112	53	68			0.2
17		KOD170-3D-S20/25-SO06	●	113	54	69			0.2
17.5		KOD175-3D-S25-SO06	●	127	56	71		SOMT060204	0.2
18		KOD180-3D-S25-SO06	●	128	57	72			0.3
18.5		KOD185-3D-S25-SO06	●	130	59	74			0.3
19		KOD190-3D-S25-SO06	●	131	60	75			0.3
19.5		KOD195-3D-S25-SO07	●	133	62	77			0.3
20		KOD200-3D-S25-SO07	●	134	63	78			0.3
20.5		KOD205-3D-S25-SO07	●	136	65	80		SOMT070306	0.3
21		KOD210-3D-S25-SO07	●	137	66	81			0.3
21.5	25	KOD215-3D-S25-SO07	●	139	68	83	56		0.3
22		KOD220-3D-S25-SO07	●	140	69	84			0.4
22.5		KOD225-3D-S25-SO08	●	142	71	86			0.4
23		KOD230-3D-S25-SO08	●	146	72	90			0.4
23.5		KOD235-3D-S25-SO08	●	148	74	92			0.4
24		KOD240-3D-S25-SO08	●	149	75	93		SOMT08T306	0.4
24.5		KOD245-3D-S25-SO08	●	151	77	95			0.4
25		KOD250-3D-S25-SO08	●	152	78	96			0.4
25.5		KOD255-3D-S32-SO08	●	160	80	100			0.6
26		KOD260-3D-S32-SO08	●	161	81	101			0.6
26.5		KOD265-3D-S32-SO09	●	163	83	103			0.6
27		KOD270-3D-S32-SO09	●	164	84	104			0.6
27.5		KOD275-3D-S32-SO09	●	166	86	106			0.6
28		KOD280-3D-S32-SO09	●	167	87	107			0.6
28.5		KOD285-3D-S32-SO09	●	169	89	109			0.6
29		KOD290-3D-S32-SO09	●	172	91	112		SOMT09T308	0.7
29.5		KOD295-3D-S32-SO09	●	174	93	114			0.7
30		KOD300-3D-S32-SO09	●	178	94	118			0.7
30.5	32	KOD305-3D-S32-SO09	●	180	96	120	60		0.7
31		KOD310-3D-S32-SO09	●	181	97	121			0.7
31.5		KOD315-3D-S32-SO09	●	183	99	123			0.7
32		KOD320-3D-S32-SO11	●	184	100	124			0.8
32.5		KOD325-3D-S32-SO11	●	186	102	126			0.8
33		KOD330-3D-S32-SO11	●	187	103	127			0.8
33.5		KOD335-3D-S32-SO11	●	189	105	129			0.8
34		KOD340-3D-S32-SO11	●	190	106	130		SOMT11T308	0.8
34.5		KOD345-3D-S32-SO11	●	192	108	132			0.8
35		KOD350-3D-S32-SO11	●	193	109	133			0.8
35.5		KOD355-3D-S32-SO11	●	195	111	135			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
36		3D36-112SOMT11	●	196	112	136		SOMT11T308	0.9
36.5		3D36.5-114SOMT11	○	198	114	138			0.9
37		3D37-136SOMT13	○	206	116	146			0.9
37.5	32	3D37.5-181SOMT13	○	208	118	148	60		0.9
38		3D38-139SOMT13	○	209	119	149			0.9
38.5		3D38.5-121SOMT13	○	211	121	151		SOMT130408	0.9
39		3D39-122SOMT13	○	212	122	152			1.0
39.5		3D39.5-124SOMT13	○	214	124	154			1.1
40	40	3D40-125SOMT13	○	225	125	155	70		1.1

SO鑽頭記號
Part number structure of SO type holder

KOD160 - 3D - S20 - SOMT05

- KOD160: 鑽頭尺寸 Diameter
- 3D: 倍徑 Drill Length
- S20: 接口尺寸 Shank Diameter
- SOMT05: 刀片型號 Inserts Type

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2*5	T6	KOD130-3D-S20-SO05~KOD160-3D-S20-SO05
M2.2*5	T7	KOD165-3D-S20-SO06~KOD190-3D-S25-SO06
M2.2*5	T7	KOD195-3D-S25-SO07~KOD220-3D-S25-SO07
M2.5*6	T7	KOD225-3D-S25-SO08~KOD260-3D-S32-SO08
M3.5*8.5	T7	KOD265-3D-S32-SO09~KOD315-3D-S32-SO09
M3.5*8.5	T8	KOD320-3D-S32-SO11~KOD365-3D-S32-SO11
M4*10	T15	KOD370-3D-S32-SO13~KOD400-3D-S40-SO13

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

TOP-4 X D (Φ 13-40) Indexable drills with SOMT inserts

SO 型 潛孔钻/ U 钻 4 D

Holder diameter 4D: ϕ 13.0 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 4 × ΦDc
Drilling depth: 4xdiameter

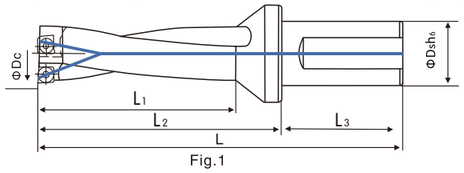


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
13		KOD130-4D-S20/25-SO05	●	114	55	70			0.2
13.5		KOD135-4D-S20/25-SO05	●	116	57	72			0.2
14		KOD140-4D-S20/25-SO05	●	118	59	74			0.2
14.5	20	KOD145-4D-S20/25-SO05	●	120	61	76	44	SOMT050204	0.2
15	/	KOD150-4D-S20/25-SO05	●	122	63	78	/		0.2
15.5	25	KOD155-4D-S20/25-SO05	●	124	65	80	56		0.2
16		KOD160-4D-S20/25-SO05	●	126	67	82			0.2
16.5		KOD165-4D-S20/25-SO06	●	128	69	84			0.2
17		KOD170-4D-S20/25-SO06	●	130	71	86			0.2
17.5		KOD175-4D-S25-SO06	●	144	73	88		SOMT060204	0.2
18		KOD180-4D-S25-SO06	●	146	75	90			0.3
18.5		KOD185-4D-S25-SO06	●	148	77	92			0.3
19		KOD190-4D-S25-SO06	●	150	79	94			0.3
19.5		KOD195-4D-S25-SO07	●	152	81	96			0.3
20		KOD200-4D-S25-SO07	●	154	83	98			0.3
20.5		KOD205-4D-S25-SO07	●	156	85	100		SOMT070306	0.3
21		KOD210-4D-S25-SO07	●	158	87	102			0.3
21.5	25	KOD215-4D-S25-SO07	●	160	89	104	56		0.3
22		KOD220-4D-S25-SO07	●	162	91	106			0.4
22.5		KOD225-4D-S25-SO08	●	164	93	108			0.4
23		KOD230-4D-S25-SO08	●	169	95	113			0.4
23.5		KOD235-4D-S25-SO08	●	171	97	115			0.4
24		KOD240-4D-S25-SO08	●	173	99	117		SOMT08T306	0.4
24.5		KOD245-4D-S25-SO08	●	175	101	119			0.4
25		KOD250-4D-S25-SO08	●	177	103	121			0.4
25.5		KOD255-4D-S32-SO08	●	185	105	125			0.6
26		KOD260-4D-S32-SO08	●	187	107	127			0.6
26.5		KOD265-4D-S32-SO09	●	189	109	129			0.6
27		KOD270-4D-S32-SO09	●	191	111	131			0.6
27.5		KOD275-4D-S32-SO09	●	193	113	133			0.6
28		KOD280-4D-S32-SO09	●	195	115	135			0.6
28.5		KOD285-4D-S32-SO09	●	197	117	137			0.6
29		KOD290-4D-S32-SO09	●	201	120	141		SOMT09T308	0.7
29.5		KOD295-4D-S32-SO09	●	203	122	143			0.7
30		KOD300-4D-S32-SO09	●	208	124	148			0.7
30.5	32	KOD305-4D-S32-SO09	●	210	126	150	60		0.7
31		KOD310-4D-S32-SO09	●	212	128	152			0.7
31.5		KOD315-4D-S32-SO09	●	214	130	154			0.7
32		KOD320-4D-S32-SO11	●	216	132	156			0.8
32.5		KOD325-4D-S32-SO11	●	218	134	158			0.8
33		KOD330-4D-S32-SO11	●	220	136	160			0.8
33.5		KOD335-4D-S32-SO11	●	222	138	162			0.8
34		KOD340-4D-S32-SO11	●	224	140	164		SOMT11T308	0.8
34.5		KOD345-4D-S32-SO11	●	226	142	166			0.8
35		KOD350-4D-S32-SO11	●	228	144	168			0.8
35.5		KOD355-4D-S32-SO11	●	230	146	170			0.8

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
36		KOD360-4D-S32-SO11	●	232	148	172		SOMT11T308	0.9
36.5		KOD365-4D-S32-SO11	○	234	150	174			0.9
37		KOD370-4D-S32-SO13	○	243	153	183			0.9
37.5	32	KOD375-4D-S32-SO13	○	245	155	185	60		0.9
38		KOD380-4D-S32-SO13	○	247	157	187			0.9
38.5		KOD385-4D-S32-SO13	○	249	159	189		SOMT130408	0.9
39		KOD390-4D-S32-SO13	○	251	161	191			1.0
39.5		KOD395-4D-S32-SO13	○	253	163	193			1.1
40	40	KOD400-4D-S40-SO13	○	265	165	195	70		1.1

SO鑽頭記號
Part number structure of SO type holder

KOD160 - 4D - S20 - SOMT05

- KOD160: 鑽頭尺寸 Diameter
- 4D: 倍徑 Drill Length
- S20: 接口尺寸 Shank Diameter
- SOMT05: 刀片型號 Inserts Type

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2*5	T6	KOD130-4D-S20-SO05~KOD160-4D-S20-SO05
M2.2*5	T7	KOD165-4D-S20-SO06~KOD190-4D-S25-SO06
M2.2*5	T7	KOD195-4D-S25-SO07~KOD220-4D-S25-SO07
M2.5*6	T7	KOD225-4D-S25-SO08~KOD260-4D-S32-SO08
M3.5*8.5	T7	KOD265-4D-S32-SO09~KOD315-4D-S32-SO09
M3.5*8.5	T8	KOD320-4D-S32-SO11~KOD365-4D-S32-SO11
M4*10	T15	KOD370-4D-S32-SO13~KOD400-4D-S40-SO13

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

TOP-5 X D (Φ 16-40) Indexable drills with SOMT inserts

SO 型 潜孔钻/ U 钻 5 D

Holder diameter 5D: ϕ 16.0 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 5 × ΦDc
Drilling depth: 5xdiameter

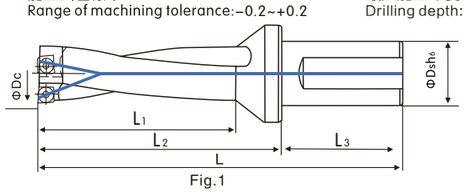


Fig.1


▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
16	20	KOD160-5D-S20/25-SO05	●	142	83	98	44	SOMT050204	0.4
16.5	/	KOD165-5D-S20/25-SO06	●	145	86	101	/	SOMT060204	0.4
17	25	KOD170-5D-S20/25-SO06	●	147	88	103	56		0.4
17.5	25	KOD175-5D-S25-SO06	●	162	91	106	56		0.4
18		KOD180-5D-S25-SO06	●	164	93	108			0.5
18.5		KOD185-5D-S25-SO06	●	167	96	111			0.5
19		KOD190-5D-S25-SO06	●	169	98	113			0.5
19.5		KOD195-5D-S25-SO07	●	172	101	116		SOMT070306	0.5
20		KOD200-5D-S25-SO07	●	174	103	118			0.5
20.5		KOD205-5D-S25-SO07	●	177	106	121			0.5
21		KOD210-5D-S25-SO07	●	179	108	123			0.5
21.5		KOD215-5D-S25-SO07	●	182	111	126			0.5
22		KOD220-5D-S25-SO07	●	184	113	128			0.5
22.5		KOD225-5D-S25-SO08	●	187	116	131		SOMT08T306	0.5
23		KOD230-5D-S25-SO08	●	192	118	136			0.6
23.5		KOD235-5D-S25-SO08	●	195	121	139			0.6
24		KOD240-5D-S25-SO08	●	197	123	141			0.6
24.5		KOD245-5D-S25-SO08	●	200	126	144			0.8
25		KOD250-5D-S25-SO08	●	202	128	146			0.8
25.5	32	KOD255-5D-S32-SO08	●	213	131	153	60		0.8
26		KOD260-5D-S32-SO08	●	216	133	156			0.8
26.5		KOD265-5D-S32-SO09	●	217	136	157		SOMT09T308	0.8
27		KOD270-5D-S32-SO09	●	218	138	158			0.8
27.5		KOD275-5D-S32-SO09	●	221	141	161			0.8
28		KOD280-5D-S32-SO09	●	223	143	163			0.9
28.5		KOD285-5D-S32-SO09	●	226	146	166			0.9
29		KOD290-5D-S32-SO09	●	230	149	170			0.9
29.5		KOD295-5D-S32-SO09	●	233	151	173			0.9
30		KOD300-5D-S32-SO09	●	238	154	178			1.0
30.5		KOD305-5D-S32-SO09	●	241	157	181			1.0
31		KOD310-5D-S32-SO09	●	243	159	183			1.0
31.5		KOD315-5D-S32-SO09	●	245	162	185			1.0
32		KOD320-5D-S32-SO11	●	248	164	188		SOMT11T308	1.1
32.5		KOD325-5D-S32-SO11	●	251	167	191			1.1
33		KOD330-5D-S32-SO11	●	253	169	193			1.1
33.5		KOD335-5D-S32-SO11	●	255	172	195			1.1
34		KOD340-5D-S32-SO11	●	258	174	198			1.2
34.5		KOD345-5D-S32-SO11	●	261	177	201			1.2
35		KOD350-5D-S32-SO11	●	263	179	203			1.2
35.5		KOD355-5D-S32-SO11	●	265	182	205			1.2
36		KOD360-5D-S32-SO11	○	268	184	208			1.3
36.5		KOD365-5D-S32-SO11	○	271	187	211			1.3
37		KOD370-5D-S32-SO13	○	280	190	220		SOMT130408	1.3
37.5		KOD375-5D-S32-SO13	○	283	193	223			1.3
38		KOD380-5D-S32-SO13	○	285	195	225			1.4
38.5		KOD385-5D-S32-SO13	○	288	198	228			1.4

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
39	32	KOD390-5D-S32-SO13	○	290	200	230	60	SOMT130408	1.9
39.5		KOD395-5D-S32-SO13	○	293	203	233			1.9
40	40	KOD400-5D-S40-SO13	○	305	205	235	70		1.9

SO鑽頭記號
Part number structure of SO type holder

KOD160 - 5D - S20 - SOMT05

- KOD160: 鑽頭尺寸 Diameter
- 5D: 倍徑 Drill Length
- S20: 接口尺寸 Shank Diameter
- SOMT05: 刀片型號 Inserts Type

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2*5	T6	KOD160-5D-S20-SO05
M2.2*5	T7	KOD165-5D-S20-SO06~KOD190-5D-S25-SO06
M2.2*5	T7	KOD195-5D-S25-SO07~KOD220-5D-S25-SO07
M2.5*6	T7	KOD225-5D-S25-SO08~KOD260-5D-S32-SO08
M3.5*8.5	T7	KOD265-5D-S32-SO09~KOD315-5D-S32-SO09
M3.5*8.5	T8	KOD320-5D-S32-SO11~KOD365-5D-S32-SO11
M4*10	T15	KOD370-5D-S32-SO13~KOD400-5D-S40-SO13

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

WC -2 X D (Φ 13-40) Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻 2 D

Holder diameter 2D:Φ13.0 ~ 40.0mm

加工公差標準 -0.2~+0.2
Range of machining tolerance:-0.2~+0.2

最大加工深度 ℓ 2× ΦDc
Drilling depth: 2xdiameter

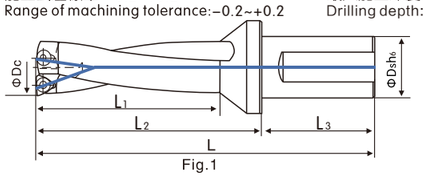


Fig.1


▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
13	20	KCD130-2D-S20/S25-WC02	●	88	29	44	44	WC..020104	0.2
13.5		KCD135-2D-S20/S25-WC02	●	89	30	45			0.2
14		KCD140-2D-S20/S25-WC03	●	90	31	46		WC..030208	0.2
14.5		KCD145-2D-S20/S25-WC03	●	91	32	47			0.2
15	/	KCD150-2D-S20/S25-WC03	●	92	33	48	/	WC..030208	0.2
15.5	25	KCD155-2D-S20/S25-WC03	●	93	34	49	56		0.2
16		KCD160-2D-S20/S25-WC03	●	94	35	50			0.2
16.5		KCD165-2D-S20/S25-WC03	●	95	36	51			0.2
17		KCD170-2D-S20/S25-WC03	●	96	37	52			0.2
17.5	25	KCD175-2D-S25-WC03	●	109	38	53	56		0.2
18		KCD180-2D-S25-WC03	●	110	39	54			0.3
18.5		KCD185-2D-S25-WC03	●	111	40	55			0.3
19		KCD190-2D-S25-WC03	●	112	41	56			0.3
19.5		KCD195-2D-S25-WC03	●	113	42	57			0.3
20		KCD200-2D-S25-WC03	●	114	43	58			0.3
20.5		KCD205-2D-S25-WC03	●	115	44	59			0.3
21		KCD210-2D-S25-WC04	●	116	45	60			0.3
21.5		KCD215-2D-S25-WC04	●	117	46	61		WC..040208	0.3
22		KCD220-2D-S25-WC04	●	118	47	62			0.4
22.5		KCD225-2D-S25-WC04	●	119	48	63			0.4
23		KCD230-2D-S25-WC04	●	123	49	67			0.4
23.5		KCD235-2D-S25-WC04	●	124	50	68			0.4
24		KCD240-2D-S25-WC04	●	125	51	69			0.4
24.5		KCD245-2D-S25-WC04	●	126	52	70			0.4
25		KCD250-2D-S25-WC05	●	127	53	71		WC..050308	0.4
25.5	32	KCD255-2D-S32-WC05	●	134	54	74	60		0.6
26		KCD260-2D-S32-WC05	●	135	55	75			0.6
26.5		KCD265-2D-S32-WC05	●	136	56	76			0.6
27		KCD270-2D-S32-WC05	●	137	57	77			0.6
27.5		KCD275-2D-S32-WC05	●	138	58	78		WC..050308	0.6
28		KCD280-2D-S32-WC05	●	139	59	79			0.6
28.5		KCD285-2D-S32-WC05	●	140	60	80			0.6
29		KCD290-2D-S32-WC05	●	143	62	83			0.7
29.5		KCD295-2D-S32-WC05	●	144	63	84			0.7
30		KCD300-2D-S32-WC05	●	148	64	88			0.7
30.5		KCD305-2D-S32-WC05	●	149	65	89			0.7
31		KCD310-2D-S32-WC06	●	150	66	90		WC..06T308	0.7
31.5		KCD315-2D-S32-WC06	●	151	67	91			0.7
32		KCD320-2D-S32-WC06	●	152	68	92			0.8
32.5		KCD325-2D-S32-WC06	●	153	69	93			0.8
33		KCD330-2D-S32-WC06	●	154	70	94			0.8
33.5		KCD335-2D-S32-WC06	●	155	71	95			0.8
34		KCD340-2D-S32-WC06	●	156	72	96			0.8
34.5		KCD345-2D-S32-WC06	●	157	73	97			0.8
35		KCD350-2D-S32-WC06	●	158	74	98			0.8
35.5		KCD355-2D-S32-WC06	●	159	75	99			0.8
36		KCD360-2D-S32-WC06	●	160	76	100			0.9
36.5		KCD365-2D-S32-WC06	●	161	77	101			0.9

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert	kg
37	32	KCD370-3D-S32-WC06	●	206	116	146	60	WC..06T308	1.1
37.5		KCD375-3D-S32-WC06	●	208	118	148			1.1
38		KCD380-3D-S32-WC06	●	209	119	149			1.1
38.5		KCD385-3D-S32-WC06	●	211	121	151			1.1
39		KCD390-3D-S32-WC06	●	212	122	152			1.2
39.5		KCD395-3D-S32-WC06	●	214	124	154			1.3
40	40	KCD400-3D-S40-WC06	○	225	125	155	70		1.6

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*5	T6	KCD130-3D-S20-WC02~KCD145-3D-S25-WC02
M2.5*5.5	T8	KCD140-3D-S20-WC03~KCD145-3D-S25-WC03
M2.5*6	T8	KCD150-3D-S20-WC03~KCD205-3D-S25-WC03
M2.5*6	T8	KCD210-3D-S25-WC04~KCD245-3D-S25-WC04
M3*7	T8	KCD250-3D-S25-WC05~KCD305-3D-S32-WC05
M3.5*8.5	T15	KCD310-3D-S32-WC06~KCD400-3D-S40-WC06

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存 ○ 表示库存预定品

WC－3ＸD（Φ13-40）Indexable drills with WC inserts

WC 型 潛孔钻/ U 钻　3 D

Holder diameter 3D:Φ13.0～40.0mm

加工公差標準 －0.2~+0.2
Range of machining tolerance:－0.2~+0.2

最大加工深度 ℓ 3× ΦDc
Drilling depth: 3xdiameter

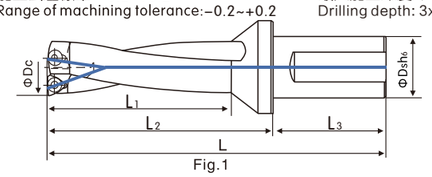


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
13	20 / 25	KCD130-3D-S20/S25-WC02	●	101	42	57	44 / 56	WC..020104	0.2
13.5		KCD135-3D-S20/S25-WC02	●	103	44	59			0.2
14		KCD140-3D-S20/S25-WC03	●	104	45	60		WC..030208	0.2
14.5		KCD145-3D-S20/S25-WC03	●	106	47	62			0.2
15		KCD150-3D-S20/S25-WC03	●	107	48	63		WC..030208	0.2
15.5		KCD155-3D-S20/S25-WC03	●	109	50	65			0.2
16		KCD160-3D-S20/S25-WC03	●	110	51	66			0.2
16.5		KCD165-3D-S20/S25-WC03	●	112	53	68			0.2
17		KCD170-3D-S20/S25-WC03	●	113	54	69			0.2
17.5	25	KCD175-3D-S25-WC03	●	127	56	71	56		0.3
18		KCD180-3D-S25-WC03	●	128	57	72			0.3
18.5		KCD185-3D-S25-WC03	●	130	59	74			0.3
19		KCD190-3D-S25-WC03	●	131	60	75			0.3
19.5		KCD195-3D-S25-WC03	●	133	62	77			0.3
20		KCD200-3D-S25-WC03	●	134	63	78			0.4
20.5		KCD205-3D-S25-WC03	●	136	65	80			0.4
21		KCD210-3D-S25-WC04	●	137	66	81			0.4
21.5		KCD215-3D-S25-WC04	●	139	68	83		WC..040208	0.4
22		KCD220-3D-S25-WC04	●	140	69	84			0.4
22.5		KCD225-3D-S25-WC04	●	142	71	86			0.4
23		KCD230-3D-S25-WC04	●	146	72	90			0.4
23.5		KCD235-3D-S25-WC04	●	148	74	92			0.4
24		KCD240-3D-S25-WC04	●	149	75	93			0.4
24.5		KCD245-3D-S25-WC04	●	151	77	95			0.4
25		KCD250-3D-S25-WC05	●	152	78	96		WC..050308	0.4
25.5	32	KCD255-3D-S32-WC05	●	160	80	100	60		0.6
26		KCD260-3D-S32-WC05	●	161	81	101			0.6
26.5		KCD265-3D-S32-WC05	●	163	83	103			0.7
27		KCD270-3D-S32-WC05	●	164	84	104			0.7
27.5		KCD275-3D-S32-WC05	●	166	86	106			0.7
28		KCD280-3D-S32-WC05	●	167	87	107			0.7
28.5		KCD285-3D-S32-WC05	●	169	89	109			0.7
29		KCD290-3D-S32-WC05	●	172	91	112			0.7
29.5		KCD295-3D-S32-WC05	●	174	93	114			0.7
30		KCD300-3D-S32-WC05	●	178	94	118			0.7
30.5		KCD305-3D-S32-WC05	●	180	96	120			0.8
31		KCD310-3D-S32-WC06	●	181	97	121		WC..06T308	0.8
31.5		KCD315-3D-S32-WC06	●	183	99	123			0.9
32		KCD320-3D-S32-WC06	●	184	100	124			0.9
32.5		KCD325-3D-S32-WC06	●	186	102	126			0.9
33		KCD330-3D-S32-WC06	●	187	103	127			0.9
33.5		KCD335-3D-S32-WC06	●	189	105	129			0.9
34		KCD340-3D-S32-WC06	●	190	106	130			0.9
34.5		KCD345-3D-S32-WC06	●	192	108	132			1.0
35		KCD350-3D-S32-WC06	●	193	109	133			1.0
35.5		KCD355-3D-S32-WC06	●	195	111	135			1.0
36		KCD360-3D-S32-WC06	●	196	112	136			1.0
36.5		KCD365-3D-S32-WC06	●	198	114	138			1.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
37	32	KCD370-3D-S32-WC06	●	206	116	146	60	WC..06T308	1.1
37.5		KCD375-3D-S32-WC06	●	208	118	148			1.1
38		KCD380-3D-S32-WC06	●	209	119	149			1.1
38.5		KCD385-3D-S32-WC06	●	211	121	151			1.1
39		KCD390-3D-S32-WC06	●	212	122	152			1.2
39.5		KCD395-3D-S32-WC06	●	214	124	154			1.3
40	40	KCD400-3D-S40-WC06	○	225	125	155	70		1.6

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*5	T6	KCD130-3D-S20-WC02~KCD145-3D-S25-WC02
M2.5*5.5	T8	KCD140-3D-S20-WC03~KCD145-3D-S25-WC03
M2.5*6	T8	KCD150-3D-S20-WC03~KCD205-3D-S25-WC03
M2.5*6	T8	KCD210-3D-S25-WC04~KCD245-3D-S25-WC04
M3*7	T8	KCD250-3D-S25-WC05~KCD305-3D-S32-WC05
M3.5*8.5	T15	KCD310-3D-S32-WC06~KCD400-3D-S40-WC06

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品

WC－4ＸD（Φ13-40）Indexable drills with WC inserts

WC 型 潛孔钻/ U 钻　4 D

Holder diameter 4D:Φ13.0～40.0mm

加工公差標準 －0.2~+0.2
Range of machining tolerance:－0.2~+0.2

最大加工深度 ℓ 4× ΦDc
Drilling depth: 4xdiameter

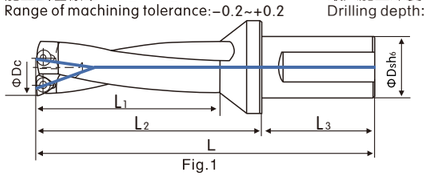


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
13	20 / 25	KCD130-4D-S20/S25-WC02	●	114	55	70	44 / 56	WC..020104	0.2
13.5		KCD135-4D-S20/S25-WC02	●	116	57	72			0.2
14		KCD140-4D-S20/S25-WC03	●	118	59	74		WC..030208	0.2
14.5		KCD145-4D-S20/S25-WC03	●	120	61	76			0.2
15		KCD150-4D-S20/S25-WC03	●	122	63	78		WC..030208	0.2
15.5		KCD155-4D-S20/S25-WC03	●	124	65	80			0.2
16		KCD160-4D-S20/S25-WC03	●	126	67	82			0.3
16.5		KCD165-4D-S20/S25-WC03	●	128	69	84			0.3
17		KCD170-4D-S20/S25-WC03	●	130	71	86			0.3
17.5	25	KCD175-4D-S25-WC03	●	144	73	88	56		0.3
18		KCD180-4D-S25-WC03	●	146	75	90			0.4
18.5		KCD185-4D-S25-WC03	●	148	77	92			0.4
19		KCD190-4D-S25-WC03	●	150	79	94			0.4
19.5		KCD195-4D-S25-WC03	●	152	81	96			0.4
20		KCD200-4D-S25-WC03	●	154	83	98			0.4
20.5		KCD205-4D-S25-WC03	●	156	85	100			0.4
21		KCD210-4D-S25-WC04	●	158	87	102			0.4
21.5		KCD215-4D-S25-WC04	●	160	89	104		WC..040208	0.4
22		KCD220-4D-S25-WC04	●	162	91	106			0.4
22.5		KCD225-4D-S25-WC04	●	164	93	108			0.4
23		KCD230-4D-S25-WC04	●	169	95	113			0.5
23.5		KCD235-4D-S25-WC04	●	171	97	115			0.5
24		KCD240-4D-S25-WC04	●	173	99	117			0.5
24.5		KCD245-4D-S25-WC04	●	175	101	119			0.7
25		KCD250-4D-S25-WC05	●	177	103	121		WC..050308	0.7
25.5	32	KCD255-4D-S32-WC05	●	185	105	125	60		0.7
26		KCD260-4D-S32-WC05	●	187	107	127			0.7
26.5		KCD265-4D-S32-WC05	●	189	109	129			0.7
27		KCD270-4D-S32-WC05	●	191	111	131			0.7
27.5		KCD275-4D-S32-WC05	●	193	113	133			0.7
28		KCD280-4D-S32-WC05	●	195	115	135			0.8
28.5		KCD285-4D-S32-WC05	●	197	117	137			0.8
29		KCD290-4D-S32-WC05	●	201	120	141			0.8
29.5		KCD295-4D-S32-WC05	●	203	122	143			0.8
30		KCD300-4D-S32-WC05	●	208	124	148			0.9
30.5		KCD305-4D-S32-WC05	●	210	126	150			0.9
31		KCD310-4D-S32-WC06	●	212	128	152		WC..06T308	0.9
31.5		KCD315-4D-S32-WC06	●	214	130	154			0.9
32		KCD320-4D-S32-WC06	●	216	132	156			1.0
32.5		KCD325-4D-S32-WC06	●	218	134	158			1.0
33		KCD330-4D-S32-WC06	●	220	136	160			1.0
33.5		KCD335-4D-S32-WC06	●	222	138	162			1.0
34		KCD340-4D-S32-WC06	●	224	140	164			1.1
34.5		KCD345-4D-S32-WC06	●	226	142	166			1.1
35		KCD350-4D-S32-WC06	●	228	144	168			1.1
35.5		KCD355-4D-S32-WC06	●	230	146	170			1.1
36		KCD360-4D-S32-WC06	●	232	148	172			1.2
36.5		KCD365-4D-S32-WC06	●	236	150	174			1.2

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
37	32	KCD370-3D-S32-WC06	●	243	153	183	60	WC..06T308	1.2
37.5		KCD375-3D-S32-WC06	●	245	155	185			1.2
38		KCD380-3D-S32-WC06	●	247	157	187			1.3
38.5		KCD385-3D-S32-WC06	●	249	159	189			1.3
39		KCD390-3D-S32-WC06	●	251	161	191			1.8
39.5		KCD395-3D-S32-WC06	●	253	163	193			1.8
40	40	KCD400-3D-S40-WC06	○	265	165	195	70		1.8

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M1.8*5	T6	KCD130-3D-S20-WC02~KCD145-3D-S25-WC02
M2.5*5.5	T8	KCD140-3D-S20-WC03~KCD145-3D-S25-WC03
M2.5*6	T8	KCD150-3D-S20-WC03~KCD205-3D-S25-WC03
M2.5*6	T8	KCD210-3D-S25-WC04~KCD245-3D-S25-WC04
M3*7	T8	KCD250-3D-S25-WC05~KCD305-3D-S32-WC05
M3.5*8.5	T15	KCD310-3D-S32-WC06~KCD400-3D-S40-WC06

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品

SP
SO
WC
WDX
TCAP
6D & 8D
880
皇冠鑽系列 SEM Drill Inserts
大直徑U鑽 YLMD MAX Drill
刀片系列 Carbide Inserts
粗鏜刀系列 Rough Boring Head
精鏜刀系列 Finish Boring Head
鏜刀柄系列 Chuck
小刀夾系列 Accessories
鏜刀倒角環 Chamfering Tools
槍鑽工藝 Gun Drill Technology

WC－5ＸD（Φ16-40）Indexable drills with WC inserts

WC 型 潜孔钻/ U 钻　5 D

Holder diameter 5D:Φ16.0～40.0mm

加工公差標準 －0.2~+0.2
Range of machining tolerance:－0.2~+0.2

最大加工深度 ℓ 5× ΦDc
Drilling depth: 5xdiameter

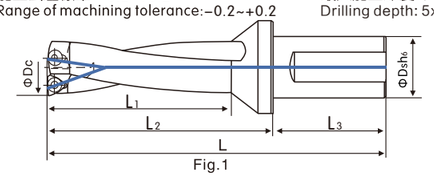


Fig.1

▲ H13/SKD61

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
16	20	KCD160-5D-S20/S25-WC03	●	142	83	98	44	WC..030208	0.4
16.5	/	KCD165-5D-S20/S25-WC03	●	145	86	101	/		0.4
17	25	KCD170-5D-S20/S25-WC03	●	147	88	103	56		0.4
17.5	25	KCD175-5D-S25-WC03	●	162	91	106	56		0.4
18		KCD180-5D-S25-WC03	●	164	93	108			0.5
18.5		KCD185-5D-S25-WC03	●	167	96	111			0.5
19		KCD190-5D-S25-WC03	●	169	98	113			0.5
19.5		KCD195-5D-S25-WC03	●	172	101	116			0.5
20		KCD200-5D-S25-WC03	●	174	103	118			0.5
20.5		KCD205-5D-S25-WC03	●	177	106	121			0.5
21		KCD210-5D-S25-WC04	●	179	108	123		WC..040208	0.5
21.5		KCD215-5D-S25-WC04	●	182	111	126			0.5
22		KCD220-5D-S25-WC04	●	184	113	128			0.5
22.5		KCD225-5D-S25-WC04	●	187	116	131			0.5
23		KCD230-5D-S25-WC04	●	192	118	136			0.6
23.5		KCD235-5D-S25-WC04	●	195	121	139			0.6
24		KCD240-5D-S25-WC04	●	197	123	141			0.6
24.5		KCD245-5D-S25-WC04	●	200	126	144			0.8
25		KCD250-5D-S25-WC05	●	202	128	146			0.8
25.5		KCD255-5D-S32-WC05	●	213	131	153		WC..050308	0.8
26		KCD260-5D-S32-WC05	●	216	133	156			0.8
26.5		KCD265-5D-S32-WC05	●	217	136	157			0.8
27		KCD270-5D-S32-WC05	●	218	138	158			0.8
27.5		KCD275-5D-S32-WC05	●	221	141	161			0.8
28		KCD280-5D-S32-WC05	●	223	143	163			0.9
28.5		KCD285-5D-S32-WC05	●	226	146	166			0.9
29		KCD290-5D-S32-WC05	●	230	149	170			0.9
29.5		KCD295-5D-S32-WC05	●	233	151	173			0.9
30		KCD300-5D-S32-WC05	●	238	154	178			1.0
30.5		KCD305-5D-S32-WC05	●	241	157	181			1.0
31	32	KCD310-5D-S32-WC06	●	243	159	183	60	WC..06T308	1.0
31.5		KCD315-5D-S32-WC06	●	245	162	185			1.0
32		KCD320-5D-S32-WC06	●	248	164	188			1.1
32.5		KCD325-5D-S32-WC06	●	251	167	191			1.1
33		KCD330-5D-S32-WC06	●	253	169	193			1.1
33.5		KCD335-5D-S32-WC06	●	255	172	195			1.1
34		KCD340-5D-S32-WC06	●	258	174	198			1.2
34.5		KCD345-5D-S32-WC06	●	261	177	201			1.2
35		KCD350-5D-S32-WC06	●	263	179	203			1.2
35.5		KCD355-5D-S32-WC06	●	265	182	205			1.2
36		KCD360-5D-S32-WC06	●	268	184	208			1.3
36.5		KCD365-5D-S32-WC06	●	271	187	211			1.3

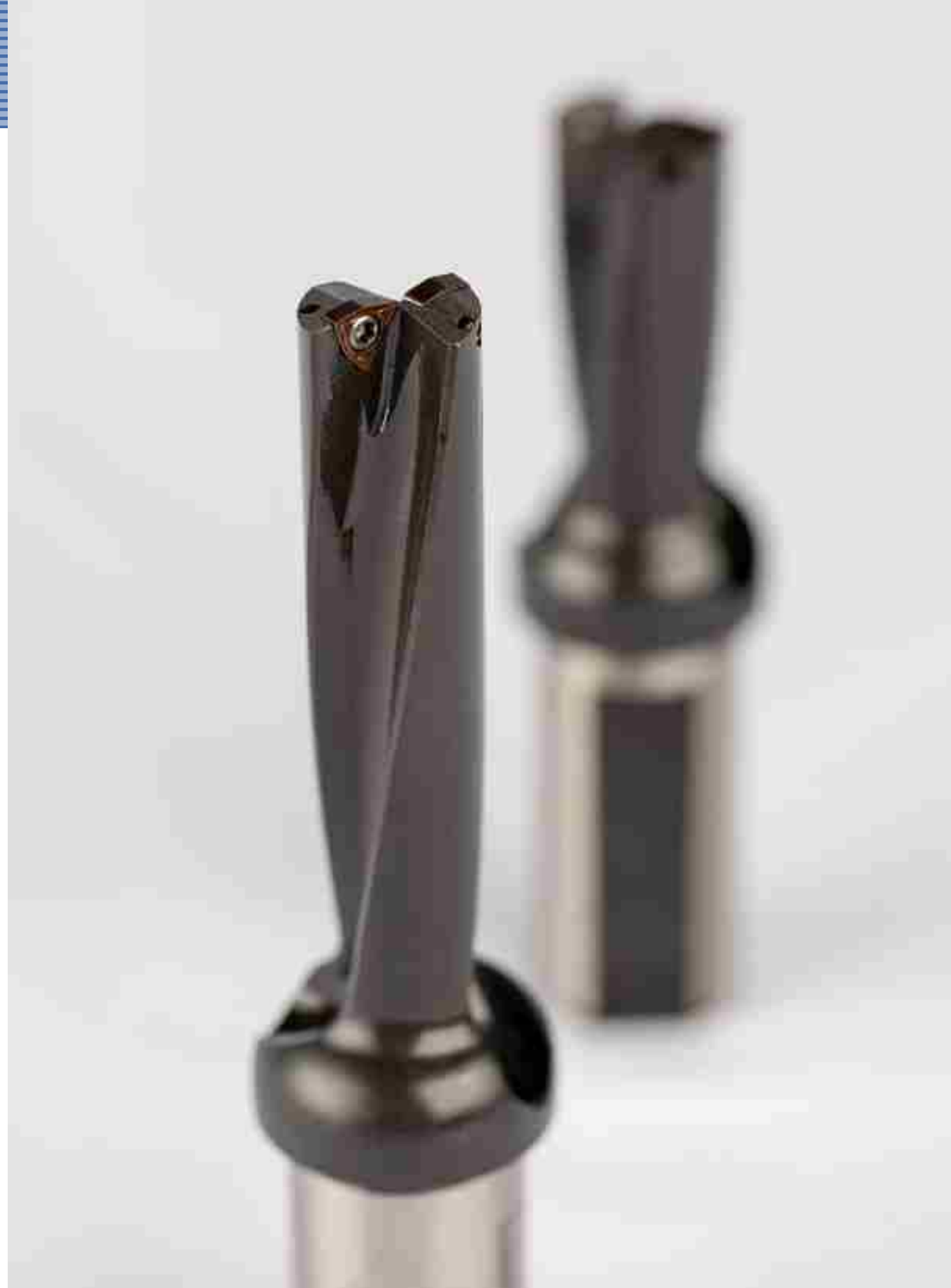
刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
37	32	KCD370-5D-S32-WC06	●	206	116	146	60	WC..06T308	1.1
37.5		KCD375-5D-S32-WC06	●	208	118	148			1.1
38		KCD380-5D-S32-WC06	●	209	119	149			1.1
38.5		KCD385-5D-S32-WC06	●	211	121	151			1.1
39		KCD390-5D-S32-WC06	●	212	122	152			1.2
39.5		KCD395-5D-S32-WC06	●	214	124	154			1.3
40	40	KCD400-5D-S40-WC06	○	225	125	155	70		1.6

◎附件Spare Parts

平頭螺釘 Screw	扳手 Wrench	適用刀杆 Applicable Drill
M2.5*6	T8	KCD160-4D-S20-WC03~KCD205-4D-S25-WC03
M2.5*6	T8	KCD210-4D-S25-WC04~KCD245-4D-S25-WC04
M3*7	T8	KCD250-4D-S25-WC05~KCD305-4D-S32-WC05
M3.5*8.5	T15	KCD310-4D-S32-WC06~KCD400-4D-S40-WC06

● Mark:Standard stock item,
No mark:Made to order item.

◎ ● 表示库存　○ 表示库存预定品



WDX (Φ 15–30) flat-bottom drills with WDX inserts

WDX/PDL型 平底钻

Holder diameter:Φ15.0 ~ 30.0mm

加工公差標準 −0.05 ~ +0.15
Range of machining tolerance:−0.05 ~ +0.15

最大加工深度 ℓ 2 × ΦDc
Drilling depth: 2xdiameter

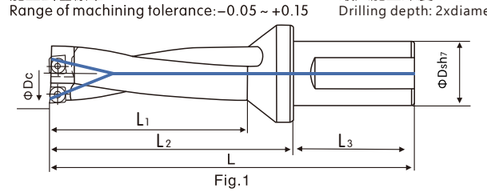
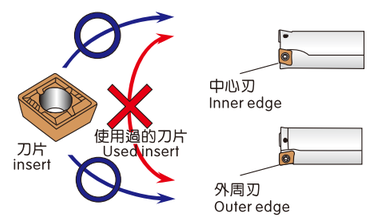


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	kg
15	25	PDL150D2S25	●	92	33	48	56	WDXT042004	0.2
16		PDL160D2S25	●	94	35	50		WDXT052504	0.2
17		PDL170D2S25	●	96	37	52			0.2
18		PDL180D2S25	●	112	39	56			0.3
19		PDL190D2S25	●	114	41	58		WDXT063006	0.3
20		PDL200D2S25	●	116	43	60			0.3
21		PDL210D2S25	●	118	45	62			0.3
22		PDL220D2S25	●	120	47	64			0.4
23		PDL230D2S25	●	122	49	66		WDXT073506	0.4
24		PDL240D2S25	●	124	51	68			0.4
25		PDL250D2S25	●	126	53	70			0.4
26	32	PDL260D2S32	●	135	55	75	60		0.6
27		PDL270D2S32	●	137	57	77			0.6
28		PDL280D2S32	●	139	59	79			0.7
29		PDL290D2S32	●	143	62	83		WDXT094008	0.7
30		PDL300D2S32	●	148	64	88			0.7
31		PDL310D2S32	○	150	66	90			0.8
32		PDL320D2S32	○	152	68	92			0.8
33		PDL330D2S32	○	154	70	94			0.8
34		PDL340D2S32	○	156	72	96			0.8
35		PDL350D2S32	○	158	74	98			0.8

◎刀片安裝注意事項
Notes About Mounting Inserts(PDL Type)



PDL型：刀片外周刃和中心刃均可使用。作爲外周刃使用的刀片，不能作爲中心刃使用。同樣，作爲中心刃使用的刀片，不能作爲外周刃使用。

PCT型：僅限于外周刃，使用2刀尖

PCT型、PDL型的稱呼方法
Part nmuber structure of PCT，PDL Type holder

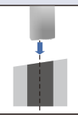
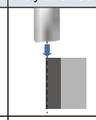
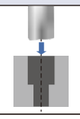
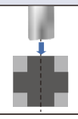
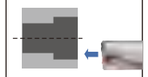
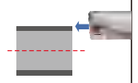
PCT 250 D3 S25

- 250: 鑽徑 Diameter (ϕ25.0)
- D3: 鑽頭刃長L/D Drill Length (3D)
- S25: 刀杆尺寸 Shank Diameter (ϕ25.0)

PCT型、PDL型用刀片的稱呼方法
Part nmuber structure of WDXT inserts

WDXT 07 35 06 – G

- 07: 對邊尺寸 Width Across Flats (7.5)
- 35: 厚度 Thickness × 10 (3.5)
- 06: 刀尖 Corner RadiusR × 10 (R0.6)
- G: 斷屑槽種類 Breaker Type

Application	Angled Surface	Half Cylindrical	Pre-cast Hole	Intersecting Holes	Boring	External Turning	Laminated Plates	Back Boring
								
Feed Rate(f) mm/rev	0.05	0.05	0.08	0.05	0.1	0.1	Not applicable	Not applicable

K2D-2 X D (Φ 13-35) Indexable drills with XO/SP inserts

XO/SP型 潜孔钻/ U 钻 2 D

Holder diameter 2D:Φ13.0 ~ 35.0mm

加工公差標準 -0.05 ~ +0.15
Range of machining tolerance:-0.05 ~ +0.15

最大加工深度 2 × ΦDc
Drilling depth: 2xdiameter

◎ Threaded Fittings /Connection：PT

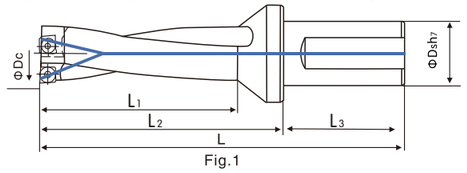


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
12	20	K2D12020-04	●	90	25	40	44	SPMT040204 XOMT040204
13		K2D13020-04	●	88	29	44		
14		K2D14020-05	●	90	31	46		SPMT050204 XOMT050204
15		K2D15020-05	●	92	33	48		
16		K2D16020-05	●	94	35	50		
17	25	K2D17025-06	●	96	37	52	56	SPMT060205 XOMT060205
18		K2D18025-06	●	110	39	54		
19		K2D19025-06	●	112	41	56		
20		K2D20025-07	●	114	43	58		SPMT07T208 XOMT07T208
21		K2D21025-07	●	116	45	60		
22		K2D22025-07	●	118	47	62		
23		K2D23025-07	●	123	49	67		

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
24	25	K2D24025-09	●	125	51	69	56	SPMT090308 XOMT090308
25		K2D25025-09	●	127	53	71		
26	32	K2D26032-09	●	135	55	75	60	
27		K2D27032-09	●	137	57	77		
28		K2D28032-09	○	139	59	79		
29		K2D29032-09	○	143	62	83		
30		K2D30032-11	○	148	64	88		SPMT11T308 XOMT11T308
31		K2D31032-11	○	150	66	90		
32		K2D32032-11	○	152	68	92		
33		K2D33032-11	○	154	70	94		
34		K2D34032-11	○	156	72	96		
35		K2D35032-11	○	158	74	98		

K4D-4 X D (Φ 13-35) Indexable drills with XO/SP inserts

XO/SP型 潜孔钻/ U 钻 4 D

Holder diameter 4D:Φ13.0 ~ 35.0mm

加工公差標準 -0.05 ~ +0.15
Range of machining tolerance:-0.05 ~ +0.15

最大加工深度 4 × ΦDc
Drilling depth: 4xdiameter

◎ Threaded Fittings /Connection：PT

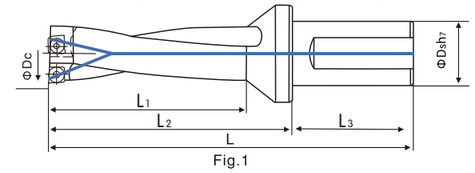


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
12	20	K4D12020-04	●	115	50	65	44	SPMT040204 XOMT040204
13		K4D13020-04	●	114	55	70		
14		K4D14020-05	●	118	59	74		SPMT050204 XOMT050204
15		K4D15020-05	●	122	63	78		
16		K4D16020-05	●	126	67	82		
17	25	K4D17025-06	●	130	71	86	56	SPMT060205 XOMT060205
18		K4D18025-06	●	146	75	90		
19		K4D19025-06	●	150	79	94		
20		K4D20025-07	●	154	83	98		SPMT07T208 XOMT07T208
21		K4D21025-07	●	158	87	102		
22		K4D22025-07	●	162	91	106		
23		K4D23025-07	●	169	95	113		

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
24	25	K4D24025-09	●	173	99	117	56	SPMT090308 XOMT090308
25		K4D25025-09	●	177	103	121		
26	32	K4D26032-09	●	187	107	127	60	
27		K4D27032-09	●	191	111	131		
28		K4D28032-09	○	195	115	135		
29		K4D29032-09	○	201	120	141		
30		K4D30032-11	○	208	124	148		SPMT11T308 XOMT11T308
31		K4D31032-11	○	212	128	152		
32		K4D32032-11	○	216	132	156		
33		K4D33032-11	○	220	136	160		
34		K4D34032-11	○	224	140	164		
35		K4D35032-11	○	228	146	168		

K3D-3 X D (Φ 13-35) Indexable drills with XO/SP inserts

XO/SP型 潜孔钻/ U 钻 3 D

Holder diameter 3D:Φ13.0 ~ 35.0mm

加工公差標準 -0.05 ~ +0.15
Range of machining tolerance:-0.05 ~ +0.15

最大加工深度 3 × ΦDc
Drilling depth: 3xdiameter

◎ Threaded Fittings /Connection：PT

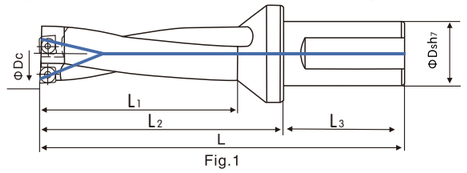


Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
12	20	K3D12020-04	●	102	37	52	44	SPMT040204 XOMT040204
13		K3D13020-04	●	101	42	57		
14		K3D14020-05	●	104	45	60		SPMT050204 XOMT050204
15		K3D15020-05	●	107	48	63		
16		K3D16020-05	●	110	51	66		
17	25	K3D17025-06	●	113	54	69	56	SPMT060205 XOMT060205
18		K3D18025-06	●	128	57	72		
19		K3D19025-06	●	131	60	75		
20		K3D20025-07	●	134	63	78		SPMT07T208 XOMT07T208
21		K3D21025-07	●	137	66	81		
22		K3D22025-07	●	140	69	84		
23		K3D23025-07	●	146	72	90		

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
24	25	K3D24025-09	●	149	75	93	56	SPMT090308 XOMT090308
25		K3D25025-09	●	152	78	96		
26	32	K3D26032-09	●	161	81	101	60	
27		K3D27032-09	●	164	84	104		
28		K3D28032-09	○	167	87	107		
29		K3D29032-09	○	172	91	112		
30		K3D30032-11	○	178	94	118		SPMT11T308 XOMT11T308
31		K3D31032-11	○	181	97	121		
32		K3D32032-11	○	184	100	124		
33		K3D33032-11	○	187	103	127		
34		K3D34032-11	○	190	106	130		
35		K3D35032-11	○	193	109	133		

K5D-5 X D (Φ 13-35) Indexable drills with XO/SP inserts

XO/SP型 潜孔钻/ U 钻 5 D

Holder diameter 5D:Φ13.0 ~ 35.0mm

加工公差標準 -0.05 ~ +0.15
Range of machining tolerance:-0.05 ~ +0.15

最大加工深度 5 × ΦDc
Drilling depth: 5xdiameter

◎ Threaded Fittings /Connection：PT

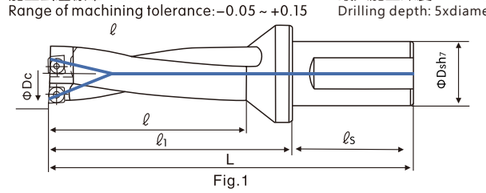


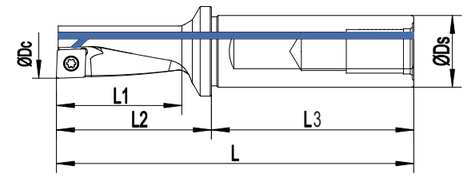
Fig.1

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
12	20	K5D12020-04	●	124	63	80	44	SPMT040204 XOMT040204
13		K5D13020-04	●	129	68	85		
14		K5D14020-05	●	133	73	89		SPMT050204 XOMT050204
15		K5D15020-05	●	137	78	93		
16		K5D16020-05	●	142	83	98		
17	25	K5D17025-06	●	147	88	103	56	SPMT060205 XOMT060205
18		K5D18025-06	●	164	93	108		
19		K5D19025-06	●	169	98	113		
20		K5D20025-07	●	174	103	118		SPMT07T208 XOMT07T208
21		K5D21025-07	●	179	108	123		
22		K5D22025-07	●	184	113	128		
23		K5D23025-07	●	192	118	136		

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ1	ℓ2	ℓ3	適用刀片 Applicable Insert
24	25	K5D24025-09	●	197	123	141	56	SPMT090308 XOMT090308
25		K5D25025-09	●	202	128	146		
26	32	K5D26032-09	●	216	133	156	60	
27		K5D27032-09	●	218	138	158		
28		K5D28032-09	○	223	143	163		
29		K5D29032-09	○	230	149	170		
30		K5D30032-11	○	238	154	178		SPMT11T308 XOMT11T308
31		K5D31032-11	○	243	159	183		
32		K5D32032-11	○	248	164	188		
33		K5D33032-11	○	253	169	193		
34		K5D34032-11	○	258	174	198		
35		K5D35032-11	○	263	179	203		

TCAP-2.25DN (8-32) Multifunction tools for drilling, boring, facing & external turning

TCAP 2.25 D 单刃多功能钻镗一体快速钻



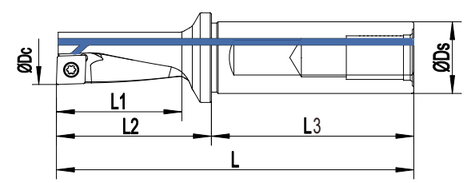
◎ Threaded Fittings /Connection: "G"

● 表示庫存 ○ 表示庫存預定品

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	螺絲 Screw	扳手 Wrench	kg
8	12	TCAP 08R 2.25D	●	64.5	17.5	22.5	42	XCMT040104-R	M2*4	T6	0.2
8	12	TCAP 08L 2.25D	○	64.5	17.5	22.5	42	XCMT040104-L	M2*4	T6	0.2
10	12	TCAP 10R 2.25D	●	70.5	22.5	28.5	42	XCMT050204	M2*4	T6	0.2
10	12	TCAP 10L 2.25D	○	70.5	22.5	28.5	42	XCMT050204	M2*4	T6	0.2
12	16	TCAP 12R 2.25D	●	79	27	34	45	XCMT060204	M2.2*5	T7	0.2
12	16	TCAP 12L 2.25D	○	79	27	34	45	XCMT060204	M2.2*5	T7	0.2
14	16	TCAP 14R 2.25D	●	85	32	40	45	XCMT070304	M2.5*6	T8	0.2
14	16	TCAP 14L 2.25D	○	85	32	40	45	XCMT070304	M2.5*6	T8	0.2
16	20	TCAP 16R 2.25D	●	96	36	46	50	XCMT080304	M3*7	T8	0.2
16	20	TCAP 16L 2.25D	○	96	36	46	50	XCMT080304	M3*7	T8	0.2
20	25	TCAP 20R 2.25D	●	113	45	57	56	XCMT10T304	M3.5*8.5	T15	0.3
20	25	TCAP 20L 2.25D	○	113	45	57	56	XCMT10T304	M3.5*8.5	T15	0.3
25	32	TCAP 25R 2.25D	●	130	57	70	60	XCMT130404	M5*11	T20	0.6
25	32	TCAP 25L 2.25D	○	130	57	70	60	XCMT130404	M5*11	T20	0.6
32	32	TCAP 32R 2.25D	●	145	72	85	60	XCMT170508	M5*11	T20	0.9
32	32	TCAP 32L 2.25D	○	145	72	85	60	XCMT170508	M5*11	T20	0.9

TCAP-3DN (8-32) Multifunction tools for drilling, boring, facing & external turning

TCAP 3 D 单刃多功能钻镗一体快速钻

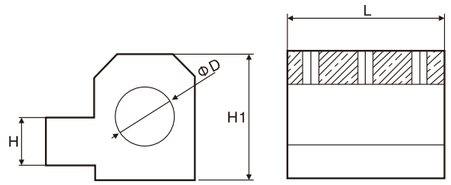


◎ Threaded Fittings /Connection: "G"

● 表示庫存 ○ 表示庫存預定品

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	庫存 Store	L	ℓ_1	ℓ_2	ℓ_3	適用刀片 Applicable Insert	螺絲 Screw	扳手 Wrench	kg
8	12	TCAP 08R 3D	●	72.5	24	30.5	42	XCMT040104-R	M2*4	T6	0.2
8	12	TCAP 08L 3D	○	72.5	24	30.5	42	XCMT040104-L	M2*4	T6	0.2
10	12	TCAP 10R 3D	●	79	30	37	42	XCMT050204	M2*4	T6	0.2
10	12	TCAP 10L 3D	○	79	30	37	42	XCMT050204	M2*4	T6	0.2
12	16	TCAP 12R 3D	●	89	37	44	45	XCMT060204	M2.2*5	T7	0.2
12	16	TCAP 12L 3D	○	89	37	44	45	XCMT060204	M2.2*5	T7	0.2
14	16	TCAP 14R 3D	●	95	42	50	45	XCMT070304	M2.5*6	T8	0.2
14	16	TCAP 14L 3D	○	95	42	50	45	XCMT070304	M2.5*6	T8	0.2
16	20	TCAP 16R 3D	●	108	48	58	50	XCMT080304	M3*7	T8	0.2
16	20	TCAP 16L 3D	○	108	48	58	50	XCMT080304	M3*7	T8	0.2
20	25	TCAP 20R 3D	●	128	60	72	56	XCMT10T304	M3.5*8.5	T15	0.3
20	25	TCAP 20L 3D	○	128	60	72	56	XCMT10T304	M3.5*8.5	T15	0.3
25	32	TCAP 25R 3D	●	148	75	88	60	XCMT130404	M5*11	T20	0.6
25	32	TCAP 25L 3D	○	148	75	88	60	XCMT130404	M5*11	T20	0.6
32	32	TCAP 32R 3D	●	169	96	109	60	XCMT170508	M5*11	T20	0.9
32	32	TCAP 32L 3D	○	169	96	109	60	XCMT170508	M5*11	T20	0.9

Boring Block for U Drills
U钻刀座



型號 Specification/Item	H	H1	L	D
DK20-16	20	37	60	16
DK20-20		47	65	20
DK20-25		47	65	25
DK20-32		55	85	32
DK25-16	25	42	65	16
DK25-25		53	70	25
DK25-32		60	85	32
DK25-40		65	90	40
DK32-40	32	83	100	40
DK32-50		83	100	50

刀座可搭配配件示例Set up example

1 刀座+導套安裝示例

2 内孔刀安裝示例

3 U鑽安裝示例

4 鑽夾頭安裝示例

5 錐柄鑽頭安裝示例

6 直柄鑽頭安裝示例

U鑽配套螺紋接口
Threaded Fittings/Connection

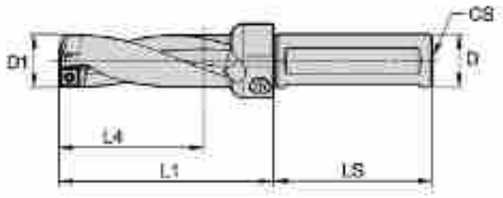
（PT&G可供选择）PT & G for your selection

型號 Specification	U鑽柄徑 Holder	氣管外徑 Air Pipe External diameter (mm)	螺紋外徑 Threads External diameter	螺距 Screw pitch (mm)
PC10-M10*1.5	C20	10	M10	1.5
PC10-M12*1.75	C25	10	M12	1.75
PC12-M16*2	C32	12	M16	2
PC12-M20-2.5	C40	12	M20	2.5

補芯
Connect

型號 Specification	U鑽柄徑 Holder	螺紋外徑 Threads External diameter	重量（g） Weight
M10*1.5-PT1/8	C20	M10	17.4
M12*1.75-PT1/8	C25	M12	34
M16*2-PT1-4	C32	M16	48
M20*2.5-PT1/4	C40	M20	56

Inch dimension Coolant Thru Indexable Drills (For America Market)
英制浅孔钻/出水钻/U钻（SKD61）



英 制(Imperial Units)

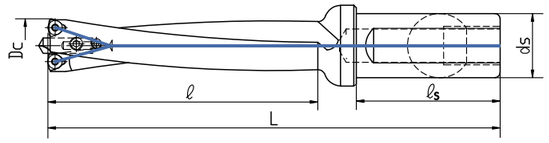
型號 Specification/Item	CS	Metric					INCH				
		D1	L1	L4	LS	D	D1	L1	L4	LS	D
C0.75-3D0500	1/4-18 NPT	12.7	66.1	38.1			0.5	2.602	1.5		
C0.75-3D0531	1/8-27 NPT	13.4874	68.46	40.46			0.531	2.695	1.592		
C0.75-3D0563	1/8-27 NPT	14.3	69.9	42.9			0.563	2.752	1.689		
C0.75-3D0594	1/8-27 NPT	15.0876	72.26	45.26	50.8	19.05	0.594	2.844	1.781	2	0.75
C0.75-3D0625	1/8-27 NPT	15.875	73.625	47.625			0.625	2.898	1.875		
C0.75-3D0656	1/8-27 NPT	16.6624	76.99	49.99			0.656	3.031	1.968		
C0.75-3D0688	1/8-27 NPT	17.4752	78.43	52.43			0.688	3.087	2.064		
C1-3D0703	1/4-18 NPT	17.8562	83.57	53.57			0.703	3.29	2.109		
C1-3D0734	1/4-18 NPT	18.6436	84.93	55.93			0.734	3.343	2.202		
C1-3D0750	1/4-18 NPT	19.05	86.15	57.15			0.75	3.391	2.25		
C1-3D0781	1/4-18 NPT	19.8374	88.51	59.51			0.781	3.484	2.342		
C1-3D0813	1/4-18 NPT	20.65	89.95	61.95			0.813	3.541	2.439		
C1-3D0844	1/4-18 NPT	21.4376	92.31	64.31	76.2	25.4	0.844	3.634	2.531	3	1
C1-3D0875	1/4-18 NPT	22.225	93.68	66.68			0.875	3.688	2.625		
C1-3D0906	1/4-18 NPT	23.0124	96.04	69.04			0.906	3.781	2.718		
C1-3D0938	1/4-18 NPT	23.8252	98.48	71.48			0.938	3.877	2.814		
C1-3D0969	1/4-18 NPT	24.6126	100.84	73.84			0.969	3.97	2.907		
C1-3D0984	1/4-18 NPT	24.9936	101.98	74.98			0.984	4.015	2.952		
C1-3D1000	1/4-18 NPT	25.4	103.2	27			1.0	4.063	3.0		
C1.25-3D1031	1/4-18 NPT	26.1874	108.56	78.56			1.031	4.274	3.092		
C1.25-3D1063	1/4-18 NPT	27	110	81			1.063	4.33	3.189		
C1.25-3D1094	1/4-18 NPT	27.7876	112.36	83.36			1.094	4.423	3.281		
C1.25-3D1125	1/4-18 NPT	28.575	114.725	85.725	82.55	31.75	1.125	4.516	3.375	3.25	1.25
C1.25-3D1156	1/4-18 NPT	29.3624	116.09	88.09			1.156	4.57	3.468		
C1.25-3D1188	1/4-18 NPT	30.1752	118.53	90.53			1.188	4.666	3.564		
C1.25-3D1219	1/4-18 NPT	30.9626	119.89	92.89			1.219	4.72	3.657		
C1.5-3D1250	1/4-18 NPT	31.75	124.42	95.25			1.25	4.898	3.75		
C1.5-3D1281	1/4-18 NPT	32.5374	127.61	97.61			1.281	5.024	3.842		
C1.5-3D1313	1/4-18 NPT	33.35	129.05	100.05			1.313	5.08	3.939		
C1.5-3D1375	1/4-18 NPT	34.925	133.77	104.775			1.375	5.266	4.125		
C1.5-3D1406	1/4-18 NPT	35.7124	135.14	107.14			1.406	5.32	4.218		
C1.5-3D1438	1/4-18 NPT	36.5252	137.58	109.58			1.438	5.416	4.314		
C1.5-3D1469	1/4-18 NPT	37.3126	138.94	111.94	95.25	38.1	1.469	5.47	4.407	3.75	1.5
C1.5-3D1500	1/4-18 NPT	38.1	144.3	114.3			1.5	5.681	4.5		
C1.5-3D1531	1/4-18 NPT	38.8874	146.66	116.66			1.531	5.774	4.592		
C1.5-3D1563	1/4-18 NPT	39.7	149.1	119.1			1.563	5.87	4.689		
C1.5-3D1625	1/4-18 NPT	41.275	153.82	123.825			1.625	6.055	4.875		
C1.5-3D1656	1/4-18 NPT	42.0624	156.19	126.19			1.656	6.149	4.968		
C1.5-3D1688	1/4-18 NPT	42.8752	157.63	128.63			1.688	6.205	5.064		
C1.5-3D1750	1/4-18 NPT	44.45	161.35	133.35	50.8		1.75	6.352	5.25	2	
C2-3D1813	1/4-18 NPT	46.05	168.15	138.15			1.813	6.62	5.439		
C2-3D1875	1/4-18 NPT	47.625	171.88	142.875			1875	6.766	5.625		
C2-3D1938	1/4-18 NPT	49.2252	176.68	147.68			1.938	6.955	5.814		
C2-3D2000	1/4-18 NPT	50.8	183.4	152.4	101.6	50.8	2.0	7.22	6.0	4	2
C2-3D2125	1/4-18 NPT	53.975	192.92	161.92			2.125	7.595	6.374		
C2-3D2250	1/4-18 NPT	57.15	208.45	171.45			2.25	8.206	6.75		
C2-3D2375	1/4-18 NPT	60.325	217.98	180.98			2.375	8.581	7.125		
C2-3D2500	1/4-18 NPT	63.5	227.5	190.5			2.5	8.956	7.5		

WC Turbo Drill 6D&8D
WC 带中心钻快速钻 6D&8D

Holder diameter 6D:Φ18.0 ~ 39.0mm

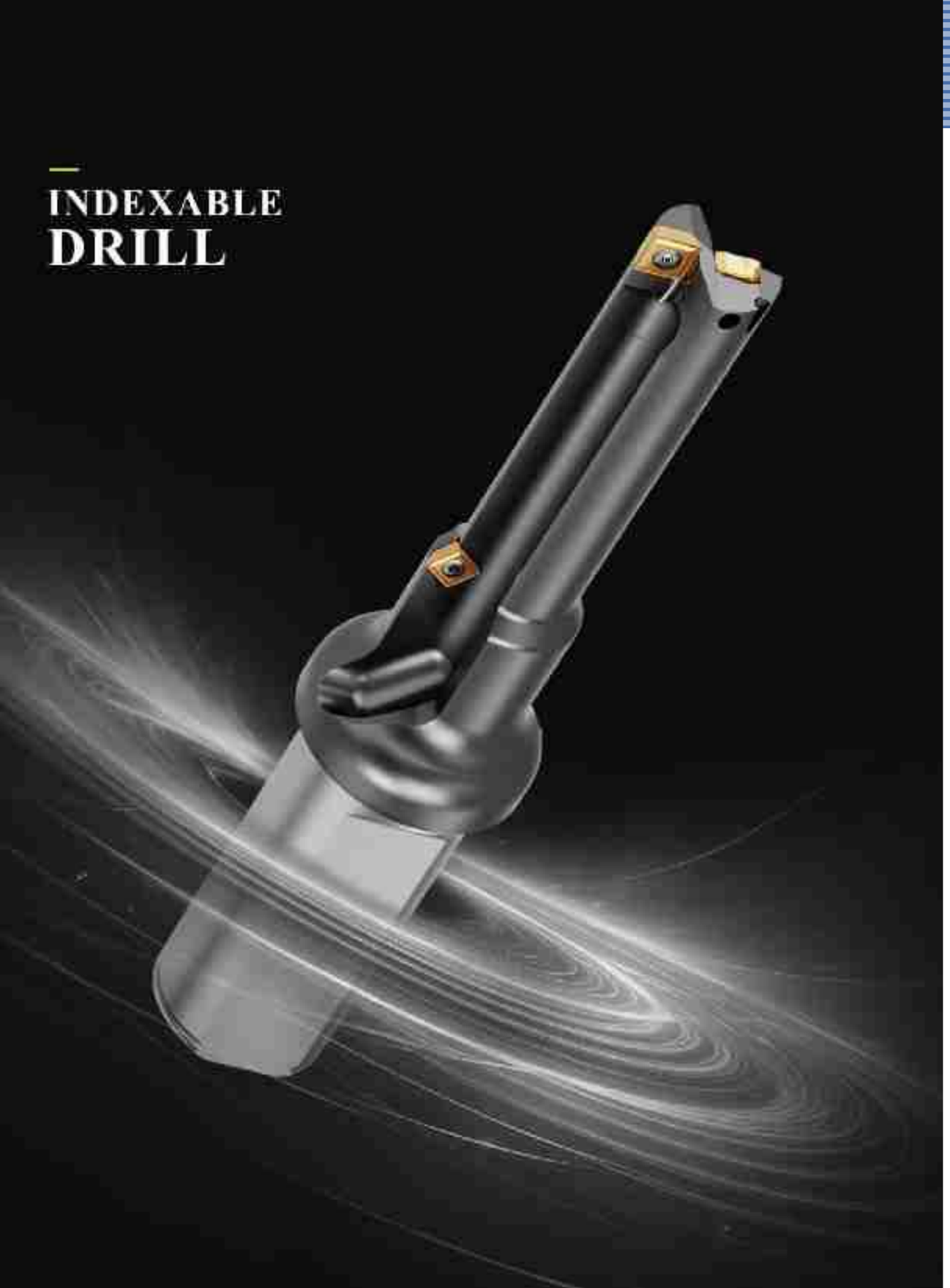
加工公差標準 −0.09~+0.1
Range of machining tolerance:−0.09~+0.1

最大加工深度 ℓ6 × ΦDc
Drilling depth: 6xdiameter



刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	L	ℓ	ℓs	中心鑽 Pilot Drill	適用刀片 Applicable Insert	螺釘 Screw	扳手 WRENCH
18	25	C25-6D18-115WC02	196	115	56	0620	WC..020104	M1.8*4	T6
19		C25-6D19-121WC02	202	121	56				
20		C25-6D20-127WC03	208	127	56		WC..030208	M2.5*6	T8
21		C25-6D21-133WC03	214	133	56				
22		C25-6D22-139WC03	220	139	56				
23		C25-6D23-145WC03	226	145	56				
24		C25-6D24-151WC03	232	151	56				
25		C25-6D25-157WC03	238	157	56				
26	32	C32-6D26-163WC04	251	163	60		WC..040208	M2.5*6	T8
27		C32-6D27-169WC04	257	169	60				
28		C32-6D28-175WC04	263	175	60				
29		C32-6D29-181WC04	269	181	60				
30		C32-6D30-187WC04	275	187	60				
31		C32-6D31-193WC04	281	193	60				
32		C32-6D32-199WC05	287	199	60	0825	WC..050308	M3*7	T15
33		C32-6D33-205WC05	293	205	60				
34		C32-6D34-211WC05	299	211	60				
35		C32-6D35-217WC05	305	217	60				
36		C32-6D36-223WC05	311	223	60				
37		C32-6D37-229WC05	317	229	60				
38		C32-6D38-235WC05	323	235	60				
39		C32-6D39-241WC05	329	241	60				

刃徑 ΦDc	柄徑 ΦDs	型號 Specification/Item	L	ℓ	ℓs	中心鑽 Pilot Drill	適用刀片 Applicable Insert	螺釘 Screw	扳手 WRENCH
18	25	C25-8D18-151WC02	232	151	56	0620	WC..020104	M1.8*4	T6
19		C25-8D19-159WC02	240	159	56				
20		C25-8D20-167WC03	248	167	56		WC..030208	M2.5*6	T8
21		C25-8D21-175WC03	256	175	56				
22		C25-8D22-183WC03	264	183	56				
23		C25-8D23-191WC03	272	191	56				
24		C25-8D24-199WC03	280	199	56				
25		C25-8D25-207WC03	288	207	56				
26	32	C32-8D26-215WC04	303	215	60		WC..040208	M2.5*6	T8
27		C32-8D27-223WC04	311	223	60				
28		C32-8D28-231WC04	319	231	60				
29		C32-8D29-239WC04	327	239	60				
30		C32-8D30-247WC04	335	247	60				
31		C32-8D31-255WC04	343	255	60				
32		C32-8D32-263WC05	351	263	60	0825	WC..050308	M3*7	T15
33		C32-8D33-271WC05	359	271	60				
34		C32-8D34-279WC05	367	279	60				
35		C32-8D35-287WC05	375	287	60				
36		C32-8D36-295WC05	383	295	60				
37		C32-8D37-303WC05	391	303	60				
38		C32-8D38-311WC05	399	311	60				
39		C32-8D39-319WC05	407	319	60				



當標準品無法滿足您的加工要求時，
訂制解决方案按照您的確切需求進一步優化

- 非標直徑 （12 – 84mm）。
- 非標有效切削長度 （1 – 5DC）。
- 階梯與倒角鑽削，直徑（12–63mm），鑽頭長度可達3倍直徑（DC1和DC2）。
- 接口類型PSC，Varilock，ABS，HSK，削平直柄等其他接口。

使用我們880系列改進您的加工，一步加工出高質量的孔

創新型設計，可變雙螺旋内冷鑽體和内側外側不同的刀片讓880系列可轉位鑽頭具有極高的剛性，穩定性和出色的效率。從而給客户帶來巨大收益。

步進技術：提供最佳的切削力平衡，以更低的切削力逐階鑽入，獲得更高的進給量以及嚴密的孔公差。

經濟高效的多功能可轉位鑽頭：中心及周邊刀片都具備真正的四個切削刃，配合多種材質及槽型，在具有良好經濟性的同時可以滿足多種材質和應用場景。

堅固耐用的鑽體：擁有堅固耐用的抗疲勞鑽體，極高的剛性減少了偏差，振動和噪音。

變螺旋式冷却液孔：變螺旋式冷却液孔設計，可保持鑽體的剛性，同時提高排屑能力并廷長刀具壽命。

精磨周邊，修光刃設計：可以獲得更加嚴密的孔公差，可預測性和一致性。創造卓越的表面光潔度和孔質量。

880 U drill
880 U钻

• 孔公差

880系列鑽頭能够實現最佳切削力平衡并鑽出正公差(尺寸加大)孔，因爲大多數孔爲H公差。

◇ 鑽深：2-3xDC	孔直徑，mm	12.00-43.99	44.00-52.99	53.00-63
	孔公差，mm	0/+0.25	0/+0.28	0/+0.30
◇ 鑽深：4-5xDC	孔直徑，mm	12.00-43.99	44.00-52.99	53.00-63
	孔公差，mm	0/+0.28	0/+0.33	0/+0.35

• 表面質量

進給	Ra, μm	Rz, μm
低	0.6-1	4-6
中等	1-2	6-15
高	2-4	15-30

備注：

880系列鑽頭的直徑公差是鑽體中刀片座公差和刀片公差的組合。鑽頭和刀片制造公差包含在孔公差中。鑽頭長徑比、對準、跳動、機床、工裝夾具穩定性和工件材料冷却液供應和冷却液壓力等因素對孔公差和光潔度產生影響。

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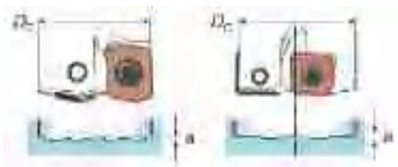
• 底部輪廓

底部輪廓不完全平整并根據鑽頭和刀片尺寸變化。



D_c 12.00-13.99mm　　D_c 14.00-63.50mm

◇ 每個刀片尺寸的最大值

刀片尺寸	01	02	03	04	05	06	07	08	09
a量大值（mm）	0.4	0.6	0.7	0.9	1.1	1.1	1.4	1.6	2.0
Dc（mm）	12.00-13.99	14.00-16.49	15.50-19.99	20.00-23.99	24.00-29.99	30.00-35.99	36.00-43.99	44.00-52.99	53.00-63.50

• 槽型和材質

◇ 槽型應用建議

LM  P M N S　長切屑材料 中等

- 低至中等進給
- 在加工長屑材料時有良好的切屑控制
- 輕切削
- 大的刀尖圓角半徑
- LM-長切屑材料的首選

GM  P M K N S H　普通材料 中等

- 低至中等進給
- 輕切削
- 短且淺的斷屑槽在進給區城提供了杰出的切屑控制
- 小的刀尖圓角半徑保證了很低的鑽頭偏斜

GR  P K　普通材料 粗加工

- 低至高進給
- 强，加强型切削刃
- 大的刀尖圓角半徑
- 在高進給區域中良好的切屑控制

		首選	其他
P	低碳鋼	LM	GM
	合金鋼	GR	GM
M		LM	GM
K		GR	GM
N		LM	GM
S		LM	GM
H		GM	

◇ 材質

MP2130	加工ISO P、K、和H材料的PVD塗層刀片材質。
	高强度細晶粒基體和采用塗層(A1TiN)，讓刀片具有根高的耐磨性和出色的抗積屑瘤性能。
MP3150	加工ISO P,M,K,S和N材料的PVD塗層刀片材質。
	帶有高鉻含量，細晶粒高强度基體和采用PVD塗層(A1TiN)。高可常性結合更高的刃綫安全性可確保抗積屑瘤和抗崩刃性能。
MM4325	加工ISO M,S和N材料的PVD塗層材質。
	采用中等顆粒的硬質合金材質，具有極好的韌性，超光滑、無缺陷的PVD除層，具有出色的結合力極高的硬度和出色的耐磨性，同時還具有很好的耐高温性。在加工不銹鋼及難加工材料時也没有粘屑和積屑瘤的形成。
MPK30	加工ISO P,K的CVD塗層刀片材質。
	先進的化學氣相沉積TiCN+A12O3+TiN塗層，同時采用高鈷硬質合金基體材料。具有極佳的抗變形和刃口韌性平衡。因此具有卓越的耐磨性和抗月牙窪磨損性能，可用于鋼和鑄鐵材料的高速加工。可采用極高的切削速度，以及低進給和中等進給量。

880 Indexable Drill Coding Rules
880系列钻头编码规则

880 可轉位鑽頭編碼規則
880 Indexable Drill Coding Rules

880	3	260	–	FC	20	–	SP	05
1	2	3		4	5		6	7

1 系列 System
880

2 長徑比 Length-diameter ratio
3=3 x DC

3 切制直徑 Dia.
260=26mm

4 安裝類型 Installation type
FC=側固式 FC=Weldon

5 接口型號 Interface type
20=20mm

6 刀片類型 Inserts Type
SP=非ISO刀片
SP=Not ISO Inserts

7 適配刀片 Adaptor Inserets
05=SC05 SP05

880 鑽削刀片編碼規則
880 Indexable Inserts Coding Rules

D	–	S	C	G	X	05	03	05	–	GR	Mp2150
1		2	3	4	5	6	7	8		9	10

1 刀片類型 InsertsType
D=鑽削刀片
D=Drilling Inserts

2 刀片形狀 Inserts Shape
S=正方型
S=Square

3 安裝位置 Installation position
C=中心刀片 P=周邊刀片
C=Center Inserts
P=Peripheral Inserts

4 精度等級 Accuracy levels
G=G級公差
G=G tolerance

5 螺釘孔類型 Screw hole type
X=非標孔型
X=non-standard

6 刀片規格 Inserts Specifications
05=05刀片
05=05 inserts

7 厚度S(mm) Thickness S(mm)

02=2	04=3.5
02=2.4	04=4
05=2.6	05=4.5
03=2.8	06=5.5
05=3	

8 刃尖圓角Re(mm) Inserts point Angle Re

4=0.4	10=1.0
05=0.5	12=1.2
06=0.6	
07=0.7	
08=0.8	

9 刀片槽形 Inserts groove
LM=輕型加工
LM=LightMachining
GM=中等/通用加工
GM=Medium/generalpurposeprocessing
GR=重載加工
GR=Heavydutymachining

10 刀片材質 Inserts material

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一種鑽，讓您的制造成本更低
產品質量更穩定

A drill that makes your manufacturing cost lower and product quality more stable.

880 Inserts U Drill
880系列刀杆型号

接口類型：削平直柄 ISO 9766

冷却方式：内冷設計

標準產品範圍：2XDC

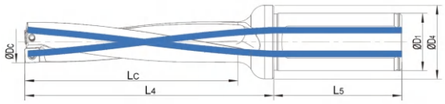
型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU2120_FC20_SP01	SC01	SP01	12	24	45	50	20	25	10	0.149	★
MGU2125_FC20_SP01	SC01	SP01	12.5	25	46	50	20	25	10	0.152	★
MGU2130_FC20_SP01	SC01	SP01	13	26	47	50	20	25	10	0.155	★
MGU2135_FC20_SP01	SC01	SP01	13.5	27	47	50	20	25	10	0.158	★
MGU2140_FC20_SP02	SC02	SP02	14	31	44	50	20	25	10	0.159	★
MGU2145_FC20_SP02	SC02	SP02	14.5	33	46	50	20	25	10	0.16	★
MGU2150_FC20_SP02	SC02	SP02	15	34	47	50	20	25	10	0.163	★
MGU2155_FC20_SP02	SC02	SP02	15.5	36.26	49	50	20	25	10	0.167	★
MGU2160_FC20_SP02	SC02	SP02	16	36.33	51	50	20	25	10	0.175	★
MGU2165_FC20_SP03	SC02	SP02	16.5	37.51	52	50	20	25	10	0.173	★
MGU2170_FC25_SP03	SC03	SP03	17	38.45	53	56	25	32	10	0.283	★
MGU2175_FC25_SP03	SC03	SP03	17.5	40.52	55	56	25	32	10	0.288	★
MGU2180_FC25_SP03	SC03	SP03	18	40.27	56	56	25	32	10	0.293	★
MGU2185_FC25_SP03	SC03	SP03	18.5	41.39	57	56	25	32	10	0.297	★
MGU2188_FC25_SP03	SC03	SP03	18.8	40.4	56	56	25	32	10	0.297	★
MGU2190_FC25_SP03	SC03	SP03	19	42.52	58	56	25	32	10	0.302	★
MGU2195_FC25_SP03	SC03	SP03	19.5	44.66	60	56	25	32	10	0.307	★
MGU2200_FC25_SP04	SC04	SP04	20	44.2	61	56	25	32	10	0.316	★
MGU2205_FC25_SP04	SC04	SP04	20.5	46.39	64	56	25	32	10	0.327	★
MGU2210_FC25_SP04	SC04	SP04	21	46.59	64	56	25	32	10	0.323	★
MGU2215_FC25_SP04	SC04	SP04	21.5	47.8	65	56	25	32	10	0.323	★
MGU2220_FC25_SP04	SC04	SP04	22	48	66	56	25	32	10	0.339	★
MGU2230_FC25_SP04	SC04	SP04	23	51.48	69	56	25	32	10	0.351	★
MGU2240_FC25_SP05	SC05	SP05	24	53.21	71	56	25	32	10	0.35	★
MGU2250_FC25_SP05	SC05	SP05	25	56.13	74	56	25	32	10	0.369	★
MGU2260_FC32_SP05	SC05	SP05	26	56.6	77	60	32	39.6	10	0.587	★
MGU2270_FC32_SP05	SC05	SP05	27	59.49	79	60	32	39.6	10	0.604	★
MGU2280_FC32_SP05	SC05	SP05	28	60.79	82	60	32	39.6	10	0.63	★
MGU2290_FC32_SP05	SC05	SP05	29	62.54	84	60	32	39.6	10	0.653	★
MGU2300_FC32_SP06	SC05	SP05	30	65.1	87	60	32	39.6	10	0.653	★

880 Inserts U Drill
880系列刀杆型号

型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU2310_FC40_SP06	SC06	SP06	31	66.75	90	70	40	48	10	1.02	★
MGU2320_FC40_SP06	SC06	SP06	32	68.18	92	70	40	48	10	1.04	★
MGU2330_FC40_SP06	SC06	SP06	33	70.74	95	70	40	48	10	1.07	★
MGU2340_FC40_SP06	SC06	SP06	34	73.43	98	70	40	48	10	1.1	★
MGU2350_FC40_SP06	SC06	SP06	35	76.24	101	70	40	48	10	1.14	★
MGU2360_FC40_SP07	SC07	SP07	36	77.35	104	70	40	48	10	1.16	★
MGU2370_FC40_SP07	SC07	SP07	37	79	105	70	40	48	10	1.193	★
MGU2380_FC40_SP07	SC07	SP07	38	80.37	108	70	40	48	10	1.244	★
MGU2390_FC40_SP07	SC07	SP07	39	82.53	110	70	40	48	10	1.29	★
MGU2400_FC40_SP07	SC07	SP07	40	85.83	113	70	40	48	10	1.32	★
MGU2410_FC40_SP07	SC07	SP07	41	90.75	117	70	40	48	10	1.38	★
MGU2420_FC40_SP07	SC07	SP07	42	93.74	119	70	40	48	10	1.42	★
MGU2430_FC40_SP07	SC07	SP07	43	91.12	122	70	40	49.5	10	1.47	★
MGU2440_FC40_SP08	SC08	SP08	44	93.23	124	70	40	62.5	10	1.65	★
MGU2450_FC40_SP08	SC08	SP08	45	95.33	127	70	40	62.5	10	1.71	★
MGU2460_FC40_SP08	SC08	SP08	46	98.82	130	70	40	62.5	10	1.75	★
MGU2470_FC40_SP08	SC08	SP08	47	101.34	132	70	40	62.5	10	1.8	★
MGU2480_FC40_SP08	SC08	SP08	48	104.88	135	70	40	62.5	10	1.86	★
MGU2490_FC40_SP08	SC08	SP08	49	107.44	137	70	40	62.5	10	1.92	★
MGU2500_FC40_SP08	SC08	SP08	50	105.46	140	70	40	62.5	10	1.99	★
MGU2510_FC40_SP08	SC08	SP08	51	108.78	144	70	40	62.5	10	2.11	★
MGU2520_FC40_SP08	SC08	SP08	52	110.37	146	70	40	62.5	10	2.17	★
MGU2530_FC40_SP09	SC09	SP09	53	113.41	149	70	40	62.5	10	2.15	☆
MGU2540_FC40_SP09	SC09	SP09	54	114.73	151	70	40	62.5	10	2.22	☆
MGU2550_FC40_SP09	SC09	SP09	55	116.67	154	70	40	62.5	10	2.31	☆
MGU2560_FC40_SP09	SC09	SP09	56	118.52	157	70	40	62.5	10	2.4	☆
MGU2570_FC40_SP09	SC09	SP09	57	120.68	159	70	40	62.5	10	2.48	☆
MGU2580_FC40_SP09	SC09	SP09	58	122.93	162	70	40	62.5	10	2.57	☆
MGU2590_FC40_SP09	SC09	SP09	59	124.85	164	70	40	62.5	10	2.61	☆
MGU2600_FC40_SP09	SC09	SP09	60	126.60	167	70	40	62.5	10	2.77	☆
MGU2610_FC40_SP09	SC09	SP09	61	129.80	171	70	40	62.5	10	2.89	☆
MGU2620_FC40_SP09	SC09	SP09	62	131.55	173	70	40	62.5	10	2.95	☆
MGU2630_FC40_SP09	SC09	SP09	63	133.60	176	70	40	62.5	10	3.06	☆

880 Inserts U Drill
880系列刀杆型号

接口類型：削平直柄 ISO 9766
冷却方式：内冷設計
標準產品範圍：3XDC



型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU3120_FC20_SP01	SC01	SP01	12	36	57	50	20	25	10	0.156	★
MGU3125_FC20_SP01	SC01	SP01	12.5	37.5	58.5	50	20	25	10	0.159	★
MGU3130_FC20_SP01	SC01	SP01	13	39	60	50	20	25	10	0.162	★
MGU3135_FC20_SP01	SC01	SP01	13.5	40.5	60.5	50	20	25	10	0.165	★
MGU3140_FC20_SP02	SC02	SP02	14	44.88	58	50	20	25	10	0.165	★
MGU3145_FC20_SP02	SC02	SP02	14.5	47	60	50	20	25	10	0.165	★
MGU3150_FC20_SP02	SC02	SP02	15	49.12	62	50	20	25	10	0.17	★
MGU3155_FC20_SP02	SC02	SP02	15.5	51.25	64	50	20	25	10	0.174	★
MGU3160_FC20_SP02	SC02	SP02	16	51.33	66	50	20	25	10	0.185	★
MGU3165_FC20_SP03	SC03	SP03	16.5	53.51	68	50	20	25	10	0.183	★
MGU3170_FC25_SP03	SC03	SP03	17	54.45	69	56	25	32	10	0.292	★
MGU3175_FC25_SP03	SC03	SP03	17.5	57.52	72	56	25	32	10	0.297	★
MGU3180_FC25_SP03	SC03	SP03	18	57.27	73	56	25	32	10	0.306	★
MGU3185_FC25_SP03	SC03	SP03	18.5	59.39	75	56	25	32	10	0.311	★
MGU3190_FC25_SP03	SC03	SP03	19	60.52	76	56	25	32	10	0.318	★
MGU3193_FC25_SP03	SC03	SP03	19.25	63.57	79	56	25	32	10	0.322	★
MGU3195_FC25_SP03	SC03	SP03	19.5	63.66	79	56	25	32	10	0.324	★
MGU3200_FC25_SP04	SC04	SP04	20	63.2	81	56	25	32	10	0.339	★
MGU3205_FC25_SP04	SC04	SP04	20.5	64.39	82	56	25	32	10	0.346	★
MGU3210_FC25_SP04	SC04	SP04	21	66.59	84	56	25	32	10	0.344	★
MGU3215_FC25_SP04	SC04	SP04	21.5	68.8	86	56	25	32	10	0.352	★
MGU3220_FC25_SP04	SC04	SP04	22	69.02	87	56	25	32	10	0.365	★
MGU3225_FC25_SP04	SC04	SP04	22.5	72.24	90	56	25	32	10	0.375	★
MGU3230_FC25_SP04	SC04	SP04	23	73.48	91	56	25	32	10	0.382	★
MGU3235_FC25_SP04	SC04	SP04	23.5	75.72	93	56	25	32	10	0.392	★
MGU3240_FC25_SP05	SC05	SP05	24	77.21	95	56	25	32	10	0.386	★
MGU3245_FC25_SP05	SC05	SP05	24.5	79.5	97	56	25	32	10	0.396	★
MGU3250_FC25_SP05	SC05	SP05	25	81.81	99	56	25	32	10	0.41	★
MGU3253_FC40_SP05	SC05	SP05	25	81.81	99	56	25	32	10	0.41	★
MGU3255_FC25_SP05	SC05	SP05	25.5	83.13	100	56	25	32	10	0.419	★
MGU3260_FC32_SP05	SC05	SP05	26	81.6	102	60	32	39.6	10	0.631	★
MGU3265_FC32_SP05	SC05	SP05	26.5	83.79	104	60	32	39.6	10	0.643	★
MGU3270_FC32_SP05	SC05	SP05	27	85.49	105	60	32	39.6	10	0.657	★
MGU3275_FC32_SP05	SC05	SP05	27.5	88.69	108	60	32	39.6	10	0.672	★
MGU3280_FC32_SP05	SC05	SP05	28	86.65	109	60	32	39.6	10	0.682	★
MGU3285_FC32_SP05	SC05	SP05	28.5	88.95	111	60	32	39.6	10	0.695	★
MGU3290_FC32_SP05	SC05	SP05	29	90.25	112	60	32	39.6	10	0.708	★
MGU3295_FC32_SP05	SC05	SP05	29.5	93.57	115	60	32	39.6	10	0.724	★

880 Inserts U Drill
880系列刀杆型号

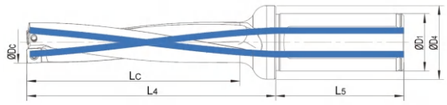
型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU3300_FC32_SP06	SC06	SP06	30	95.11	117	60	32	39.6	10	0.717	★
MGU3305_FC32_SP06	SC06	SP06	30.5	96.11	118	60	32	39.6	10	0.729	★
MGU3310_FC40_SP06	SC06	SP06	31	97.75	121	70	40	48	10	1.09	★
MGU3315_FC40_SP06	SC06	SP06	31.5	98.94	122	70	40	48	10	1.101	★
MGU3320_FC40_SP06	SC06	SP06	32	100.18	124	70	40	48	10	1.123	★
MGU3325_FC40_SP06	SC06	SP06	32.5	102.39	126	70	40	48	10	1.14	★
MGU3330_FC40_SP06	SC06	SP06	33	103.74	128	70	40	48	10	1.159	★
MGU3335_FC40_SP06	SC06	SP06	33.5	105.98	130	70	40	48	10	1.178	★
MGU3340_FC40_SP06	SC06	SP06	34	106.43	131	70	40	48	10	1.196	★
MGU3345_FC40_SP06	SC06	SP06	34.5	109.7	134	70	40	48	10	1.219	★
MGU3350_FC40_SP06	SC06	SP06	35	110.24	135	70	40	48	10	1.24	★
MGU3355_FC40_SP06	SC06	SP06	35.5	112.54	137	70	40	48	10	1.261	★
MGU3360_FC40_SP07	SC07	SP07	36	112.35	139	70	40	48	10	1.282	★
MGU3370_FC40_SP07	SC07	SP07	37	115.9	142	70	40	48	10	1.329	★
MGU3380_FC40_SP07	SC07	SP07	38	118.37	146	70	40	48	10	1.391	★
MGU3383_FC40_SP07	SC07	SP07	38.35	119.75	147.5	70	40	48	10	1.41	★
MGU3385_FC40_SP07	SC07	SP07	38.5	119.94	147.5	70	40	48	10	1.418	★
MGU3390_FC40_SP07	SC07	SP07	39	121.54	149	70	40	48	10	1.445	★
MGU3395_FC40_SP07	SC07	SP07	39.5	123.39	151	70	40	48	10	1.449	★
MGU3400_FC40_SP07	SC07	SP07	40	125.83	153	70	40	48	10	1.475	★
MGU3405_FC40_SP07	SC07	SP07	40.5	127.89	153	70	40	48	10	1.57	★
MGU3410_FC40_SP07	SC07	SP07	41	127.82	157	70	40	48	10	1.623	★
MGU3420_FC40_SP07	SC07	SP07	42	130.88	160	70	40	48	10	1.689	★
MGU3430_FC40_SP07	SC07	SP07	43	133.12	164	70	40	49.5	10	1.771	★
MGU3440_FC40_SP08	SC08	SP08	44	136.54	167	70	40	49.5	10	1.815	★
MGU3450_FC40_SP08	SC08	SP08	45	140.57	172	70	40	49.5	10	1.902	★
MGU3460_FC40_SP08	SC08	SP08	46	144	176	70	40	49.5	10	1.98	★
MGU3470_FC40_SP08	SC08	SP08	47	146.07	179	70	40	62.5	10	2.12	★
MGU3480_FC40_SP08	SC08	SP08	48	149.33	183	70	40	62.5	10	2.3	★
MGU3490_FC40_SP08	SC08	SP08	49	152.41	186	70	40	62.5	10	2.39	★
MGU3495_FC40_SP08	SC08	SP08	49.5	153.7	188	70	40	59	10	2.31	★
MGU3500_FC40_SP08	SC08	SP08	50	155.46	190	70	40	62.5	10	2.37	★
MGU3510_FC40_SP08	SC08	SP08	51	158.29	194	70	40	62.5	10	2.58	★
MGU3520_FC40_SP08	SC08	SP08	52	161.37	197	70	40	62.5	10	2.69	★
MGU3530_FC40_SP09	SC09	SP09	53	164.4	201	70	40	62.5	10	2.71	☆
MGU3540_FC40_SP09	SC09	SP09	54	167.73	204	70	40	62.5	10	2.81	☆
MGU3550_FC40_SP09	SC09	SP09	55	171.67	209	70	40	62.5	10	2.94	☆
MGU3560_FC40_SP09	SC09	SP09	56	174.52	213	70	40	62.5	10	3.07	☆
MGU3570_FC40_SP09	SC09	SP09	57	177.68	216	70	40	62.5	10	3.19	☆
MGU3580_FC40_SP09	SC09	SP09	58	180.93	220	70	40	62.5	10	3.32	☆
MGU3590_FC40_SP09	SC09	SP09	59	183.85	223	70	40	62.5	10	3.41	☆
MGU3600_FC40_SP09	SC09	SP09	60	186.89	227	70	40	62.5	10	3.55	☆
MGU3610_FC40_SP09	SC09	SP09	61	190.8	232	70	40	62.5	10	3.71	☆
MGU3620_FC40_SP09	SC09	SP09	62	193.78	235	70	40	62.5	10	3.94	☆
MGU3630_FC40_SP09	SC09	SP09	63	196.6	239	70	40	62.5	10	4.1	☆

880 Inserts U Drill
880系列刀杆型号

接口類型：削平直柄 ISO 9766

冷却方式：内冷設計

標準產品範圍：4XDC



型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU4120_FC20_SP01	SC01	SP01	12	48	69	50	20	25	10	0.163	★
MGU4125_FC20_SP01	SC01	SP01	12.5	50	71	50	20	25	10	0.166	★
MGU4130_FC20_SP01	SC01	SP01	13	52	73	50	20	25	10	0.169	★
MGU4135_FC20_SP01	SC01	SP01	13.5	54	74	50	20	25	10	0.172	★
MGU4140_FC20_SP02	SC02	SP02	14	59.01	72	50	20	25	10	0.174	★
MGU4145_FC20_SP02	SC02	SP02	14.5	62.13	75	50	20	25	10	0.175	★
MGU4150_FC20_SP02	SC02	SP02	15	64.87	77	50	20	25	10	0.178	★
MGU4155_FC20_SP02	SC02	SP02	15.5	66.4	79	50	20	25	10	0.184	★
MGU4160_FC20_SP02	SC02	SP02	16	67.51	82	50	20	25	10	0.194	★
MGU4165_FC20_SP03	SC03	SP03	16.5	69.7	84	50	20	25	10	0.195	★
MGU4170_FC25_SP03	SC03	SP03	17	71.54	86	56	25	32	10	0.305	★
MGU4175_FC25_SP03	SC03	SP03	17.5	73.79	89	56	25	32	10	0.317	★
MGU4180_FC25_SP03	SC03	SP03	18	75.4	91	56	25	32	10	0.323	★
MGU4185_FC25_SP03	SC03	SP03	18.5	77.53	93	56	25	32	10	0.330	★
MGU4190_FC25_SP03	SC03	SP03	19	79.66	95	56	25	32	10	0.34	★
MGU4193_FC25_SP03	SC03	SP03	19.25	83.7	99	56	25	32	10	0.343	★
MGU4195_FC25_SP03	SC03	SP03	19.5	83.8	99	56	25	32	10	0.347	★
MGU4200_FC25_SP04	SC04	SP04	20	83.38	101	56	25	32	10	0.365	★
MGU4205_FC25_SP04	SC04	SP04	20.5	86.58	104	56	25	32	10	0.375	★
MGU4210_FC25_SP04	SC04	SP04	21	89.78	105	56	25	32	10	0.374	★
MGU4215_FC25_SP04	SC04	SP04	21.5	89.56	107.5	56	25	32	10	0.387	★
MGU4220_FC25_SP04	SC04	SP04	22	91.22	109	56	25	32	10	0.397	★
MGU4225_FC25_SP04	SC04	SP04	22.5	93.63	112	56	25	32	10	0.406	★
MGU4230_FC25_SP04	SC04	SP04	23	95.9	114	56	25	32	10	0.417	★
MGU4240_FC25_SP05	SC05	SP05	24	101.48	119	56	25	32	10	0.426	★
MGU4245_FC25_SP05	SC05	SP05	24.5	102.36	121.5	56	25	32	10	0.443	★
MGU4250_FC25_SP05	SC05	SP05	25	107.1	124	56	25	32	10	0.456	★
MGU4253_FC25_SP05	SC05	SP05	25.25	107.24	124	56	25	32	10	0.46	★
MGU4260_FC32_SP05	SC05	SP05	26	107.79	128	60	32	39.6	10	0.686	★
MGU4265_FC32_SP05	SC05	SP05	26.5	109.98	130	60	32	39.6	10	0.702	★

880 Inserts U Drill
880系列刀杆型号

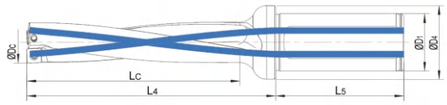
型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU4270_FC32_SP05	SC05	SP05	27	112.19	132	60	32	39.6	10	0.717	★
MGU4280_FC32_SP05	SC05	SP05	28	115.66	137	60	32	39.6	10	0.748	★
MGU4290_FC32_SP05	SC05	SP05	29	120.24	141	60	32	39.6	10	0.781	★
MGU4295_FC32_SP05	SC05	SP05	29.5	123.2	144	60	32	39.6	10	0.801	★
MGU4300_FC32_SP06	SC06	SP06	30	125.5	147	60	32	39.6	10	0.801	★
MGU4310_FC40_SP06	SC06	SP06	31	128	152	70	40	48	10	1.18	★
MGU4320_FC40_SP06	SC06	SP06	32	131.98	156	70	40	48	10	1.218	★
MGU4330_FC40_SP06	SC06	SP06	33	136.61	161	70	40	48	10	1.264	★
MGU4340_FC40_SP06	SC06	SP06	34	140.74	165	70	40	48	10	1.312	★
MGU4350_FC40_SP06	SC06	SP06	35	145.58	170	70	40	48	10	1.369	★
MGU4360_FC40_SP07	SC07	SP07	36	148.89	175	70	40	48	10	1.431	★
MGU4370_FC40_SP07	SC07	SP07	37	151.71	179	70	40	48	10	1.484	★
MGU4380_FC40_SP07	SC07	SP07	38	157.09	184	70	40	48	10	1.546	★
MGU4390_FC40_SP07	SC07	SP07	39	161.85	188	70	40	48	10	1.62	★
MGU4400_FC40_SP07	SC07	SP07	40	167.65	193	70	40	48	10	1.771	★
MGU4410_FC40_SP07	SC07	SP07	41	168.69	198	70	40	48	10	1.86	★
MGU4420_FC40_SP07	SC07	SP07	42	172.18	202	80	50	62.5	10	2.64	★
MGU4430_FC40_SP07	SC07	SP07	43	176	207	80	50	62.5	10	2.74	★
MGU4440_FC40_SP08	SC08	SP08	44	180.04	211	80	50	62.5	10	2.833	★
MGU4450_FC40_SP08	SC08	SP08	45	185.224	217	80	50	62.5	10	2.953	★
MGU4460_FC40_SP08	SC08	SP08	46	188.97	222	80	50	62.5	10	3.056	★
MGU4470_FC40_SP08	SC08	SP08	47	193.1	226	80	50	62.5	10	3.124	★
MGU4480_FC40_SP08	SC08	SP08	48	197	231	80	50	62.5	10	3.25	★
MGU4490_FC40_SP08	SC08	SP08	49	201.18	235	80	50	62.5	10	3.365	★
MGU4500_FC40_SP08	SC08	SP08	50	204.98	240	80	50	62.5	10	3.51	★
MGU4505_FC40_SP08	SC08	SP08	50.5	208.229	242	80	50	62.5	10	3.56	★
MGU4510_FC40_SP08	SC08	SP08	51	209.17	245	80	50	62.5	10	3.61	★
MGU4520_FC40_SP08	SC08	SP08	52	213.03	249	80	50	62.5	10	3.75	★
MGU4530_FC40_SP09	SC09	SP09	53	218	253	80	50	62.5	10	3.83	☆
MGU4540_FC40_SP09	SC09	SP09	54	221.98	258	80	50	62.5	10	3.92	☆
MGU4550_FC40_SP09	SC09	SP09	55	226	263	80	50	62.5	10	4.12	☆
MGU4560_FC40_SP09	SC09	SP09	56	230.68	269	80	50	62.5	10	4.32	☆
MGU4570_FC40_SP09	SC09	SP09	57	234	273	80	50	62.5	10	4.45	☆
MGU4580_FC40_SP09	SC09	SP09	58	238.95	277	80	50	62.5	10	4.63	☆
MGU4590_FC40_SP09	SC09	SP09	59	242	282	80	50	62.5	10	4.92	☆
MGU4600_FC40_SP09	SC09	SP09	60	246	287	80	50	62.5	10	5.23	☆
MGU4610_FC40_SP09	SC09	SP09	61	250	292	80	50	62.5	10	5.55	☆
MGU4620_FC40_SP09	SC09	SP09	62	254	296	80	50	62.5	10	5.87	☆
MGU4630_FC40_SP09	SC09	SP09	63	258	301	80	50	62.5	10	6.18	☆

880 Inserts U Drill
880系列刀杆型号

接口類型：削平直柄 ISO 9766

冷却方式：内冷設計

標準產品範圍：5XDC



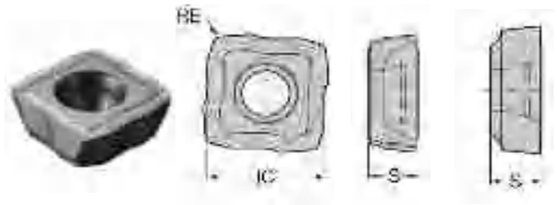
型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU5120_FC20_SP01	SC01	SP01	12	60.0	81	50	20	25	10	0.167	★
MGU5125_FC20_SP01	SC01	SP01	12.5	62.5	84	50	20	25	10	0.170	★
MGU5130_FC20_SP01	SC01	SP01	13	65.0	86	50	20	25	10	0.173	★
MGU5135_FC20_SP01	SC01	SP01	13.5	67.5	88	50	20	25	10	0.176	★
MGU5140_FC20_SP02	SC02	SP02	14	73.65	86	50	20	25	10	0.180	★
MGU5145_FC20_SP02	SC02	SP02	14.5	76.76	89	50	20	25	10	0.181	★
MGU5150_FC20_SP02	SC02	SP02	15	79.26	92	50	20	25	10	0.187	★
MGU5155_FC20_SP02	SC02	SP02	15.5	82.4	95	50	20	25	10	0.194	★
MGU5160_FC20_SP02	SC02	SP02	16	83.5	98	50	20	25	10	0.208	★
MGU5165_FC20_SP03	SC03	SP03	16.5	86.7	101	50	20	25	10	0.207	★
MGU5170_FC25_SP03	SC03	SP03	17	88.0	103	56	25	32	10	0.317	★
MGU5175_FC25_SP03	SC03	SP03	17.5	91.27	107	56	25	32	10	0.331	★
MGU5180_FC25_SP03	SC03	SP03	18	93.4	109	56	25	32	10	0.339	★
MGU5185_FC25_SP03	SC03	SP03	18.5	96.52	112	56	25	32	10	0.348	★
MGU5190_FC25_SP03	SC03	SP03	19	98.66	114	56	25	32	10	0.356	★
MGU5193_FC25_SP03	SC03	SP03	19.25	102.73	118	56	25	32	10	0.363	★
MGU5195_FC25_SP03	SC03	SP03	19.5	102.8	118	56	25	32	10	0.367	★
MGU5200_FC25_SP04	SC04	SP04	20	103.38	121	56	25	32	10	0.388	★
MGU5205_FC25_SP04	SC04	SP04	20.5	105.57	123	56	25	32	10	0.398	★
MGU5210_FC25_SP04	SC04	SP04	21	108.78	126	56	25	32	10	0.401	★
MGU5215_FC25_SP04	SC04	SP04	21.5	111.0	129	56	25	32	10	0.411	★
MGU5220_FC25_SP04	SC04	SP04	22	113.22	131	56	25	32	10	0.425	★
MGU5230_FC25_SP04	SC04	SP04	23	119.89	138	56	25	32	10	0.459	★
MGU5240_FC25_SP05	SC05	SP05	24	125.47	143	56	25	32	10	0.470	★
MGU5250_FC25_SP05	SC05	SP05	25	132.09	149	56	25	32	10	0.502	★
MGU5253_FC25_SP05	SC05	SP05	25.25	132.22	149	56	25	32	10	0.507	★
MGU5260_FC32_SP05	SC05	SP05	26	133.78	154	60	32	39.6	10	0.739	★
MGU5265_FC32_SP05	SC05	SP05	26.5	136.49	157	60	32	39.6	10	0.755	★
MGU5270_FC32_SP05	SC05	SP05	27	139.18	159	60	32	39.6	10	0.775	★
MGU5280_FC32_SP05	SC05	SP05	28	143.28	165	60	32	39.6	10	0.814	★

880 Inserts U Drill
880系列刀杆型号

型號 Specification/Item	適配刀片		切削刃直徑	刀刃長度	最大懸伸長度	夾緊長度	柄部直徑	法蘭直徑	冷却液	重量	庫存
	中心刀片	周邊刀片	DC	LC	L4	L5	D1	D4	BAR	KG	
MGU5290_FC32_SP05	SC05	SP05	29	149.53	171	60	32	39.6	10	0.855	★
MGU5300_FC32_SP06	SC06	SP06	30	155.49	177	60	32	39.6	10	0.880	★
MGU5310_FC40_SP06	SC06	SP06	31	159.0	183	70	40	48	10	1.260	★
MGU5320_FC40_SP06	SC06	SP06	32	164.42	188	70	40	48	10	1.310	★
MGU5330_FC40_SP06	SC06	SP06	33	169.2	194	70	40	48	10	1.364	★
MGU5340_FC40_SP06	SC06	SP06	34	175.73	200	70	40	48	10	1.426	★
MGU5350_FC40_SP06	SC06	SP06	35	181.57	206	70	40	48	10	1.495	★
MGU5360_FC40_SP07	SC07	SP07	36	186.0	212	70	40	48	10	1.574	★
MGU5370_FC40_SP07	SC07	SP07	37	189.0	216	70	40	48	10	1.643	★
MGU5380_FC40_SP07	SC07	SP07	38	195.08	222	70	40	48	10	1.720	★
MGU5390_FC40_SP07	SC07	SP07	39	201.84	228	70	40	48	10	1.793	★
MGU5400_FC40_SP07	SC07	SP07	40	208.64	234	70	40	48	10	1.841	★
MGU5410_FC40_SP07	SC07	SP07	41	215.51	240	70	40	48	10	2.110	★
MGU5420_FC40_SP07	SC07	SP07	42	219.85	245	80	50	62.5	10	2.854	★
MGU5430_FC40_SP07	SC07	SP07	43	236.16	251	80	50	62.5	10	2.969	★
MGU5440_FC40_SP08	SC08	SP08	44	223.99	255	80	50	62.5	10	3.153	☆
MGU5450_FC40_SP08	SC08	SP08	45	230.14	262	80	50	62.5	10	3.281	☆
MGU5460_FC40_SP08	SC08	SP08	46	234.97	268	80	50	62.5	10	3.410	☆
MGU5470_FC40_SP08	SC08	SP08	47	240.1	273	80	50	62.5	10	3.520	☆
MGU5480_FC40_SP08	SC08	SP08	48	245.0	279	80	50	62.5	10	3.675	☆
MGU5490_FC40_SP08	SC08	SP08	49	250.18	284	80	50	62.5	10	3.827	☆
MGU5500_FC40_SP08	SC08	SP08	50	254.92	290	80	50	62.5	10	3.990	☆
MGU5510_FC40_SP08	SC08	SP08	51	259.47	296	80	50	62.5	10	4.131	☆
MGU5520_FC40_SP08	SC08	SP08	52	265.0	301	80	50	62.5	10	4.305	☆

880 Sem inserts
880系列鉆削刀片

◎ 中心刀片



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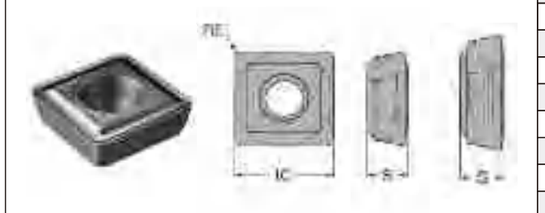
					M		○	○	●
					K		●	●	
					N			○	○
					S			○	●
					H		●	○	

	型號 Specification/Item	尺寸（mm）				材質		
		IC	S	RE	效率	Mp2150	Mp3150	Mm4235
01	D-SCGX010203-LM	4.57	2	0.3	中等進給			●
	D-SCGX010203-GR	4.57	2	0.3	高進給		●	
02	D-SCGX020204-LM	4.9	2.4	0.4	中等進給		●	●
	D-SCGX020204-GM	4.9	2.4	0.4		●	●	
	D-SCGX020204-GR	4.9	2.4	0.4	高進給	●	●	
03	D-SCGX030305-LM	5.7	2.6	0.5	中等進給		●	●
	D-SCGX030305-GM	5.7	2.6	0.5		●	●	
	D-SCGX030305-GR	5.7	2.6	0.5	高進給	●	●	
04	D-SCGX040305-LM	6.8	2.8	0.5	中等進給		●	●
	D-SCGX040305-GM	6.8	2.8	0.5		●	●	
	D-SCGX040305-GR	6.8	2.8	0.5	高進給	●	●	
05	D-SCGX050305-LM	8.4	3	0.5	中等進給		●	●
	D-SCGX050305-GM	8.4	3	0.5		●	●	
	D-SCGX050305-GR	8.4	3	0.5	高進給	●	●	
06	D-SCGX060406-LM	10.2	3.5	0.6	中等進給		●	●
	D-SCGX060406-GM	10.2	3.5	0.6		●	●	
	D-SCGX060406-GR	10.2	3.5	0.6	高進給	●	●	
07	D-SCGX070406-LM	12.4	4	0.6	中等進給		●	●
	D-SCGX070406-GM	12.4	4	0.6		●	●	
	D-SCGX070406-GR	12.4	4	0.6	高進給	●	●	
08	D-SCGX080508-LM	14.9	4.5	0.8	中等進給		●	●
	D-SCGX080508-GM	14.9	4.5	0.8		●	●	
	D-SCGX080508-GR	14.9	4.5	0.8	高進給	●	●	
09	D-SCGX090608-LM	17.9	5.5	0.8	中等進給		●	●
	D-SCGX090608-GM	17.9	5.5	0.8		●	●	
	D-SCGX090608-GR	17.9	5.5	0.8	高進給	●	●	

880 Sem inserts
880系列鉆削刀片

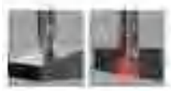
◎ 周心刀片



					P	●	●	○	●
					M	○	○	●	
					K	●	●		●
					N		○	○	
					S		○	●	
					H	●	○		

	型號 Specification/Item	尺寸（mm）				材質		
		IC	S	RE	效率	Mp2150	Mp3150	Mm4235
01	D-SPGX010204-LM	4.6	2	0.4	中等進給			●
	D-SPGX010204-GR	4.6	2	0.4	高進給		●	
02	D-SPGX020204-GM	5.1	2.4	0.4	中等進給	●	●	
	D-SPGX020205-LM	5.1	2.4	0.5			●	
	D-SPGX020205-MS	5.1	2.4	0.5				●
	D-SPGX020205-GR	5.1	2.4	0.5	高進給		●	
03	D-SPGX030305-GM	6.0	2.6	0.5	中等進給	●	●	
	D-SPGX030306-LM	6.0	2.6	0.6			●	
	D-SPGX030305-MS	6.0	2.6	0.6				●
	D-SPGX030306-GR	6.0	2.6	0.6	高進給		●	
04	D-SPGX040305-GM	7.4	2.8	0.5	中等進給	●	●	
	D-SPGX040307-LM	7.4	2.8	0.7			●	
	D-SPGX040307-MS	7.4	2.8	0.7				●
	D-SPGX040307-GR	7.4	2.8	0.7	高進給		●	
05	D-SPGX050305-GM	8.9	3.0	0.5	中等進給	●	●	
	D-SPGX050308-LM	8.9	3.0	0.8			●	
	D-SPGX050308-MS	8.9	3.0	0.8				●
	D-SPGX050308-GR	8.9	3.0	0.8	高進給		●	
06	D-SPGX060406-GM	10.7	3.5	0.6	中等進給	●	●	
	D-SPGX060408-LM	10.7	3.5	0.8			●	
	D-SPGX060408-MS	10.7	3.5	0.8				●
	D-SPGX060410-GR	10.7	3.5	1.0	高進給		●	
07	D-SPGX070406-GM	12.7	4.0	0.6	中等進給	●	●	
	D-SPGX070410-LM	12.7	4.0	1.0			●	
	D-SPGX070410-MS	12.7	4.0	1.0				●
	D-SPGX070412-GR	12.7	4.0	1.2	高進給		●	
08	D-SPGX080508-GM	15.5	4.5	0.8	中等進給	●	●	
	D-SPGX080510-LM	15.5	4.5	1.0			●	
	D-SPGX080510-MS	15.5	4.5	1.0				●
	D-SPGX080512-GR	15.5	4.5	1.2	高進給		●	
09	D-SPGX090608-GM	18.6	5.5	0.8	中等進給	●	●	
	D-SPGX090610-LM	18.6	5.5	1.0			●	
	D-SPGX090610-MS	18.6	5.5	1.0				●
	D-SPGX090612-GR	18.6	5.5	1.2	高進給		●	

◎ 特殊工序：旋轉

不規則表面		進給率使用推薦值的最低值，以避免刀片損壞
凸面鑽削		中心刀片先接觸，正常進給率
凹面鑽削		進給降至推薦值的1/3
斜面入口/斜面出口		• 使用盡可能短的鑽頭，以使振動趨勢最小，從而減小鑽頭偏斜影響 • 如果表面傾角超過2°，則將進給率降低至正常值的1/3
交叉孔		• 推薦值的最低值 • 當被貫穿的孔徑大于鑽頭直徑的時，將進給減小至正常進給率的1/3 • 不建議在長屑材料中使用
不對稱曲面		由于中心刀片最初不參與切削，爲了平衡切削力，將進刀進給率降低至推薦值的最低值1/3
預鑽孔		要將中心與周邊刀片之間的切削力平衡保持在可接受的水平，預鑽孔不應大于DC/4
插鑽		• 爲了獲得最佳穩定性，務必使用盡可能短的鑽頭，使用最低推薦進給量并應用慢進 • 務必使用內冷却液以確保充分排屑 • 最大步距寬度率爲鑽頭直徑的70%。這可提供高效的型腔形成率，同時確保型腔中不留下材料芯 • 最好鑽兩個孔，并在它們之間插鑽。這樣可爲排屑留下足够的排屑空間。

880 System Spare
880系列特殊工具及配件

◎ 非旋轉：車削

對準		機床中心綫與工件之間的總跳動量不得超過0.03mm
		將刀具的X軸與機床的X軸對準是良好切削的必要條件，斜度不得超過0.07mm
凹面鑽削		• 可鑽削比鑽頭名義尺寸更大的孔，以及通過後續鏜削走刀進行擴孔和精加工。 • 也可以使用非旋轉可轉位刀片鑽頭加工錐形孔。 • 使用鑽頭也可以加工倒角和退刀槽。 • 最大AP一般不超過周邊刀片IC值的70%

◎ 配件

切削刃直徑（mm）	刀片尺寸	螺釘規格	訂貨號	Keygrip	扳手
DC				TORXPLUS®	
12.00–13.50	01	M1.8	SM18–040–5IP	5IP	1056000051–5DS
14.00–16.00	02	M2	SM20–045–6IP	6IP	1056000001–6DS
16.50–19.50	03	M2.2	SM22–049–7IP	7IP	1056000002–7DS
20.00–23.50	04	M2.5	SM25–072–8IP	8IP	1056000003–8DS
24.00–29.00	05	M3	SM30–082–9IP	9IP	1056000004–9DS
30.00–43.00	06–07	M3.5	SM35–094–101	10IP	1056000005–10DS
44.00–63.50	08–09	M4	SM40–110–15IP	15IP	1056000006–15DS

● 注意：TORXPLUS® 扳手头与IP扳手搭配使用。

SP SO WC WDX TCAP 6D&8D 880 皇冠鑽系列 SEM Drill Inserts 大直徑U鑽 YLMD MAX Drill 刀片系列 Carbide Inserts 粗鏜刀系列 Rough Boring Head 精鏜刀系列 Finish Boring Head 鏜刀柄系列 Chuck 小刀夾系列 Accessories 鏜刀倒角環 Chamfering Tools 槍鑽工藝 Gun Drill Technology

◎ 冷却

冷却在鑽削時至關重要，它對排屑、孔質量、刀具壽命都產生影響。

◎ 冷却方式

内冷却液

- 始終作爲首選，特别是在加工長切屑材料以及鑽削深孔（4–5XDC）時

外冷却液

- 可在切屑成形良好以及鑽削淺孔（≤3XDc）時使用

壓縮空氣，微量潤滑或幹鑽削

- 在特殊工况下能够成功，但是通常不推薦
- 可用于短切屑材料
- 刀具壽命降低
- 孔深不超過3XDC

◎ 冷却液選擇

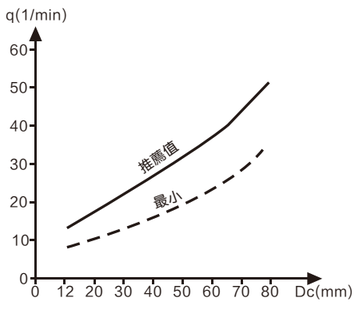
可溶性切削油（乳化液）

- 含油量爲5–12%（加工不銹鋼時爲10–25%）
- EP（極壓）添加劑

净　油

- 始終含有EP添加劑
- 在ISO–M和ISO–S應用中延長刀具壽命

◎ 推薦的冷却液流量



◎ 選擇切削參數

切屑成形和排屑是鑽削中的關鍵因素，取决于工件材料、鑽頭、刀片槽型的選擇、冷却液壓力、流量和切削參數。切屑堵塞會導致鑽頭徑向移動，從而影響孔質量、鑽頭壽命和可靠性，或導致鑽頭、刀片崩斷。

當切屑能够從鑽頭中順暢排出時，切屑成形是可接受的。對其進行識别的最佳方法是在鑽削過程中進行監聽。連續的聲音表示排屑良好，斷續的聲音表示切屑堵塞。檢查進給力或功率監控器。如果存在异常，則原可能是切屑堵塞。查看切屑：如果切屑長而彎曲，但未卷曲，則表示出現切屑堵塞。查看孔：出現切屑堵塞後，將看到粗糙表面。

880 System Application
880系列应用指南

◎ 切削速度的影響–vc，m/min

- 影響功率Pc kW（Hp）和扭矩Mc Nm
- 更高的速度將產生更高的温度并增加後刀面磨損，特别是在周邊圓角處
- 更高的速度有利于長切屑軟材料（例如低碳鋼）的切屑成形
- 决定刀具壽命的最大因素

切削速度過高

- 後刀面磨損過快
- 刀尖塑性變形
- 孔質量差和孔公差不良

切削速度過低

- 積屑瘤
- 塑性變形 排屑不良
- 孔質量差和孔公差不良 長時間連續切削

◎ 進給的影響–fn，mm/r

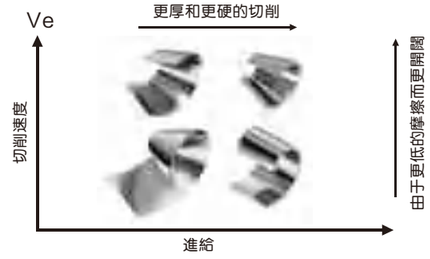
- 影響進給力Ff(N)、功率Pc kW(Hp)和扭矩Mc Nm
- 控制切屑成形
- 主要影響表面質量
- 有助于減少機械應力和熱應力

高進給率

- 斷屑較硬
- 切削時間較短
- 刀具磨損較小但鑽頭刃崩裂危險增加
- 孔質量降低

低進給率

- 長切屑材料的首選
- 孔質量提高
- 刀具磨損加快
- 長時間連續切削



● 注意：進給率必須與切削速度相互關聯。

◎ 獲得高質量的孔

排　屑

- 確保排屑性能符合要求。切屑堵塞影響孔質量和可靠性和刀具壽命。刀片槽型和切削參數至關重要。

穩定性、刀具裝夾

- 機床應狀况良好。確保零件固定且穩定。爲不規則表面、斜面和交叉孔應用正確的進給率。
- 使用跳動量最小的精制剛性刀柄，刀柄會影響孔質量和刀具壽命。

冷　却

- 内冷却始終是最優的選擇，冷却液供應和冷却液壓力是重要因素，它對排屑、表面質量、刀具壽命產生影響。

刀具壽命

- 檢查刀片的磨損情况，預設刀具壽命管理程序。最有效的方法是使用進給力監視器監視鑽削。

維　護

- 定期更換刀片夾緊螺釘。先清潔刀座，再更換刀片。

問題	解讀方案	
	旋轉	非旋轉：車削
孔徑變大 	1.增加冷却液流量，清潔過濾器，清潔鑽頭中的冷却流孔。	1.檢查車床對準情況。
		2.將鑽頭旋轉180°。
	2.嘗試在周邊使用韌性更高的槽型（中心刀片保持不變）。	3.嘗試在周邊使用韌性更高的槽型（中心刀片保持不變）。
孔徑減小 	1.增加冷却液流量，請潔過濾器。清潔鑽頭中的冷却液孔。	1.檢查車床對準情況。
		2.將鑽頭旋轉180°。
	2.嘗試在中心使用韌性更高的槽型，在周邊使用輕快切削槽型。	3.嘗試在中心使用韌性更高的槽型，在周邊使用輕快切削槽型。
震動 	1.縮短站頭懸伸，提高工件穩定性。	
	2.降低切削速度。	
	3.嘗試在周邊使用不同的槽型，并在推薦的切削參數範圍內調整進給率。	
機床扭矩不足 	1.降低進給。	
	2.選擇輕快切削槽型以降低切削力。	
機床功率不足 	1.降低切削速度。	
	2.降低切削進給。	
	3.選擇輕快切削槽型以降低切削力。	
錐孔，孔底尺寸超差 	1.增加冷却液流量，清潔過濾器，清潔鑽頭中的冷却液孔。	
	2.嘗試在周邊使用不同的槽型，并在推薦的切前參數範圍內調整進給率。	
	3.縮短鑽頭懸伸。	
刀片螺釘破損	1.往用扭矩扳手將螺釘緊固到一起，除抹防卡劑。	
	2.定期檢查并更換刀片螺釘。	
表面質量差	1.務必確保良好的切屑控制。	
	2.降低進給(如果必順保持vf.則也可提高速度。	
	3.增加冷却液流量,清潔過濾器,清潔鑽頭中的冷却液孔。	
	4.縮短鑽頭懸伸，提高工件穩定性。	
鑽頭容屑槽中切屑堵塞，由長切屑導致	1.檢查槽型和切削參數推薦值。	
	2.增加冷却液流量，清潔過濾器，清潔鑽頭中的冷却液孔。	
	3.在推薦切削參數範圍內降低進給。	
	4.在推薦切削參數範圍內提高切削速度。	

880 System Common Troubleshooting
880系列常见故障排除

◎ 刀片磨損

問題	原因	解决方法
後刀面磨損 	切削速度過高。	降低切削速度。
	材質耐磨性不足。	選擇耐磨性更高的材質。
月牙窪磨損 	周邊刀片	周邊刀片
	•前刀面上因溫度過高而出現擴散磨損。	•選擇耐磨性更高的材質。
		•降低切削速度。
	中心刀片	中心刀片
	•因積屑瘤和粘結而導致磨料磨損。	•降低切削進給。
		•選擇切削刃更加鋒利的槽型，即-LM。
塑性變形（周邊刀片） 	a）切削溫度（切削速度）過高，同時，壓也高（進給，工件硬度）。	a-b）選擇耐磨性更高、抗塑性變形性能更好的材質。
	b）過度後刀面磨損和/或月牙窪磨損的最終結果。	a-b）降低切削速度。
		a-b）選擇更鋒利的槽型。
		a）降低進給。
崩刃 	a）材質韌性不足。	a）選擇切性更高的材質。
	b）刀片槽型强度過低。	b）選擇强度更高的槽型。
	c）積屑瘤（BUE）。	c）提高切削速度或選擇切削刃更加鋒利的槽型。
	d）表面不規則。	d）降低進刀時的進給。
	e）穩定性差。	e）提高穩定性。
	f）夾砂（鑄鐵）。	f）選擇强度更高的槽型。降低進給。
積屑瘤（BUE） 	a）切削速度過低（切削刃處溫度過低）。	a）提高切削速度成改用塗層材質。
	b）刀片槽型的切削刃太鈍。	b）選擇切削刃更加鋒利的槽型。
	c）材料粘性非常高。例如某些不銹鋼和地鋁。	c-d）提高切削液的含油量和容量/壓力。
	d）切削液的含油量百分比過低。	

Recommended parameters for the 880 series inserts
880系列刀片参数推荐

◎ 4–5 × DC切削参數
（切削速度與進給）按照2–3 × DC的75–85%

ISO	MC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2 – 3*D C) /進給 (fn mm/rev) M	CM	CR
P	P1.0.Z.AN (01.0)	非合金鋼	90–200	12.00–16.49	GPK30	210–325	0.04–0.08		
		非淬硬鋼		12.00–13.99	MP2150	180–235	0.04–0.08	0.04–0.06	0.04–0.06
		0.05–0.10%C		16.50–19.99	MP3150	150–220	0.04–0.10	0.04–0.06	0.04–0.06
				20.00–23.99			0.04–0.12	0.04–0.08	0.04–0.08
				24.00–29.99			0.04–0.12	0.04–0.08	0.04–0.08
				30.00–35.99			0.06–0.14	0.06–0.10	0.06–0.10
				36.00–43.99			0.06–0.16	0.06–0.10	0.06–0.10
				44.00–52.99			0.08–0.16	0.08–0.12	0.08–0.12
				53.00–63.50			0.08–0,16	0.08–0.12	0.08–0.12
	P1.0.Z.AN (01.1)		90–200	12.00–16.49	GPK30	200–310	0.04–0.10		
		非淬硬鋼		12.00–13.99	MP2150	170–225	0.04–0.10	0.04–0.06	0.04–0.06
		0.05–0.25%C		16.50–19.99	MP3150	140–210	0.04–0.10	0.04–0.06	0.04–0.06
				20.00–23.99			0.04–0.12	0.04–0.10	0.04–0.10
				24.00–29.99			0.04–0.12	0.04–0.10	0.04–0.10
				30.00–35.99			0.06–0.14	0.06–0.12	0.06–0.12
				36.00–43.99			0.06–0.16	0.06–0.12	0.06–0.12
				44.00–52.99			0.08–0.16	0.08–0.12	0.08–0.12
				33.00–63.50			0.08–0.16	0.08–0.12	0.08–0.12
	P1.0.Z.AN (01.2)		125–225	12.00–16.49	GPK30	200–310	0.04–0.10		
		非淬硬鋼		12.00–13.99	MP2150	170–225	0.04–0.10	0.04–0.10	0.04–0.10
		0.25–0.55%C		16.50–19.99	MP3150	140–210	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24
	P1.0.Z.AN (01.3)		150–250	12.00–16.49	GPK30	200–310	0.04–0.10		
		非淬硬鋼		12.00–13.99	MP2150	170–225	0.04–0.10	0.04–0.10	0.04–0.10
		0.55–0.80%C		16.50–19.99	MP3150	140–210	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24

Recommended parameters for the 880 series inserts
880系列刀片参数推荐

ISO	MC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2 – 3*D C) /進給 (fn mm/rev) LM	GM	GR
P	P1.0.Z.AN (01.4)	高碳鋼和碳素工具鋼	180–275	12.00–16.49	GPK30	200–310	0.04–0.10		
				12.00–13.99	MP2150	170–225	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	140–210	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24
	P2.0.Z.AN (02.1)	低合金鋼（非淬火）	150–260	12.00–16.49	GPK30	180–280	0.04–0.10		
				12.00–13.99	MP2150	150–230	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	110–180	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24
	P2.0.Z.AN (02.1)	調質處理和合金鋼	220–450	12.00–16.49	GPK30	95–200	0.04–0.10		
				12.00–13.99	MP2150	90–160	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	80–150	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24
	P3.0.Z.AN (03.11)	高合金鋼（退火）	150–250	12.00–16.49	GPK30	150–260	0.04–0.10		
				12.00–13.99	MP2150	120–210	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	90–190	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24
	P3.0.Z.HT (03.21)	調質處理的高合金鋼	250–350	12.00–16.49	GPK30	80–190	0.04–0.10		
				12.00–13.99	MP2150	65–150	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	60–110	0.04–0.12	0.04–0.12	0.04–0.12
				20.00–23.99			0.04–0.14	0.04–0.14	0.04–0.14
				24.00–29.99			0.04–0.18	0.04–0.18	0.04–0.18
				30.00–35.99			0.06–0.18	0.06–0.18	0.06–0.18
				36.00–43.99			0.06–0.24	0.06–0.24	0.06–0.24
				44.00–52.99			0.08–0.24	0.08–0.24	0.08–0.24
				53.00–63.50			0.08–0.24	0.08–0.24	0.08–0.24

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ISO	MC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2-3*DC)/进给 (fn mm/rev) LM	GM	GR
P	6.1	鑄鋼(非合金)	90–225	12.00–16.49	GPK50	140–280	0.04–0.08		
				12.00–13.99	MP2150	110–220	0.04–0.08	0.04–0.08	0.04–0.08
				16.50–19.99	MP3150	100–180	0.04–0.08	0.04–0.08	0.04–0.08
				20.00–23.99			0.04–0.10	0.04–0.10	0.04–0.10
				24.00–29.99			0.04–0.10	0.04–0.10	0.04–0.10
				30.00–35.99			0.06–0.14	0.06–0,14	0.06–0.14
				36.00–43.99			0.06–0.14	0.06–0.14	0.06–0.14
				44.00–52.99			0.08–0.14	0.08–0.14	0.08–0.14
				53.00–63.50			0.08–0.14	0.08–0.14	0.08–0.14
	P1.5.C.UT (06.2)	低合金鋼(合金元素<5%)	150–250	12.00–16.49	GPK30	140–280	0.04–0.10		
				12.00–13.99	MP2150	110–220	0.04–0.10	0.04–0.10	0.04–0.10
				16.50–19.99	MP3150	100–180	0.04–0.14	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.18	0.06–0.18
				24.00–29.99			0.06–0.18	0.06–0.18	0.06–0.18
				30.00–35.99			0.06–0.20	0.06–0.20	0.06–0.20
				36.00–43.99			0.06–0.22	0.06–0.22	0.06–0.22
				44.00–52.99			0.10–0.22	0.10–0.22	0.10–0.22
				53.00–63.50			0.10–0.22	0.10–0.22	0.10–0.22

ISO	SC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2–3*DC)/進給 (fn mm/rev) LM	MS	GM	GR
M	P5.0.Z.AN (05.1)	鐵素體/馬氏體不銹鋼 銘含量13%–25%	150–270	12.00–16.49	MP2150	130–190	0.04–0.12	0.04–0.12		
				12.00–13.99	MP3150	125–185	0.04–0.14	0.04–0.14	0.04–0.08	0.04–0.08
				16.50–19.99	GM4235	110–170	0.06–0.16	0.06–0.16	0.04–0.08	0.04–0.08
				20.00–23.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				24.00–29.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				30.00–35.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				36.00–43.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				44.00–52.99			0.10–0.24	0.10–0.24	0.10–0.18	0.10–0.18
				53.00–63.50			0.10–0.24	0.10–0.24	0.10–0.18	0.10–0.18
	P5.0.Z.AN (05.11)	奧氏體不銹鋼鎳含量>8% 銘含量13%–25%	150–275	12.00–16.49	MP2150	130–190	0.04–0.12	0.04–0.12		
				12.00–13.99	MP3150	125–185	0.04–0.14	0.04–0.14	0.04–0.08	0.04–0.08
				16.50–19.99	GM4235	110–170	0.06–0.16	0.06–0.16	0.04–0.08	0.04–0.08
				20.00–23.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				24.00–29.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				30.00–35.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				36.00–43.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				44.00–52.99			0.10–0.20	0.10–0.20	0.10–0.16	0.10–0.16
				53.00–63.50			0.10–0.20	0.10–0.20	0.10–0.16	0.10–0.16
	M3.1.Z.AQ (05.51) M3.2.Z.AQ (05.52)	奧氏體/鐵素體(雙粗不銹鋼)	200–320	12.00–16.49	MP2150	100–190	0.04–0.12	0.04–0.12		
				12.00–13.99	MP3150	90–110	0.04–0.14	0.04–0.14	0.04–0.08	0.04–0.08
				16.50–19.99	GM4235	80–100	0.06–0.16	0.06–0.16	0.04–0.08	0.04–0.08
				20.00–23.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				24.00–29.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				30.00–35.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				36.00–43.90			0.06–0.20	0.06–0.20	0.05–0.16	0.05–0.16
				44.00–52.99			0.10–0.24	0.10–0.24	0.10–0.18	0.10–0.18
				53.00–63.50			0.10–0.24	0.10–0.24	0.10–0.18	0.10–0.18

Recommended parameters for the 880 series inserts
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ISO	SC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2–3*DC)/進給 (fn mm/rev) LM	MS	GM	GR
M	M1.0.C.UT (15.21)	奧氏體鑄造不銹鋼 13%–25%	150–250	12.00–16.49			0.04–0.12	0.04–0.12		
				12.00–13.99	MP2150	120–190	0.04–0.14	0.04–0.14	0.04–0.08	0.04–0.08
				16.50–19.99	MP3150	100–160	0.06–0.16	0.06–0.16	0.04–0.08	0.04–0.08
				20.00–23.99	GM4235	80–130	0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				24.00–29.99			0.06–0.18	0.06–0.18	0.06–0.14	0.06–0.14
				30.00–35.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				36.00–43.99			0.06–0.20	0.06–0.20	0.06–0.16	0.06–0.16
				44.00–52.99			0.10–0.24	0.10–0.24	0,10–0.18	0,10–0.18
				53.00–63.50			0.10–0.24	0.10–0.24	0.10–0.18	0.10–0.18
S	S2.0.Z.AN (20.21) S2.0.Z.AG (20.22) S2.0.C.NS (20.24)	鎳基高温合金	140–425	12.00–16.49			0.04–0.08	0.04–0.08		
				12.00–13.99	MP3150	25–80	0.04–0.08	0.04–0.08	0.04–0.08	0.04–0.08
				16.50–19.99	GM4235	20–70	0.05–0.08	0.05–0.08	0.05–0.08	0.05–0.08
				20.00–23.99			0.05–0.08	0.05–0.03	0.05–0.03	0.05–0.03
				24.00–29.99			0.06–0.10	0.06–0.10	0.06–0.10	0.06–0.10
				30.00–35.99			0.06–0.12	0.06–0.12	0.06–0.12	0.06–0.12
				36.00–43.99			0.06–0.12	0.06–0.12	0.06–0.12	0.06–0.12
				44.00–52.99			0.06–0.12	0.06–0.12	0.06–0.12	0.06–0.12
				53.00–63.50			0.08–0.14	0.08–0.14	0.08–0.14	0.08–0.14
	S4.2.Z.AN (23.21) S4.3.Z.AG (23.22)	鈦合金	Rm (Mpa) 600–1500	12.00–16.49			0.04–0.14			
				12.00–13.90	MP3150	35–120	0.04–0.14		0.04–0.10	0.04–0.10
				16.50–19.99	GM4235	30–100	0.08–0.16		0.04–0.12	0.04–0.12
				20.00–23.99			0.08–0.16		0.04–0.14	0.04–0.14
				24.00–29.99			0.12–0.18		0.04–0.18	0.04–0.18
				30.00–35.99			0.12–0.18		0.06–0.18	0.06–0.18
				36.00–43.99			0.12–0.18		0.06–0.24	0.06–0.24
				44.00–52.99			0.12–0.18		0.08–0.24	0.08–0.24
				53.00–63.50			0.14–0.20		0.08–0.24	0.08–0.24

ISO	MC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2–3*DC)/進給 (fn mm/rev) LM	GM	GR
K	K1.1C.NS (07.1)	可鍛鑄鐵 鐵素體(短切屑)	110–145	12.00–16.49	GPK30	120–220	0.06–0.10		
				12.00–13.99	MP2150	100–180	0.06–0.10	0.06–0.12	0.06–0.20
				16.50–19.99	MP3150	80–140	0.06–0.12	0.08–0.14	0.08–0.22
				20.00–23.99			0.08–0.14	0.10–0.18	0.08–0.28
				24.00–29.99			0.08–0.14	0.10–0.20	0.10–0.30
				30.00–35.99			0.06–0.14	0.10–0.20	0.10–0.32
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.34
				44.00–52.99			0.10–0.16	0.10–0.20	0.12–0.34
				53.00–63.50			0.12–0.18	0.12–0.22	0.12–0.34
	K1.1CNS (07.2)	珠光體(長切屑)	150–270	12.00–16.49	GPK30	90–150	0.06–0.10		
				12.00–13.99	MP2150	70–125	0.06–0.10	0.06–0.12	0.06–0.16
				16.50–19.99	MP3150	50–100	0.06–0.12	0.08–0.14	0.08–0.18
				20.00–23.99			0.08–0.14	0.10–0.18	0.10–0.24
				24.00–29.99			0.08–0.14	0.10–0.20	0.10–0.28
				30.00–35.99			0.06–0.14	0.10–0.20	0.10–0.30
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.32
				44.00–52.99			0.10–0.16	0.10–0.20	0.10–0.32
				53.00–63.50			0.12–0.18	0.12–0.22	0.10–0.32

Recommended parameters for the 880 series inserts
880系列刀片参数推荐

◎ 4–5 × DC切削参數（切削速度與進給）按照2–3 × DC的75–85%

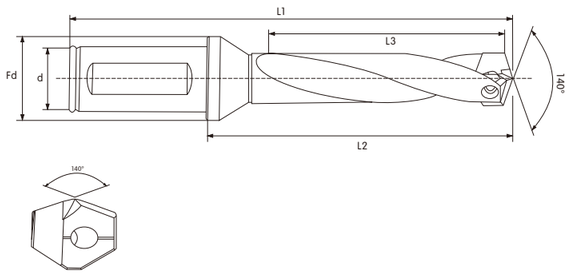
ISO	材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2 – 3*D C) /進給 (fn mm/rev) M	CM	CR
P	K2.1.C.UT (08.1)	灰口鑄鐵；低拉伸强度	125–225	12.00–16.49	GPK30	190–300	0.06–0.10		
				12.00–13.99	MP2150	150–235	0.06–0.10	0.06–0.12	0.06–0.18
				16.50–19.99	MP3150	110–180	0.06–0.12	0.08–0.14	0.08–0.18
				20.00–23.99			0.08–0.14	0.10–0.18	0.10–0.24
				24.00–29.99			0.08–0.14	0.10–0.20	0.10–0.28
				30.00–35.99			0.06–0.14	0.10–0.20	0.10–0.30
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.32
				44.00–52.99			0.10–0.18	0.10–0.20	0.10–0.34
				53.00–63.50			0.12–0.18	0.12–0.22	0.10–0.34
	K2.2.C.UT (08.2)	灰口鑄鐵；高抗拉强度	200–330	12.00–16.49	GPK30	100–200	0.06–0.10		
				12.00–13.99	MP2150	80–180	0.06–0.10	0.06–0.12	0.06–0.16
				16.50–19.99	MP3150	60–130	0.06–0.12	0.08–0.14	0.08–0.18
				20.00–23.99			0.08–0.14	0.10–0.18	0.10–0.24
				24.00–29.99			0.08–0.14	0.10–0.18	0.10–0.28
				30.00–35.99			0.06–0.14	0.10–0.18	0.10–0.30
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.30
				44.00–52.90			0.10–0.18	0.10–0.20	0.10–0.32
				53.00–63.50			0.12–0.18	0.12–0.22	0.10–0.32
	K3.1.C.UT (09.1)	球墨鑄鐵(鐵素體)	150–230	12.00–16.49	GPK30	110–210	0.06–0.10		
				12.00–13.99	MP2150	90–160	0.06–0.10	0.06–0.12	0.06–0.16
				16.50–19.99	MP3150	70–130	0.06–0.12	0.08–0.14	0.08–0.18
				20.00–23.99			0.08–0.14	0.10–0.18	0.10–0.24
				24.00–29.99			0.08–0.14	0.10–0.18	0.10–0.28
				30.00–35.99			0.06–0.14	0.10–0.18	0.10–0.30
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.30
				44.00–52.99			0.10–0.18	0.10–0.20	0.10–0.32
				53.00–63.50			0.12–0.18	0.12–0.22	0.10–0.32
	K3.3.C.UT (09.2)	珠光體	150–260	12.00–16.49	GPK30	100–200	0.06–0.10		
				12.00–13.99	MP2150	80–160	0.06–0.10	0.06–0.12	0.06–0.16
				16.50–19.99	MP3150	70–135	0.06–0.12	0.08–0.14	0.08–0.18
				20.00–23.99			0.08–0.14	0.10–0.18	0.10–0.24
				24.00–29,99			0.08–0.14	0.10–0.18	0.10–0.28
				30,00–35.99			0.06–0.14	0.10–0.18	0.10–0.30
				36.00–43.99			0.10–0.16	0.10–0.20	0.10–0.30
				44.00–52.99			0.10–0.18	0.10–0.20	0.10–0.32
				53.00–63.50			0.12–0.18	0.12–0.22	0.10–0.32
H	H1.3.ZHA (04.1)	淬硬鋼	47–65 (HRC)	12.00–16.49	GPK30	30–70	0.10–0.16		
				12.00–13.99	MP2150	30–50	0.04–0.08	0.04–0.12	0.04–0.08
				16.50–19.99	MP3150	25–60	0.05–0.12	0.06–0.14	0.05–0.12
				20.00–23.99			0.05–0.14	0.06–0.18	0.05–0.14
				24.00–29.99			0.05–0.14	0.06–0.18	0.05–0.14
				30.00–35.99			0.06–0.14	0.06–0.20	0.06–0.16
				36.00–43.99			0.06–0.16	0.06–0.20	0.06–0.16
				44.00–52.99			0.06–0.16	0.10–0.20	0.10–0.16
				53.00–63.50			0.10–0.16	0.10–0.20	0.10–0.16

Recommended parameters for the 880 series inserts
880系列刀片参数推荐

ISO	MC材料編號	工件材料	布氏硬度 HB	鑽頭直徑 Dc mm	材料塗層	切削速度 (m/min)	槽型 (2 – 3*D C) /進給 (fn mm/rev) LM	GM	GR
N	H1.3.Z.HA (30.12)	鋁合金-鍛造或鍛造加時效處理	30–150	12.00–16.49			0.04–0.08		
				12.00–13.99			0.04–0.14	0.04–0.12	0.04–0.12
				16.50–19.99	MP3150	250–350	0.04–0.16	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.16	0.06–0.16
				24.00–29.99			0.10–0.20	0.10–0.18	0.10–0.18
				30.00–35.99			0.10–0.25	0.10–0.20	0.10–0.20
				36.00–43.99			0.10–0.25	0.10–0.20	0.10–0.20
				44.00–52.59			0.12–0.28	0.12–0.22	0.12–0.22
				53.00–63.00			0.12–0.28	0.12–0.22	0.12–0.22
	H1.3.C.UT (30.21)	鑄造，非時效	40–100	12.00–16.49			0.04–0.08		
				12.00–13.99			0.04–0.14	0.04–0.12	0.04–0.12
				16.50–19.99	MP3150	250–350	0.04–0.16	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.16	0.06–0.16
				24.00–29.99			0.10–0.20	0.10–0.18	0.10–0.18
				30.00–35.99			0.10–0.25	0.10–0.20	0.10–0.20
				36.00–43.99			0.10–0.25	0.10–0.20	0.10–0.20
				44.00–52.99			0.12–0.28	0.12–0.22	0.12–0.22
				53.00–63.50			0.12–0.28	0.12–0.22	0.12–0.22
	N1.3.C.AG (30.22)	鑄造或鑄造加時效處理	70–140	12.00–16.49			0.04–0.08		
				12.00–13,99			0.04–0.14	0.04–0.12	0.04–0.12
				16.50–19,99	MP3150	25–60	0.04–0.16	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.16	0.06–0.16
				24.00–29.99			0.10–0.20	0.10–0.18	0.10–0.18
				30.00–35.99			0.10–0.25	0.10–0.20	0.10–0.20
				36.00–43.99			0.10–0.25	0.10–0.20	0.10–0.20
				44.00–52.99			0.12–0.28	0.12–0.22	0.12–0.22
				53.00–63.50			0.12–0.28	0.12–0.22	0.12–0.22
	N3.3.U.UT (04.1)	銅和銅合金	70–160	12.00–16.49			0.04–0.14		
				12.00–13.99			0.04–0.14	0.04–0.12	0.04–0.12
				16.50–19,99	MP3150	200–300	0.04–0.16	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.16	0.06–0.16
				24.00–29.99			0.10–0.20	0.10–0.18	0.10–0.18
				30.00–35.99			0.10–0.25	0.10–0.20	0.10–0.20
				36.00–43.99			0.10–0.25	0.10–0.20	0.10–0.20
				44.00–52.99			0.12–0.28	0.12–0.22	0.12–0.22
				53.00–63.50			0.12–0.28	0.12–0.22	0.12–0.22
	N3.2.C.UT (33.2)	黃銅與鉛青銅（鉛含量<1%）	50–200	12.00–16.49			0.04–0.14		
				12.00–13.99			0.04–0.14	0.04–0.12	0.04–0.12
				16.50–19.99	MP3150	150–220	0.04–0.16	0.04–0.14	0.04–0.14
				20.00–23.99			0.06–0.18	0.06–0.16	0.06–0.16
				24.00–29.99			0.10–0.20	0.10–0.18	0.10–0.18
				30.00–35.99			0.10–0.25	0.10–0.20	0.10–0.20
				36.00–43.99			0.10–0.25	0.10–0.20	0.10–0.20
				44.00–52.99			0.12–0.28	0.12–0.22	0.12–0.22
				53.00–63.50			0.12–0.28	0.12–0.22	0.12–0.22

HCD DRILL
HCD可換式合金皇冠鉆

◎ HCD可換式合金皇冠鑽

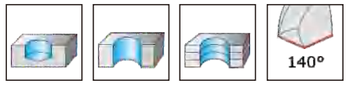


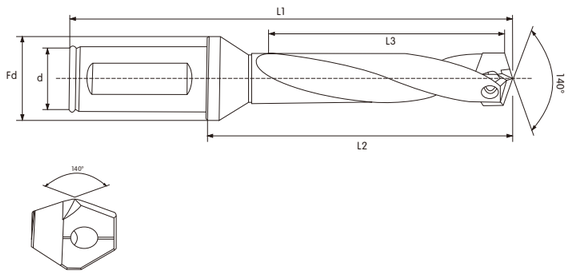
◎ HCD・WD柄・3xD・公制

3 x D型號	Dc/mm	Lc/mm	Ls/mm	d/mm	Seat size
HCD-03-12.00F16	12	36	48	16	A
HCD-03-13.00F16	13	41	48	16	A
HCD-03-14.00F16	14	45	48	16	B
HCD-03-15.00F16	15	48	48	16	B
HCD-03-16.00F20	16	51	50	20	C
HCD-03-17.00F20	17	54	50	20	C
HCD-03-18.00F20	18	57	50	20	D
HCD-03-19.00F20	19	61	50	20	D
HCD-03-20.00F20	20	64	50	20	E
HCD-03-21.00F20	21	67	50	20	E
HCD-03-22.00F25	22	70	56	25	F
HCD-03-23.00F25	23	73	56	25	F
HCD-03-24.00F25	24	76	56	25	G
HCD-03-25.00F25	25	80	56	25	G
HCD-03-26.00F25	26	83	56	25	H
HCD-03-27.00F25	27	86	56	25	H
HCD-03-28.00F32	28	89	60	32	J
HCD-03-29.00F32	29	92	60	32	J
HCD-03-30.00F32	30	95	60	32	K
HCD-03-31.00F32	31	99	60	32	K
HCD-03-32.00F40	32	102	70	40	M
HCD-03-33.00F40	33	105	70	40	M
HCD-03-34.00F40	34	108	70	40	N
HCD-03-35.00F40	35	111	70	40	N
HCD-03-36.00F40	36	115	70	40	P
HCD-03-37.00F40	37	118	70	40	P

HCD DRILL
HCD可換式合金皇冠鉆

◎ HCD可換式合金皇冠鑽

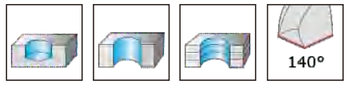


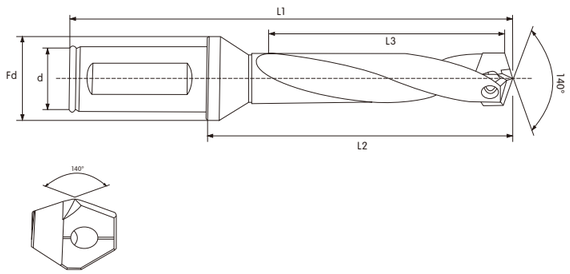


◎ HCD・WD柄・5xD・公制

5 x D型號	Dc/mm	Lc/mm	Ls/mm	d/mm	Seat size
HCD-05-12.00F16	12	62	48	16	A
HCD-05-13.00F16	13	67	48	16	A
HCD-05-14.00F16	14	73	48	16	B
HCD-05-15.00F16	15	78	48	16	B
HCD-05-16.00F20	16	83	50	20	C
HCD-05-17.00F20	17	88	50	20	C
HCD-05-18.00F20	18	93	50	20	D
HCD-05-19.00F20	19	98	50	20	D
HCD-05-20.00F20	20	104	50	20	E
HCD-05-21.00F20	21	109	50	20	E
HCD-05-22.00F25	22	114	56	25	F
HCD-05-23.00F25	23	119	56	25	F
HCD-05-24.00F25	24	124	56	25	G
HCD-05-25.00F25	25	130	56	25	G
HCD-05-26.00F25	26	135	56	25	H
HCD-05-27.00F25	27	140	56	25	H
HCD-05-28.00F32	28	145	60	32	J
HCD-05-29.00F32	29	150	60	32	J
HCD-05-30.00F32	30	155	60	32	K
HCD-05-31.00F32	31	161	60	32	K
HCD-05-32.00F40	32	166	70	40	M
HCD-05-33.00F40	33	171	70	40	M
HCD-05-34.00F40	34	176	70	40	N
HCD-05-35.00F40	35	181	70	40	N
HCD-05-36.00F40	36	187	70	40	P
HCD-05-37.00F40	37	192	70	40	P

◎ HCD可換式合金皇冠鑽



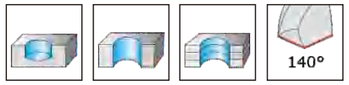


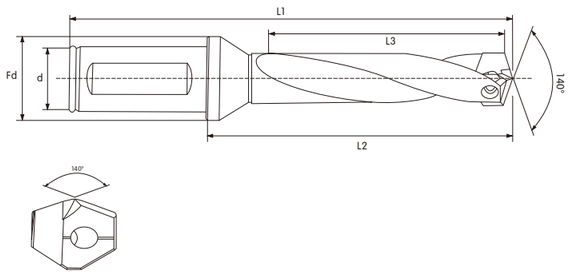
◎ HCD・WD柄・7xD・公制

7 x D型號	Dc/mm	Lc/mm	Ls/mm	d/mm	Seat size
HCD-07-12.00F16	12	86	48	16	A
HCD-07-13.00F16	13	93	48	16	A
HCD-07-14.00F16	14	101	48	16	B
HCD-07-15.00F16	15	108	48	16	B
HCD-07-16.00F20	16	115	50	20	C
HCD-07-17.00F20	17	122	50	20	C
HCD-07-18.00F20	18	133	50	20	D
HCD-07-19.00F20	19	136	50	20	D
HCD-07-20.00F20	20	144	50	20	E
HCD-07-21.00F20	21	151	50	20	E
HCD-07-22.00F25	22	158	56	25	F
HCD-07-23.00F25	23	165	56	25	F
HCD-07-24.00F25	24	172	56	25	G
HCD-07-25.00F25	25	180	56	25	G
HCD-07-26.00F25	26	187	56	25	H
HCD-07-27.00F25	27	194	56	25	H
HCD-07-28.00F32	28	201	60	32	J
HCD-07-29.00F32	29	208	60	32	J
HCD-07-30.00F32	30	215	60	32	K
HCD-07-31.00F32	31	223	60	32	K
HCD-07-32.00F40	32	230	70	40	M
HCD-07-33.00F40	33	237	70	40	M
HCD-07-34.00F40	34	244	70	40	N
HCD-07-35.00F40	35	251	70	40	N
HCD-07-36.00F40	36	259	70	40	P
HCD-07-37.00F40	37	266	70	40	P

HCD DRILL
HCD可換式合金皇冠鉆

◎ HCD可換式合金皇冠鑽





◎ HCD・WD柄・10xD・公制

10 x D型號	Dc/mm	Lc/mm	Ls/mm	d/mm	Seat size
HCD-10-12.00F16	12	120	48	16	A
HCD-10-13.00F16	13	130	48	16	A
HCD-10-14.00F16	14	140	48	16	B
HCD-10-15.00F16	15	150	48	16	B
HCD-10-16.00F20	16	160	50	20	C
HCD-10-17.00F20	17	170	50	20	C
HCD-10-18.00F20	18	180	50	20	D
HCD-10-19.00F20	19	190	50	20	D
HCD-10-20.00F20	20	200	50	20	E
HCD-10-21.00F20	21	210	50	20	E
HCD-10-22.00F25	22	220	56	25	F
HCD-10-23.00F25	23	230	56	25	F
HCD-10-24.00F25	24	240	56	25	G
HCD-10-25.00F25	25	250	56	25	G

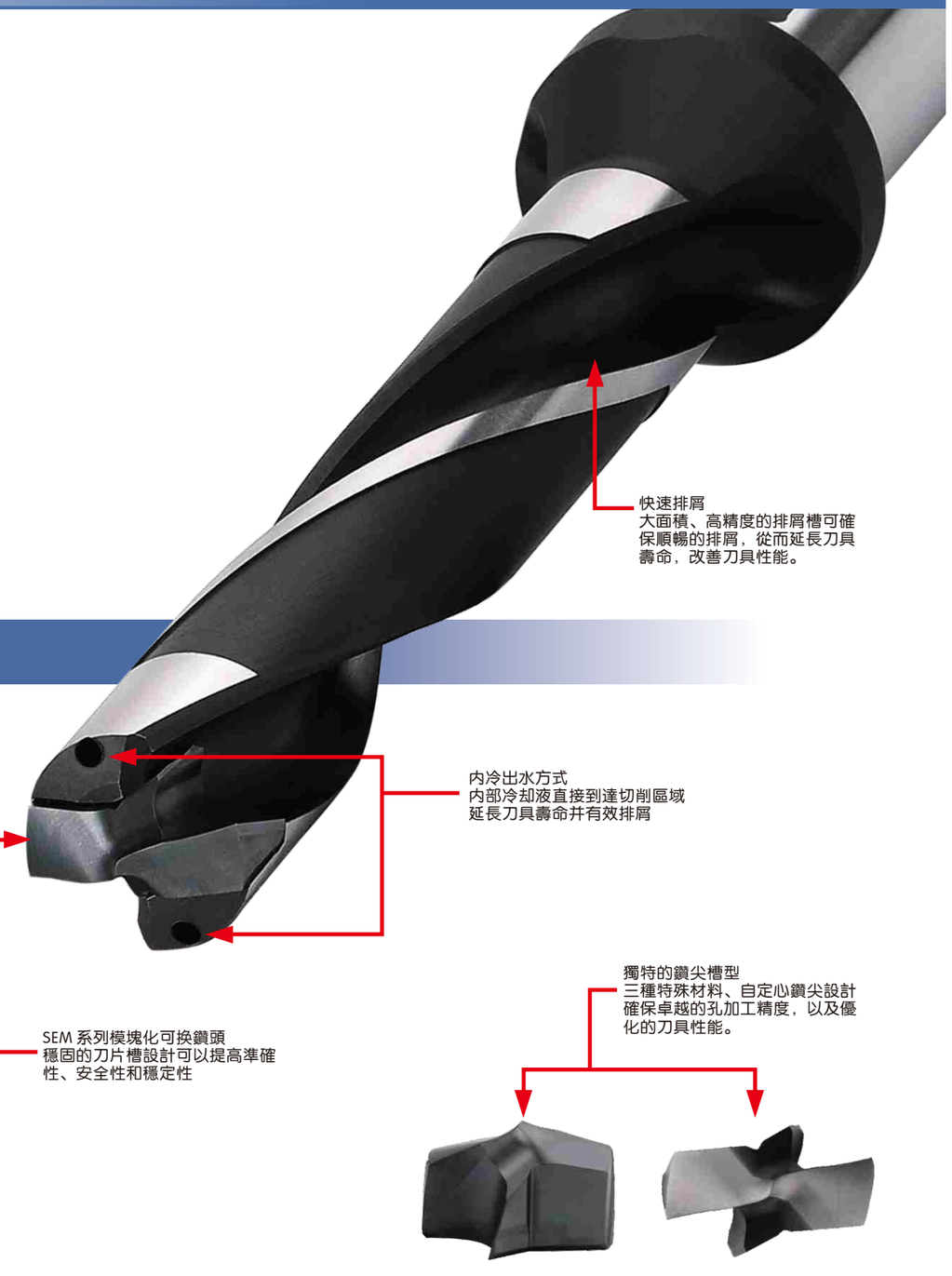
SP
SO
WC
WDX
TCAP
6D & 8D
880
SEM Drill Inserts 皇冠鑽系列
YLMD MAX Drill 大直徑U鑽
Carbide Inserts 刀片系列
Rough Boring Head 粗鏜刀系列
Finish Boring Head 精鏜刀系列
Chuck 鏜刀柄系列
Accessories 小刀夾系列
Chamfering Tools 鏜刀倒角環
Gun Drill Technology 槍鑽工藝

SEM DRILL
SEM皇冠鉆

Ac7315 材質，以 TiAlN 爲基體材料的復合塗層，可用于高速切削適合中高碳鋼，合金鋼，調質鋼和鑄鐵等加工應用。

Ac7320 材質采用以 AlTiN 爲基體材料的 PVD 塗層，特別適合不銹鋼材料的鑽削加工應用。

ACPM45 材質，TiAlN 復合塗層韌性極佳的基體材料。改善了抗崩刃性能，斷削好，壽命高，特別適合軟硬剛材質的加工應用。



特点及优势

◎ Hz鑽尖類型

- 低鑽入力，可避免工件出現彎曲現象。
- 卓越的定中心性能。
- 根據應用類型選擇槽型，確保最佳加工性能。

◎ 可修磨刀片

- 大研刀具公司及其合作伙伴提供快速可靠的刀具修磨服務。
- 修磨鑽尖價格是按照新鑽尖價格的30%收取費用每個規格10個起修。

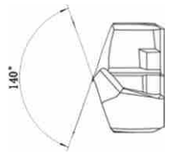
◎ 堅固的刀窩設計，便于更換刀片

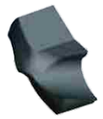
- 堅固的刀窩設計，延長刀片和鑽杆的使用壽命
- 四面封閉型刀窩確保刀片安裝穩固。
- 在拆除刀片時衹需一把簡單的扳手即可。

◎ 修磨注意事項

- 刀片刃口没有較大崩缺現象，修磨次數較少且修磨餘量足够
- 韌帶磨損較小，否則修磨後鑽孔直徑容易變小
- 最好能提供被加工材質和材料硬度

SEM HZ AC7315 切削刃在鋼材料加工中有極高的金屬去除率和超長的使用壽命。
HZ 槽型刀片有一個寬型并且堅固的 HZ 型橫刃，可以避免芯部出現淬火，從而提高進給率。經過倒圓處理的鐮刀形刀刃具有卓越的切屑控制性能和超長的刀具壽命，即使在長切屑材料加工中也有出色的表現。
AC7315 是一種細晶粒硬質合金材質，采用TiAlN 基體的 PVD 復合塗層。
它具有很高的耐磨性，在穩定工況下可以采用極高的切削速度參數。
AC7315 HZ 切削刃特別適合合金鋼和高合金鋼的鑽孔加工。
AC7315 HZ 切削刃可作爲鑄鐵材料加工的備選。





◎ SEM刀片 · HZ · AC7315

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產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM1250	12.5	C
后拉式鉆尖	SEM1260	12.6	C
后拉式鉆尖	SEM1270	12.7	C
后拉式鉆尖	SEM1280	12.8	C
后拉式鉆尖	SEM1290	12.9	C
后拉式鉆尖	SEM1300	13.0	C
后拉式鉆尖	SEM1310	13.1	C
后拉式鉆尖	SEM1320	13.2	C
后拉式鉆尖	SEM1330	13.3	C
后拉式鉆尖	SEM1340	13.4	C
后拉式鉆尖	SEM1350	13.5	C
后拉式鉆尖	SEM1360	13.6	B
后拉式鉆尖	SEM1370	13.7	B
后拉式鉆尖	SEM1380	13.8	B
后拉式鉆尖	SEM1390	13.9	B
后拉式鉆尖	SEM1400	14.0	B
后拉式鉆尖	SEM1410	14.1	B
后拉式鉆尖	SEM1420	14.2	B
后拉式鉆尖	SEM1430	14.3	B
后拉式鉆尖	SEM1440	14.4	B
后拉式鉆尖	SEM1450	14.5	B
后拉式鉆尖	SEM1460	14.6	A
后拉式鉆尖	SEM1470	14.7	A
后拉式鉆尖	SEM1480	14.8	A
后拉式鉆尖	SEM1490	14.9	A
后拉式鉆尖	SEM1500	15.0	A
后拉式鉆尖	SEM1510	15.1	A
后拉式鉆尖	SEM1520	15.2	A
后拉式鉆尖	SEM1530	15.3	A
后拉式鉆尖	SEM1540	15.4	A
后拉式鉆尖	SEM1550	15.5	A
后拉式鉆尖	SEM1560	15.6	A
后拉式鉆尖	SEM1570	15.7	A
后拉式鉆尖	SEM1580	15.8	A
后拉式鉆尖	SEM1590	15.9	1
后拉式鉆尖	SEM1600	16.0	1
后拉式鉆尖	SEM1610	16.1	1
后拉式鉆尖	SEM1620	16.2	1

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM1630	16.3	1
后拉式鉆尖	SEM1640	16.4	1
后拉式鉆尖	SEM1650	16.5	1
后拉式鉆尖	SEM1660	16.6	1
后拉式鉆尖	SEM1670	16.7	1
后拉式鉆尖	SEM1680	16.8	1
后拉式鉆尖	SEM1690	16.9	1
后拉式鉆尖	SEM1700	17.0	1
后拉式鉆尖	SEM1710	17.1	1
后拉式鉆尖	SEM1720	17.2	1
后拉式鉆尖	SEM1730	17.3	1
后拉式鉆尖	SEM1740	17.4	1
后拉式鉆尖	SEM1750	17.5	1
后拉式鉆尖	SEM1760	17.6	1
后拉式鉆尖	SEM1770	17.7	1
后拉式鉆尖	SEM1780	17.8	1
后拉式鉆尖	SEM1790	17.9	1
后拉式鉆尖	SEM1800	18.0	1
后拉式鉆尖	SEM1810	18.1	2
后拉式鉆尖	SEM1820	18.2	2
后拉式鉆尖	SEM1830	18.3	2
后拉式鉆尖	SEM1840	18.4	2
后拉式鉆尖	SEM1850	18.5	2
后拉式鉆尖	SEM1860	18.6	2
后拉式鉆尖	SEM1870	18.7	2
后拉式鉆尖	SEM1880	18.8	2
后拉式鉆尖	SEM1890	18.9	2
后拉式鉆尖	SEM1900	19.0	2
后拉式鉆尖	SEM1910	19.1	2
后拉式鉆尖	SEM1920	19.2	2
后拉式鉆尖	SEM1930	19.3	2
后拉式鉆尖	SEM1940	19.4	2
后拉式鉆尖	SEM1950	19.5	2
后拉式鉆尖	SEM1960	19.6	2
后拉式鉆尖	SEM1970	19.7	2
后拉式鉆尖	SEM1980	19.8	2
后拉式鉆尖	SEM1990	19.9	2
后拉式鉆尖	SEM2000	20.0	3

◎ SEM刀片 · HZ · AC7315–續

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產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM2010	20.1	3
后拉式鉆尖	SEM2020	20.2	3
后拉式鉆尖	SEM2030	20.3	3
后拉式鉆尖	SEM2040	20.4	3
后拉式鉆尖	SEM2050	20.5	3
后拉式鉆尖	SEM2060	20.6	3
后拉式鉆尖	SEM2070	20.7	3
后拉式鉆尖	SEM2080	20.8	3
后拉式鉆尖	SEM2090	20.9	3
后拉式鉆尖	SEM2100	21.0	3
后拉式鉆尖	SEM2110	21.1	3
后拉式鉆尖	SEM2120	21.2	3
后拉式鉆尖	SEM2130	21.3	3
后拉式鉆尖	SEM2140	21.4	3
后拉式鉆尖	SEM2150	21.5	3
后拉式鉆尖	SEM2160	21.6	3
后拉式鉆尖	SEM2170	21.7	3
后拉式鉆尖	SEM2180	21.8	3
后拉式鉆尖	SEM2190	21.9	3
后拉式鉆尖	SEM2200	22.0	3
后拉式鉆尖	SEM2210	22.1	4
后拉式鉆尖	SEM2220	22.2	4
后拉式鉆尖	SEM2230	22.3	4
后拉式鉆尖	SEM2240	22.4	4
后拉式鉆尖	SEM2250	22.5	4
后拉式鉆尖	SEM2260	22.6	4
后拉式鉆尖	SEM2270	22.7	4
后拉式鉆尖	SEM2280	22.8	4
后拉式鉆尖	SEM2290	22.9	4
后拉式鉆尖	SEM2300	23.0	4
后拉式鉆尖	SEM2310	23.1	4
后拉式鉆尖	SEM2320	23.2	4
后拉式鉆尖	SEM2330	23.3	4
后拉式鉆尖	SEM2340	23.4	4
后拉式鉆尖	SEM2350	23.5	4
后拉式鉆尖	SEM2360	23.6	4
后拉式鉆尖	SEM2370	23.7	4
后拉式鉆尖	SEM2380	23.8	4
后拉式鉆尖	SEM2390	23.9	4
后拉式鉆尖	SEM2400	24.0	4
后拉式鉆尖	SEM2410	24.1	5
后拉式鉆尖	SEM2420	24.2	5
后拉式鉆尖	SEM2430	24.3	5
后拉式鉆尖	SEM2440	24.4	5
后拉式鉆尖	SEM2450	24.5	5
后拉式鉆尖	SEM2460	24.6	5
后拉式鉆尖	SEM2470	24.7	5
后拉式鉆尖	SEM2480	24.8	5

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM2490	24.9	5
后拉式鉆尖	SEM2500	25.0	5
后拉式鉆尖	SEM2510	25.1	5
后拉式鉆尖	SEM2520	25.2	5
后拉式鉆尖	SEM2530	25.3	5
后拉式鉆尖	SEM2540	25.4	5
后拉式鉆尖	SEM2550	25.5	5
后拉式鉆尖	SEM2560	25.6	5
后拉式鉆尖	SEM2570	25.7	5
后拉式鉆尖	SEM2580	25.8	5
后拉式鉆尖	SEM2590	25.9	5
后拉式鉆尖	SEM2600	26.0	5
后拉式鉆尖	SEM2610	26.1	6
后拉式鉆尖	SEM2620	26.2	6
后拉式鉆尖	SEM2630	26.3	6
后拉式鉆尖	SEM2640	26.4	6
后拉式鉆尖	SEM2650	26.5	6
后拉式鉆尖	SEM2660	26.6	6
后拉式鉆尖	SEM2670	26.7	6
后拉式鉆尖	SEM2680	26.8	6
后拉式鉆尖	SEM2690	26.9	6
后拉式鉆尖	SEM2700	27.0	6
后拉式鉆尖	SEM2710	27.1	6
后拉式鉆尖	SEM2720	27.2	6
后拉式鉆尖	SEM2730	27.3	6
后拉式鉆尖	SEM2740	27.4	6
后拉式鉆尖	SEM2750	27.5	6
后拉式鉆尖	SEM2760	27.6	6
后拉式鉆尖	SEM2770	27.7	6
后拉式鉆尖	SEM2780	27.8	6
后拉式鉆尖	SEM2790	27.9	6
后拉式鉆尖	SEM2800	28.0	6
后拉式鉆尖	SEM2810	28.1	7
后拉式鉆尖	SEM2820	28.2	7
后拉式鉆尖	SEM2830	28.3	7
后拉式鉆尖	SEM2840	28.4	7
后拉式鉆尖	SEM2850	28.5	7
后拉式鉆尖	SEM2860	28.6	7
后拉式鉆尖	SEM2870	28.7	7
后拉式鉆尖	SEM2880	28.8	7
后拉式鉆尖	SEM2890	28.9	7
后拉式鉆尖	SEM2900	29.0	7
后拉式鉆尖	SEM2910	29.1	7
后拉式鉆尖	SEM2920	29.2	7
后拉式鉆尖	SEM2930	29.3	7
后拉式鉆尖	SEM2940	29.4	7
后拉式鉆尖	SEM2950	29.5	7
后拉式鉆尖	SEM2960	29.6	7

◎ SEM刀片・HZ・AC7315–續

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產品名稱	規格型號	切削直徑	刀座尺寸	產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM2970	29.7	7	后拉式鉆尖	SEM3090	30.9	8
后拉式鉆尖	SEM2980	29.8	7	后拉式鉆尖	SEM3100	31.0	8
后拉式鉆尖	SEM2990	29.9	7	后拉式鉆尖	SEM3110	31.1	8
后拉式鉆尖	SEM3000	30.0	7	后拉式鉆尖	SEM3120	31.2	8
后拉式鉆尖	SEM3010	30.1	8	后拉式鉆尖	SEM3130	31.3	8
后拉式鉆尖	SEM3020	30.2	8	后拉式鉆尖	SEM3140	31.4	8
后拉式鉆尖	SEM3030	30.3	8	后拉式鉆尖	SEM3150	31.5	8
后拉式鉆尖	SEM3040	30.4	8	后拉式鉆尖	SEM3160	31.6	8
后拉式鉆尖	SEM3050	30.5	8	后拉式鉆尖	SEM3170	31.7	8
后拉式鉆尖	SEM3060	30.6	8	后拉式鉆尖	SEM3180	31.8	8
后拉式鉆尖	SEM3070	30.7	8	后拉式鉆尖	SEM3190	31.9	8
后拉式鉆尖	SEM3080	30.8	8	后拉式鉆尖	SEM3200	32.0	8

◎ 公差HZ・公制

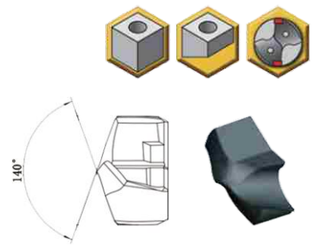
D1公制	公差h8
12.5–1	+0.000/–0.027
＞18–30	+0.000/–0.033
＞30–32	+0.000/–0.039

◎ 模塊化鑽硬質合金刀片・SEM・HZ槽型・材質 Ac7315・内冷・公制

材料分組		切削速度(VC)範圍(m/min)			公制					
					根據直徑推薦進給率(f)					
		最小值	初始值	最大值		12.5	16.0	20.0	25.4	32.0
P	低碳钢	100	100	120	毫米/转	0.15–0.31	0.17–0.36	0.19–0.41	0.25–0.53	0.29–0.60
	中碳钢/高碳钢	80	95	110	毫米/转	0.15–0.31	0.17–0.36	0.19–0.41	0.25–0.53	0.29–0.60
	合金钢/工具钢	65	70	80	毫米/转	0.15–0.31	0.17–0.36	0.19–0.41	0.25–0.53	0.29–0.60
M	奥氏体不锈钢	30	60	90	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28
	奥氏体/铸造不锈钢	30	50	90	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28
	双相不锈钢	20	40	60	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28
K	灰铸铁	90	135	175	毫米/转	0.17–0.35	0.21–042	0.25–0.48	0.31–0.59	0.37–0.70
	球墨铸铁/蠕墨铸铁	90	110	125	毫米/转	0.17–0.33	0.21–0.41	0.25–0.48	0.31–0.59	0.37–0.70
	高强度延展性铁	40	95	125	毫米/转	0.18–0.36	0.20–0.41	0.21–0.44	0.23–0.48	0.25–0.53

SEM INSERTS
SEM皇冠鉆鉆尖

SEM HM AC7320 切削刃在不銹鋼材料加工中有出色的加工性能，和極高的加工效率。
HM槽型刀片的每個切削刃可以形成兩條切屑，可以形成連續的切屑流。
AC3220 產品有極高的金屬去除率和可靠的鑽孔性能，鑽孔深度可達10xD是不銹鋼材料鑽孔加工中的首選產品。
AC7320 材質在通用型細晶粒硬質合金材料上有含A1量較高的TAIN 塗層。
該產品具有極好的氧化穩定性，韌性適中的硬質合金材質在奧氏體、不銹鋼和其它不銹鋼材料加工中具有極好的耐磨性。



◎ SEM刀片・HM・AC7320

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產品名稱	規格型號	切削直徑	刀座尺寸	產品名稱	規格型號	切削直徑	刀座尺寸
后拉式鉆尖	SEM1250	12.5	C	后拉式鉆尖	SEM1630	16.3	1
后拉式鉆尖	SEM1260	12.6	C	后拉式鉆尖	SEM1640	16.4	1
后拉式鉆尖	SEM1270	12.7	C	后拉式鉆尖	SEM1650	16.5	1
后拉式鉆尖	SEM1280	12.8	C	后拉式鉆尖	SEM1660	16.6	1
后拉式鉆尖	SEM1290	12.9	C	后拉式鉆尖	SEM1670	16.7	1
后拉式鉆尖	SEM1300	13.0	C	后拉式鉆尖	SEM1680	16.8	1
后拉式鉆尖	SEM1310	13.1	C	后拉式鉆尖	SEM1690	16.9	1
后拉式鉆尖	SEM1320	13.2	C	后拉式鉆尖	SEM1700	17.0	1
后拉式鉆尖	SEM1330	13.3	C	后拉式鉆尖	SEM1710	17.1	1
后拉式鉆尖	SEM1340	13.4	C	后拉式鉆尖	SEM1720	17.2	1
后拉式鉆尖	SEM1350	13.5	C	后拉式鉆尖	SEM1730	17.3	1
后拉式鉆尖	SEM1360	13.6	B	后拉式鉆尖	SEM1740	17.4	1
后拉式鉆尖	SEM1370	13.7	B	后拉式鉆尖	SEM1750	17.5	1
后拉式鉆尖	SEM1380	13.8	B	后拉式鉆尖	SEM1760	17.6	1
后拉式鉆尖	SEM1390	13.9	B	后拉式鉆尖	SEM1770	17.7	1
后拉式鉆尖	SEM1400	14.0	B	后拉式鉆尖	SEM1780	17.8	1
后拉式鉆尖	SEM1410	14.1	B	后拉式鉆尖	SEM1790	17.9	1
后拉式鉆尖	SEM1420	14.2	B	后拉式鉆尖	SEM1800	18.0	1
后拉式鉆尖	SEM1430	14.3	B	后拉式鉆尖	SEM1810	18.1	2
后拉式鉆尖	SEM1440	14.4	B	后拉式鉆尖	SEM1820	18.2	2
后拉式鉆尖	SEM1450	14.5	B	后拉式鉆尖	SEM1830	18.3	2
后拉式鉆尖	SEM1460	14.6	A	后拉式鉆尖	SEM1840	18.4	2
后拉式鉆尖	SEM1470	14.7	A	后拉式鉆尖	SEM1850	18.5	2
后拉式鉆尖	SEM1480	14.8	A	后拉式鉆尖	SEM1860	18.6	2
后拉式鉆尖	SEM1490	14.9	A	后拉式鉆尖	SEM1870	18.7	2
后拉式鉆尖	SEM1500	15.0	A	后拉式鉆尖	SEM1880	18.8	2
后拉式鉆尖	SEM1510	15.1	A	后拉式鉆尖	SEM1890	18.9	2
后拉式鉆尖	SEM1520	15.2	A	后拉式鉆尖	SEM1900	19.0	2
后拉式鉆尖	SEM1530	15.3	A	后拉式鉆尖	SEM1910	19.1	2
后拉式鉆尖	SEM1540	15.4	A	后拉式鉆尖	SEM1920	19.2	2
后拉式鉆尖	SEM1550	15.5	A	后拉式鉆尖	SEM1930	19.3	2
后拉式鉆尖	SEM1560	15.6	A	后拉式鉆尖	SEM1940	19.4	2
后拉式鉆尖	SEM1570	15.7	A	后拉式鉆尖	SEM1950	19.5	2
后拉式鉆尖	SEM1580	15.8	A	后拉式鉆尖	SEM1960	19.6	2
后拉式鉆尖	SEM1590	15.9	1	后拉式鉆尖	SEM1970	19.7	2
后拉式鉆尖	SEM1600	16.0	1	后拉式鉆尖	SEM1980	19.8	2
后拉式鉆尖	SEM1610	16.1	1	后拉式鉆尖	SEM1990	19.9	2
后拉式鉆尖	SEM1620	16.2	1	后拉式鉆尖	SEM2000	20.0	3

SP
SO
WC
WDX
TCAP
6D & 8D
880
SEM Drill Inserts 皇冠鑽系列
YLMD MAX Drill 大直徑U鑽
Carbide Inserts 刀片系列
Rough Boring Head 粗鏜刀系列
Finish Boring Head 精鏜刀系列
Chuck 鏜刀柄系列
Accessories 小刀夾系列
Chamfering Tools 鏜刀倒角環
Gun Drill Technology 槍鑽工藝

◎SEM刀片・HM・AC7320–續

P M K N S H
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產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2010	20.1	3
后拉式钻尖	SEM2020	20.2	3
后拉式钻尖	SEM2030	20.3	3
后拉式钻尖	SEM2040	20.4	3
后拉式钻尖	SEM2050	20.5	3
后拉式钻尖	SEM2060	20.6	3
后拉式钻尖	SEM2070	20.7	3
后拉式钻尖	SEM2080	20.8	3
后拉式钻尖	SEM2090	20.9	3
后拉式钻尖	SEM2100	21.0	3
后拉式钻尖	SEM2110	21.1	3
后拉式钻尖	SEM2120	21.2	3
后拉式钻尖	SEM2130	21.3	3
后拉式钻尖	SEM2140	21.4	3
后拉式钻尖	SEM2150	21.5	3
后拉式钻尖	SEM2160	21.6	3
后拉式钻尖	SEM2170	21.7	3
后拉式钻尖	SEM2180	21.8	3
后拉式钻尖	SEM2190	21.9	3
后拉式钻尖	SEM2200	22.0	3
后拉式钻尖	SEM2210	22.1	4
后拉式钻尖	SEM2220	22.2	4
后拉式钻尖	SEM2230	22.3	4
后拉式钻尖	SEM2240	22.4	4
后拉式钻尖	SEM2250	22.5	4
后拉式钻尖	SEM2260	22.6	4
后拉式钻尖	SEM2270	22.7	4
后拉式钻尖	SEM2280	22.8	4
后拉式钻尖	SEM2290	22.9	4
后拉式钻尖	SEM2300	23.0	4
后拉式钻尖	SEM2310	23.1	4
后拉式钻尖	SEM2320	23.2	4
后拉式钻尖	SEM2330	23.3	4
后拉式钻尖	SEM2340	23.4	4
后拉式钻尖	SEM2350	23.5	4
后拉式钻尖	SEM2360	23.6	4
后拉式钻尖	SEM2370	23.7	4
后拉式钻尖	SEM2380	23.8	4
后拉式钻尖	SEM2390	23.9	4
后拉式钻尖	SEM2400	24.0	4
后拉式钻尖	SEM2410	24.1	5
后拉式钻尖	SEM2420	24.2	5
后拉式钻尖	SEM2430	24.3	5
后拉式钻尖	SEM2440	24.4	5
后拉式钻尖	SEM2450	24.5	5
后拉式钻尖	SEM2460	24.6	5
后拉式钻尖	SEM2470	24.7	5
后拉式钻尖	SEM2480	24.8	5

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2490	24.9	5
后拉式钻尖	SEM2500	25.0	5
后拉式钻尖	SEM2510	25.1	5
后拉式钻尖	SEM2520	25.2	5
后拉式钻尖	SEM2530	25.3	5
后拉式钻尖	SEM2540	25.4	5
后拉式钻尖	SEM2550	25.5	5
后拉式钻尖	SEM2560	25.6	5
后拉式钻尖	SEM2570	25.7	5
后拉式钻尖	SEM2580	25.8	5
后拉式钻尖	SEM2590	25.9	5
后拉式钻尖	SEM2600	26.0	5
后拉式钻尖	SEM2610	26.1	6
后拉式钻尖	SEM2620	26.2	6
后拉式钻尖	SEM2630	26.3	6
后拉式钻尖	SEM2640	26.4	6
后拉式钻尖	SEM2650	26.5	6
后拉式钻尖	SEM2660	26.6	6
后拉式钻尖	SEM2670	26.7	6
后拉式钻尖	SEM2680	26.8	6
后拉式钻尖	SEM2690	26.9	6
后拉式钻尖	SEM2700	27.0	6
后拉式钻尖	SEM2710	27.1	6
后拉式钻尖	SEM2720	27.2	6
后拉式钻尖	SEM2730	27.3	6
后拉式钻尖	SEM2740	27.4	6
后拉式钻尖	SEM2750	27.5	6
后拉式钻尖	SEM2760	27.6	6
后拉式钻尖	SEM2770	27.7	6
后拉式钻尖	SEM2780	27.8	6
后拉式钻尖	SEM2790	27.9	6
后拉式钻尖	SEM2800	28.0	6
后拉式钻尖	SEM2810	28.1	7
后拉式钻尖	SEM2820	28.2	7
后拉式钻尖	SEM2830	28.3	7
后拉式钻尖	SEM2840	28.4	7
后拉式钻尖	SEM2850	28.5	7
后拉式钻尖	SEM2860	28.6	7
后拉式钻尖	SEM2870	28.7	7
后拉式钻尖	SEM2880	28.8	7
后拉式钻尖	SEM2890	28.9	7
后拉式钻尖	SEM2900	29.0	7
后拉式钻尖	SEM2910	29.1	7
后拉式钻尖	SEM2920	29.2	7
后拉式钻尖	SEM2930	29.3	7
后拉式钻尖	SEM2940	29.4	7
后拉式钻尖	SEM2950	29.5	7
后拉式钻尖	SEM2960	29.6	7

SEM INSERTS
SEM皇冠钻钻尖

◎SEM刀片・HM・AC7320–續

P M K N S H
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產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2970	29.7	7
后拉式钻尖	SEM2980	29.8	7
后拉式钻尖	SEM2990	29.9	7
后拉式钻尖	SEM3000	30.0	7
后拉式钻尖	SEM3010	30.1	8
后拉式钻尖	SEM3020	30.2	8
后拉式钻尖	SEM3030	30.3	8
后拉式钻尖	SEM3040	30.4	8
后拉式钻尖	SEM3050	30.5	8
后拉式钻尖	SEM3060	30.6	8
后拉式钻尖	SEM3070	30.7	8
后拉式钻尖	SEM3080	30.8	8

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM3090	30.9	8
后拉式钻尖	SEM3100	31.0	8
后拉式钻尖	SEM3110	31.1	8
后拉式钻尖	SEM3120	31.2	8
后拉式钻尖	SEM3130	31.3	8
后拉式钻尖	SEM3140	31.4	8
后拉式钻尖	SEM3150	31.5	8
后拉式钻尖	SEM3160	31.6	8
后拉式钻尖	SEM3170	31.7	8
后拉式钻尖	SEM3180	31.8	8
后拉式钻尖	SEM3190	31.9	8
后拉式钻尖	SEM3200	32.0	8

◎公差HM・公制

D1公制	公差h8
12.5–1	+0.000/–0.027
＞18–30	+0.000/–0.033
＞30–32	+0.000/–0.039

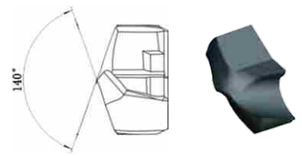
◎模塊化鑽硬質合金刀片・SEM・HM槽型・材質 Ac7320・内冷・公制

材料分組		切削速度(VC)範圍(m/min)			公制					
					根據直徑推薦進給率(f)					
		最小值	初始值	最大值		12.5	16.0	20.0	25.4	32.0
M	奥氏体不锈钢	30	60	90	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28
	奥氏体/铸造不锈钢	30	50	90	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28
	双相不锈钢	20	40	60	毫米/转	0.09–0.14	0.11–0.17	0.13–0.20	0.16–0.25	0.18–0.28

SP
SO
WC
WDX
TCAP
6D & 8D
880
皇冠鑽系列 SEM Drill Inserd
大直徑U鑽 YLMD MAX Drill
刀片系列 Carbide Inserts
粗鏜刀系列 Rough Boring Head
精鏜刀系列 Finish Boring Head
鏜刀柄系列 Chuck
小刀夾系列 Accessories
鏜刀倒角環 Chamfering Tools
槍鑽工藝 Gun Drill Technology

SEM INSERTS
SEM皇冠钻钻尖

SEM HQ ACPM45切削刃在軟鋼類材料加工中有出色的加工性能，極高的加工效率，和極好的耐磨性。
ACPM45 材質，TiAIN 復合塗層韌性極佳的基體材料。改善了抗 崩刃性能斷削好，壽命高，特別適合軟硬剛材質的加工應用。



◎ SEM刀片・HQ・ACPM45

P M K N S H

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM1250	12.5	C
后拉式钻尖	SEM1260	12.6	C
后拉式钻尖	SEM1270	12.7	C
后拉式钻尖	SEM1280	12.8	C
后拉式钻尖	SEM1290	12.9	C
后拉式钻尖	SEM1300	13.0	C
后拉式钻尖	SEM1310	13.1	C
后拉式钻尖	SEM1320	13.2	C
后拉式钻尖	SEM1330	13.3	C
后拉式钻尖	SEM1340	13.4	C
后拉式钻尖	SEM1350	13.5	C
后拉式钻尖	SEM1360	13.6	B
后拉式钻尖	SEM1370	13.7	B
后拉式钻尖	SEM1380	13.8	B
后拉式钻尖	SEM1390	13.9	B
后拉式钻尖	SEM1400	14.0	B
后拉式钻尖	SEM1410	14.1	B
后拉式钻尖	SEM1420	14.2	B
后拉式钻尖	SEM1430	14.3	B
后拉式钻尖	SEM1440	14.4	B
后拉式钻尖	SEM1450	14.5	B
后拉式钻尖	SEM1460	14.6	A
后拉式钻尖	SEM1470	14.7	A
后拉式钻尖	SEM1480	14.8	A
后拉式钻尖	SEM1490	14.9	A
后拉式钻尖	SEM1500	15.0	A
后拉式钻尖	SEM1510	15.1	A
后拉式钻尖	SEM1520	15.2	A
后拉式钻尖	SEM1530	15.3	A
后拉式钻尖	SEM1540	15.4	A
后拉式钻尖	SEM1550	15.5	A
后拉式钻尖	SEM1560	15.6	A
后拉式钻尖	SEM1570	15.7	A
后拉式钻尖	SEM1580	15.8	A
后拉式钻尖	SEM1590	15.9	1
后拉式钻尖	SEM1600	16.0	1
后拉式钻尖	SEM1610	16.1	1
后拉式钻尖	SEM1620	16.2	1

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM1630	16.3	1
后拉式钻尖	SEM1640	16.4	1
后拉式钻尖	SEM1650	16.5	1
后拉式钻尖	SEM1660	16.6	1
后拉式钻尖	SEM1670	16.7	1
后拉式钻尖	SEM1680	16.8	1
后拉式钻尖	SEM1690	16.9	1
后拉式钻尖	SEM1700	17.0	1
后拉式钻尖	SEM1710	17.1	1
后拉式钻尖	SEM1720	17.2	1
后拉式钻尖	SEM1730	17.3	1
后拉式钻尖	SEM1740	17.4	1
后拉式钻尖	SEM1750	17.5	1
后拉式钻尖	SEM1760	17.6	1
后拉式钻尖	SEM1770	17.7	1
后拉式钻尖	SEM1780	17.8	1
后拉式钻尖	SEM1790	17.9	1
后拉式钻尖	SEM1800	18.0	1
后拉式钻尖	SEM1810	18.1	2
后拉式钻尖	SEM1820	18.2	2
后拉式钻尖	SEM1830	18.3	2
后拉式钻尖	SEM1840	18.4	2
后拉式钻尖	SEM1850	18.5	2
后拉式钻尖	SEM1860	18.6	2
后拉式钻尖	SEM1870	18.7	2
后拉式钻尖	SEM1880	18.8	2
后拉式钻尖	SEM1890	18.9	2
后拉式钻尖	SEM1900	19.0	2
后拉式钻尖	SEM1910	19.1	2
后拉式钻尖	SEM1920	19.2	2
后拉式钻尖	SEM1930	19.3	2
后拉式钻尖	SEM1940	19.4	2
后拉式钻尖	SEM1950	19.5	2
后拉式钻尖	SEM1960	19.6	2
后拉式钻尖	SEM1970	19.7	2
后拉式钻尖	SEM1980	19.8	2
后拉式钻尖	SEM1990	19.9	2
后拉式钻尖	SEM2000	20.0	3

SEM INSERTS
SEM皇冠钻钻尖

◎ SEM刀片・HQ・ACPM45–續

P M K N S H

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2010	20.1	3
后拉式钻尖	SEM2020	20.2	3
后拉式钻尖	SEM2030	20.3	3
后拉式钻尖	SEM2040	20.4	3
后拉式钻尖	SEM2050	20.5	3
后拉式钻尖	SEM2060	20.6	3
后拉式钻尖	SEM2070	20.7	3
后拉式钻尖	SEM2080	20.8	3
后拉式钻尖	SEM2090	20.9	3
后拉式钻尖	SEM2100	21.0	3
后拉式钻尖	SEM2110	21.1	3
后拉式钻尖	SEM2120	21.2	3
后拉式钻尖	SEM2130	21.3	3
后拉式钻尖	SEM2140	21.4	3
后拉式钻尖	SEM2150	21.5	3
后拉式钻尖	SEM2160	21.6	3
后拉式钻尖	SEM2170	21.7	3
后拉式钻尖	SEM2180	21.8	3
后拉式钻尖	SEM2190	21.9	3
后拉式钻尖	SEM2200	22.0	3
后拉式钻尖	SEM2210	22.1	4
后拉式钻尖	SEM2220	22.2	4
后拉式钻尖	SEM2230	22.3	4
后拉式钻尖	SEM2240	22.4	4
后拉式钻尖	SEM2250	22.5	4
后拉式钻尖	SEM2260	22.6	4
后拉式钻尖	SEM2270	22.7	4
后拉式钻尖	SEM2280	22.8	4
后拉式钻尖	SEM2290	22.9	4
后拉式钻尖	SEM2300	23.0	4
后拉式钻尖	SEM2310	23.1	4
后拉式钻尖	SEM2320	23.2	4
后拉式钻尖	SEM2330	23.3	4
后拉式钻尖	SEM2340	23.4	4
后拉式钻尖	SEM2350	23.5	4
后拉式钻尖	SEM2360	23.6	4
后拉式钻尖	SEM2370	23.7	4
后拉式钻尖	SEM2380	23.8	4
后拉式钻尖	SEM2390	23.9	4
后拉式钻尖	SEM2400	24.0	4
后拉式钻尖	SEM2410	24.1	5
后拉式钻尖	SEM2420	24.2	5
后拉式钻尖	SEM2430	24.3	5
后拉式钻尖	SEM2440	24.4	5
后拉式钻尖	SEM2450	24.5	5
后拉式钻尖	SEM2460	24.6	5
后拉式钻尖	SEM2470	24.7	5
后拉式钻尖	SEM2480	24.8	5

產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2490	24.9	5
后拉式钻尖	SEM2500	25.0	5
后拉式钻尖	SEM2510	25.1	5
后拉式钻尖	SEM2520	25.2	5
后拉式钻尖	SEM2530	25.3	5
后拉式钻尖	SEM2540	25.4	5
后拉式钻尖	SEM2550	25.5	5
后拉式钻尖	SEM2560	25.6	5
后拉式钻尖	SEM2570	25.7	5
后拉式钻尖	SEM2580	25.8	5
后拉式钻尖	SEM2590	25.9	5
后拉式钻尖	SEM2600	26.0	5
后拉式钻尖	SEM2610	26.1	6
后拉式钻尖	SEM2620	26.2	6
后拉式钻尖	SEM2630	26.3	6
后拉式钻尖	SEM2640	26.4	6
后拉式钻尖	SEM2650	26.5	6
后拉式钻尖	SEM2660	26.6	6
后拉式钻尖	SEM2670	26.7	6
后拉式钻尖	SEM2680	26.8	6
后拉式钻尖	SEM2690	26.9	6
后拉式钻尖	SEM2700	27.0	6
后拉式钻尖	SEM2710	27.1	6
后拉式钻尖	SEM2720	27.2	6
后拉式钻尖	SEM2730	27.3	6
后拉式钻尖	SEM2740	27.4	6
后拉式钻尖	SEM2750	27.5	6
后拉式钻尖	SEM2760	27.6	6
后拉式钻尖	SEM2770	27.7	6
后拉式钻尖	SEM2780	27.8	6
后拉式钻尖	SEM2790	27.9	6
后拉式钻尖	SEM2800	28.0	6
后拉式钻尖	SEM2810	28.1	7
后拉式钻尖	SEM2820	28.2	7
后拉式钻尖	SEM2830	28.3	7
后拉式钻尖	SEM2840	28.4	7
后拉式钻尖	SEM2850	28.5	7
后拉式钻尖	SEM2860	28.6	7
后拉式钻尖	SEM2870	28.7	7
后拉式钻尖	SEM2880	28.8	7
后拉式钻尖	SEM2890	28.9	7
后拉式钻尖	SEM2900	29.0	7
后拉式钻尖	SEM2910	29.1	7
后拉式钻尖	SEM2920	29.2	7
后拉式钻尖	SEM2930	29.3	7
后拉式钻尖	SEM2940	29.4	7
后拉式钻尖	SEM2950	29.5	7
后拉式钻尖	SEM2960	29.6	7

◎ SEM刀片・HQ・ACPM45–續

P	M	K	N	S	H
●					

產品名稱	規格型號	切削直徑	刀座尺寸	產品名稱	規格型號	切削直徑	刀座尺寸
后拉式钻尖	SEM2970	29.7	7	后拉式钻尖	SEM3090	30.9	8
后拉式钻尖	SEM2980	29.8	7	后拉式钻尖	SEM3100	31.0	8
后拉式钻尖	SEM2990	29.9	7	后拉式钻尖	SEM3110	31.1	8
后拉式钻尖	SEM3000	30.0	7	后拉式钻尖	SEM3120	31.2	8
后拉式钻尖	SEM3010	30.1	8	后拉式钻尖	SEM3130	31.3	8
后拉式钻尖	SEM3020	30.2	8	后拉式钻尖	SEM3140	31.4	8
后拉式钻尖	SEM3030	30.3	8	后拉式钻尖	SEM3150	31.5	8
后拉式钻尖	SEM3040	30.4	8	后拉式钻尖	SEM3160	31.6	8
后拉式钻尖	SEM3050	30.5	8	后拉式钻尖	SEM3170	31.7	8
后拉式钻尖	SEM3060	30.6	8	后拉式钻尖	SEM3180	31.8	8
后拉式钻尖	SEM3070	30.7	8	后拉式钻尖	SEM3190	31.9	8
后拉式钻尖	SEM3080	30.8	8	后拉式钻尖	SEM3200	32.0	8

◎ 公差HQ・公制

D1公制	公差h8
12.5–1	+0.000/–0.027
＞18–30	+0.000/–0.033
＞30–32	+0.000/–0.039

◎ 模塊化鑽硬質合金刀片・SEM・HQ槽型・材質 ACPM45・内冷・公制

材料分組		切削速度(VC) 範圍(m/min)			公制					
					根據直徑推薦進給率(f)					
		最小值	初始值	最大值		12.5	16.0	20.0	25.4	32.0
P	低碳钢	90	100	110	毫米/转	0.14–0.23	0.17–0.25	0.19–0.29	0.23–0.38	0.26–0.43
P	中碳钢/高碳钢	80	90	100	毫米/转	0.17–0.23	0.19–0.25	0.22–0.29	0.29–0.38	0.32–0.43
P	合金钢/工具钢	55	65	75	毫米/转	0.14–0.20	0.15–0.23	0.17–0.25	0.23–0.34	0.26–0.38
P	合金钢/工具钢	50	65	70	毫米/转	0.11–0.20	0.13–0.23	0.14–0.25	0.18–0.34	0.21–0.38
P	奥氏体/铸造不锈钢	45	50	60	毫米/转	0.08–0.11	0.10–0.13	0.11–0.14	0.14–0.18	0.15–0.20
P	高强度铁素体 马氏体不锈钢	45	55	65	毫米/转	0.11–0.17	0.13–0.18	0.14–0.20	0.18–0.28	0.21–0.31

SEM皇冠钻

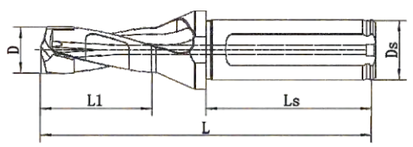
硬质合金钻和可转位钻的完美结合

SEM模块化钻刀具系统有长度更长，直径更大的特点
SEM 在多种应用中可以采用极高的进给率，确保高生产率水平
该产品刀窝非常坚固，适合更换刀片
可延长钢质钻杆和硬质合金钻尖的使用寿命
该设计使得 SEM 有极好的经济性
性能非常可靠
适合中等直径的钻孔加工

标准型产品的钻孔深度可达 12xD
钻孔直径范围为 12,5-40mm
多种钻削材质产品
几乎可用于各种类型
各种材料的加工应用

SEM DRILL 1.5D
SEM皇冠钻钻杆 1.5 D

所有鑽體應使用指定型號刀片。
了解備選產品，請參看刀片配合表。
與鑽頭產品一同發送中心鎖緊螺釘、扳手。

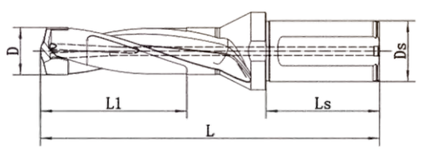


◎ SEM・WD柄・1.5xD・公制

1.5 x D型號	D/mm MIN	D/mm MAX	L/mm	L1/mm	Ls/mm	Ds/mm	刀座尺寸	扳手	鎖緊螺絲
SEM125R1.5WD16M	12.5	13.6	89	23.5	45	16	C	T5x160	M2.5/M2.5x13
SEM136R1.5WD16M	13.51	14.6	90	24.8	45	16	B	T6x160	M3/M2.5x14
SEM146R1.5WD20M	14.51	16	103.5	30.5	50	20	A	T6x160	M3/M2.5x14
SEM160R1.5WD20M	16	18.1	103.5	30.5	50	20	1	T7x185	M3.5/M2.5x16
SEM181R1.5WD25M	18.01	20	119	36	56	25	2	H2x210	M4/M3x19
SEM200R1.5WD25M	20	22.1	122	39	56	25	3	H2x210	M4/M3x19
SEM221R1.5WD25M	22.01	24.1	126	41	56	25	4	H2x210	M4/M3x19
SEM241R1.5WD32M	24.01	26.1	138.5	45	60	32	5	H2.5x240	M5/M4x23
SEM261R1.5WD32M	26.01	28.1	141.5	48	60	32	6	H2.5x240	M5/M4x23
SEM281R1.5WD32M	28.01	30.1	147	53.5	60	32	7	H3x265	M6/M5x28
SEM301R1.5WD32M	30.01	32.1	149.5	56	60	32	8	H3x265	M6/M5x28

SEM DRILL 3D
SEM皇冠钻钻杆 3 D

所有鑽體應使用指定型號刀片。
了解備選產品，請參看刀片配合表。
與鑽頭產品一同發送中心鎖緊螺釘、扳手。

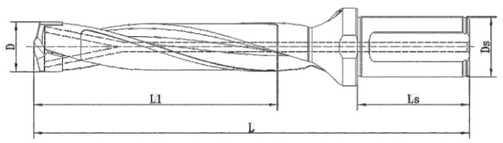


◎ SEM・WD柄・3xD・公制

3 x D型號	D/mm MIN	D/mm MAX	L/mm	L1/mm	Ls/mm	Ds/mm	刀座尺寸	扳手	鎖緊螺絲
SEM125R3WD16M	12.5	13	109	39	45	16	C	T5x160	M2.5/M2.5x13
SEM130R3WD16M	13	13.5	109	39	45	16	C	T5x160	M2.5/M2.5x13
SEM136R3WD16M	13.51	14	111	42	45	16	B	T6x160	M3/M2.5x14
SEM140R3WD16M	14	14.5	111	42	45	16	B	T6x160	M3/M2.5x14
SEM146R3WD16M	14.51	15	126	46	50	20	A	T6x160	M3/M2.5x14
SEM150R3WD20M	15	15.87	126	46	50	20	A	T6x160	M3/M2.5x14
SEM160R3WD20M	15.88	17	129	49	50	20	1	T7x185	M3.5/M2.5x16
SEM170R3WD20M	17	18	132	52	50	20	1	T7x185	M3.5/M2.5x16
SEM181R3WD25M	18.01	19	147	55	56	25	2	H2x210	M4/M3x19
SEM190R3WD25M	19	20	151	58	56	25	2	H2x210	M4/M3x19
SEM200R3WD25M	20	21	154	61	56	25	3	H2x210	M4/M3x19
SEM210R3WD25M	21	22	157	64	56	25	3	H2x210	M4/M3x19
SEM221R3WD25M	22.01	23	161	68	56	25	4	H2x210	M4/M3x19
SEM230R3WD25M	23	24	163	70	56	25	4	H2x210	M4/M3x19
SEM241R3WD32M	24.01	25	176	73	60	32	5	H2.5x240	M5/M4x23
SEM250R3WD32M	25	26	179	76	60	32	5	H2.5x240	M5/M4x23
SEM261R3WD32M	26.01	27	182	79	60	32	6	H2.5x240	M5/M4x23
SEM270R3WD32M	27	28	184	81	60	32	6	H2.5x240	M5/M4x23
SEM281R3WD32M	28.01	29	189	86	60	32	7	H3x265	M6/M5x28
SEM290R3WD32M	29	30	192	89	60	32	7	H3x265	M6/M5x28
SEM301R3WD32M	30.01	31	195	92	60	32	8	H3x265	M6/M5x28
SEM310R3WD32M	31	32	198	95	60	32	8	H3x265	M6/M5x28

SEM DRILL 5D
SEM皇冠钻钻杆 5 D

所有鑽體應使用指定型號刀片。
了解備選產品，請參看刀片配合表。
與鑽頭產品一同發送中心鎖緊螺釘、扳手。

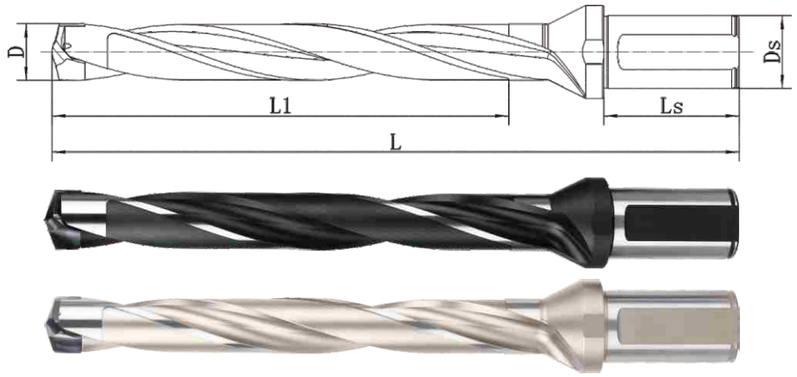


◎ SEM・WD柄・5xD・公制

5 x D型號	D/mm MIN	D/mm MAX	L/mm	L1/mm	Ls/mm	Ds/mm	刀座尺寸	扳手	鎖緊螺絲
SEM125R5WD16M	12.5	13	133	65	45	16	C	T5x160	M2.5/M2.5x13
SEM130R5WD16M	13	13.5	133	65	45	16	C	T5x160	M2.5/M2.5x13
SEM136R5WD16M	13.51	14	138	70	45	16	B	T6x160	M3/M2.5x14
SEM140R5WD16M	14	14.5	138	70	45	16	B	T6x160	M3/M2.5x14
SEM146R5WD16M	14.51	15	156	76	50	20	A	T6x160	M3/M2.5x14
SEM150R5WD20M	15	15.87	156	76	50	20	A	T6x160	M3/M2.5x14
SEM160R5WD20M	15.88	17	161	81	50	20	1	T7x185	M3.5/M2.5x16
SEM170R5WD20M	17	18	166	86	50	20	1	T7x185	M3.5/M2.5x16
SEM181R5WD25M	18.01	19	183	91	56	25	2	H2x210	M4/M3x19
SEM190R5WD25M	19	20	189	96	56	25	2	H2x210	M4/M3x19
SEM200R5WD25M	20	21	194	101	56	25	3	H2x210	M4/M3x19
SEM210R5WD25M	21	22	199	106	56	25	3	H2x210	M4/M3x19
SEM221R5WD25M	22.01	23	205	112	56	25	4	H2x210	M4/M3x19
SEM230R5WD25M	23	24	209	116	56	25	4	H2x210	M4/M3x19
SEM241R5WD32M	24.01	25	224	121	60	32	5	H2.5x240	M5/M4x23
SEM250R5WD32M	25	26	229	126	60	32	5	H2.5x240	M5/M4x23
SEM261R5WD32M	26.01	27	234	131	60	32	6	H2.5x240	M5/M4x23
SEM270R5WD32M	27	28	238	135	60	32	6	H2.5x240	M5/M4x23
SEM281R5WD32M	28.01	29	245	142	60	32	7	H3x265	M6/M5x28
SEM290R5WD32M	29	30	250	147	60	32	7	H3x265	M6/M5x28
SEM301R5WD32M	30.01	31	256	153	60	32	8	H3x265	M6/M5x28
SEM310R5WD32M	31	32	260	157	60	32	8	H3x265	M6/M5x28

SEM DRILL 8D
SEM皇冠钻钻杆 8 D

所有鑽體應使用指定型號刀片。
了解備選產品，請參看刀片配合表。
與鑽頭產品一同發送中心鎖緊螺釘、扳手。

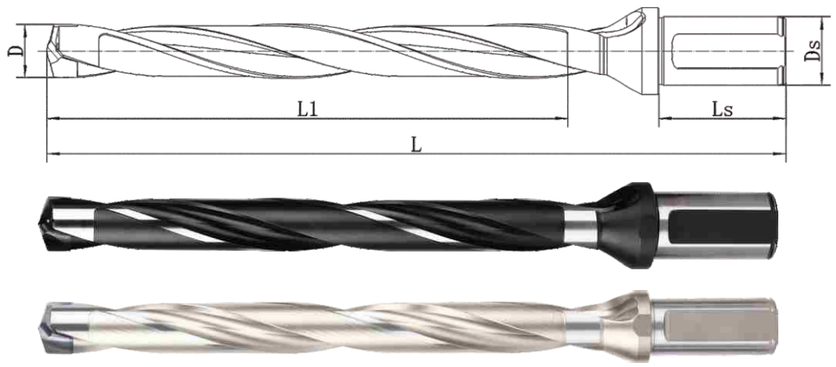


◎ SEM・WD柄・8xD・公制

8 x D型號	D/mm MIN	D/mm MAX	L/mm	L1/mm	Ls/mm	Ds/mm	刀座尺寸	扳手	鎖緊螺絲
SEM125R8WD16M	12.5	13	172	104	45	16	C	T5x190	M2.5/M2.5x13
SEM130R8WD16M	13	13.5	172	104	45	16	C	T5x190	M2.5/M2.5x13
SEM136R8WD16M	13.51	14	180	112	45	16	B	T6x190	M3/M2.5x14
SEM140R8WD16M	14	14.5	180	112	45	16	B	T6x190	M3/M2.5x14
SEM146R8WD16M	14.51	15	201	121	50	20	A	T6x190	M3/M2.5x14
SEM150R8WD20M	15	15.87	201	121	50	20	A	T6x190	M3/M2.5x14
SEM160R8WD20M	15.88	17	209	129	50	20	1	T7x225	M3.5/M2.5x16
SEM170R8WD20M	17	18	217	137	50	20	1	T7x225	M3.5/M2.5x16
SEM181R8WD25M	18.01	19	237	145	56	25	2	H2x260	M4/M3x19
SEM190R8WD25M	19	20	246	153	56	25	2	H2x260	M4/M3x19
SEM200R8WD25M	20	21	254	161	56	25	3	H2x260	M4/M3x19
SEM210R8WD25M	21	22	262	169	56	25	3	H2x260	M4/M3x19
SEM221R8WD25M	22.01	23	270	177	56	25	4	H2x260	M4/M3x19
SEM230R8WD25M	23	24	278	185	56	25	4	H2x260	M4/M3x19
SEM241R8WD32M	24.01	25	296	193	60	32	5	H2.5x295	M5/M4x23
SEM250R8WD32M	25	26	304	201	60	32	5	H2.5x295	M5/M4x23
SEM261R8WD32M	26.01	27	312	209	60	32	6	H2.5x295	M5/M4x23
SEM270R8WD32M	27	28	319	216	60	32	6	H2.5x295	M5/M4x23
SEM281R8WD32M	28.01	29	329	226	60	32	7	H3x330	M6/M5x28
SEM290R8WD32M	29	30	337	234	60	32	7	H3x330	M6/M5x28
SEM301R8WD32M	30.01	31	345	242	60	32	8	H3x330	M6/M5x28
SEM310R8WD32M	31	32	353	250	60	32	8	H3x330	M6/M5x28

SEM DRILL 10D
SEM皇冠钻钻杆 10 D

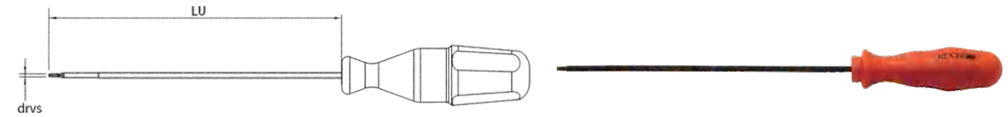
所有鑽體應使用指定型號刀片。
了解備選產品，請參看刀片配合表。
與鑽頭產品一同發送中心鎖緊螺釘、扳手。



◎ SEM・WD柄・10xD・公制

10 x D型號	D/mm MIN	D/mm MAX	L/mm	L1/mm	Ls/mm	Ds/mm	刀座尺寸	扳手	鎖緊螺絲
SEM125R5WD16M	12.5	13	266	130	45	16	C	T5x290	M2.5/M2.5x13
SEM130R5WD16M	13	13.5	266	130	45	16	C	T5x290	M2.5/M2.5x13
SEM136R5WD16M	13.51	14	276	140	45	16	B	T6x290	M3/M2.5x14
SEM140R5WD16M	14	14.5	276	140	45	16	B	T6x290	M3/M2.5x14
SEM146R5WD16M	14.51	15	312	152	50	20	A	T6x290	M3/M2.5x14
SEM150R5WD20M	15	15.87	312	152	50	20	A	T6x290	M3/M2.5x14
SEM160R5WD20M	15.88	17	322	162	50	20	1	T7x300	M3.5/M2.5x16
SEM170R5WD20M	17	18	332	172	50	20	1	T7x300	M3.5/M2.5x16
SEM181R5WD25M	18.01	19	366	182	56	25	2	H2x345	M4/M3x19
SEM190R5WD25M	19	20	378	192	56	25	2	H2x345	M4/M3x19
SEM200R5WD25M	20	21	388	202	56	25	3	H2x345	M4/M3x19
SEM210R5WD25M	21	22	398	212	56	25	3	H2x345	M4/M3x19
SEM221R5WD25M	22.01	23	410	224	56	25	4	H2x345	M4/M3x19
SEM230R5WD25M	23	24	418	232	56	25	4	H2x345	M4/M3x19
SEM241R5WD32M	24.01	25	448	242	60	32	5	H2.5x395	M5/M4x23
SEM250R5WD32M	25	26	458	252	60	32	5	H2.5x395	M5/M4x23
SEM261R5WD32M	26.01	27	468	262	60	32	6	H2.5x395	M5/M4x23
SEM270R5WD32M	27	28	476	270	60	32	6	H2.5x395	M5/M4x23
SEM281R5WD32M	28.01	29	490	284	60	32	7	H3x440	M6/M5x28
SEM290R5WD32M	29	30	500	294	60	32	7	H3x440	M6/M5x28
SEM301R5WD32M	30.01	31	512	306	60	32	8	H3x440	M6/M5x28
SEM310R5WD32M	31	32	520	314	60	32	8	H3x440	M6/M5x28

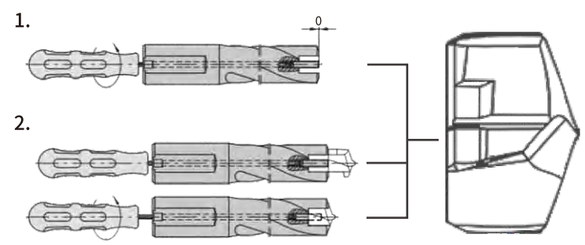
SEM DRILL ACCESSORIES
SEM皇冠钻配件



◎ SEM・扳手

扳手	鎖緊螺絲	drvs	Lu
T5x160	M2.5/M2.5x13	T5	160.00
T5x190	M2.5/M2.5x13	T5	190.00
T5x290	M2.5/M2.5x13	T5	290.00
T6x160	M3/M2.5x14	T6	160.00
T6x190	M3/M2.5x14	T6	190.00
T6x290	M3/M2.5x14	T6	290.00
T7x185	M3.5/M2.5x16	T7	185.00
T7x225	M3.5/M2.5x16	T7	225.00
T7x300	M3.5/M2.5x16	T7	300.00
H2x210	M4/M3x19	2mm	210.00
H2x260	M4/M3x19	2mm	260.00
H2x345	M4/M3x19	2mm	345.00
H2.5x240	M5/M4x23	2.5mm	240.00
H2.5x295	M5/M4x23	2.5mm	295.00
H2.5x395	M5/M4x23	2.5mm	395.00
H3x265	M6/M5x28	3mm	265.00
H3x330	M6/M5x28	3mm	330.00
H3x440	M6/M5x28	3mm	440.00

◎ 安裝刀片



1–使用螺絲刀對螺紋銷進行設置：
安裝時刀片應對齊鑽頭面高度。
2–使用螺絲刀對刀片進行緊固，將其穩固地定位于刀片座內。

更換刀片時，逆時針轉動夾持螺釘，直至刀片鬆開。

◎ 損壞螺紋銷的維修

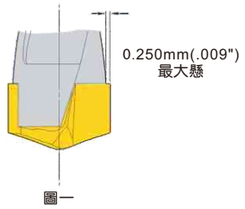
如果中心螺紋銷損壞，可以在將其與刀體分離後去除。進行這個操作時，可對刀體上刀座下面進行鑽孔。然後可以去除刀片和螺紋銷。

（注:對于沒有聯接銷的刀片，在安裝過程中精確定位時應避免卡滯）

SEM DRILL ACCESSORIES
SEM皇冠钻配件・英制

在限制範圍内刀片刀板可用于不同鑽體。刀板必須有同樣的刀座尺寸。每側懸伸(見圖1)必須低于 0,250mm(.0098")爲了實現最佳鑽削性能，剛性及有效的排屑性能，一定要使用首選的鋼刀體。
使用備選刀體會影響性能。在某些應用中，鑽體和孔壁之間會有切屑連結 – 尤其是在加工像奥氏體不銹鋼和低碳鋼這類長切屑材料時。

（不用于短鑽頭）



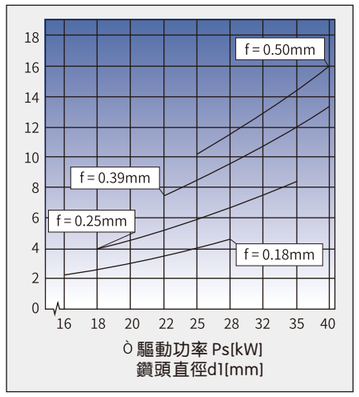
圖一

英制	切削直徑	規格型號	刀座尺寸
.492	12,50	SEM1250	C
.500	12.70	SEM0500	C
.509	12.93	SEM0509	C
.512	13,00	SEM1300	C
.516	13,10	SEM0516	C
.531	13,50	SEM1350	C
.547	13.89	SEM0547	B
.551	14,00	SEM1400	B
.563	14,29	SEM0563	B
.571	14.50	SEM1450	B
.578	14,68	SEM0578	A
.591	15,00	SEM1500	A
.594	15,08	SEM0594	A
.609	15,48	SEM0609	A
.610	15,50	SEM1550	A
.625	15,88	SEM0625	1
.630	16,00	SEM1600	1
.634	16,09	SEM0634	1
.641	16,27	SEM0641	1
.650	16,50	SEM1650	1
.656	16,67	SEM0656	1
.669	17,00	SEM1700	1
.672	17.07	SEM0672	1
.688	17.46	SEM0688	1
.689	17,50	SEM1750	1
.700	17,78	SEM0700	1
.703	17.86	SEM0703	1
.709	18,00	SEM1800	1
.719	18,26	SEM0719	2
.728	18.50	SEM1850	2
.734	18,65	SEM0734	2
.748	19,00	SEM1900	2
.750	19,05	SEM0750	2
.759	19,27	SEM0759	2
.766	19,45	SEM0766	2
.768	19.50	SEM1950	2
.781	19.84	SEM0781	2
.787	20,00	SEM2000	3
.797	20,24	SEM0797	3
.800	20,32	SEM0800	3
.807	20.50	SEM2050	3
.813	20,64	SEM0813	3
.827	21,00	SEM2100	3

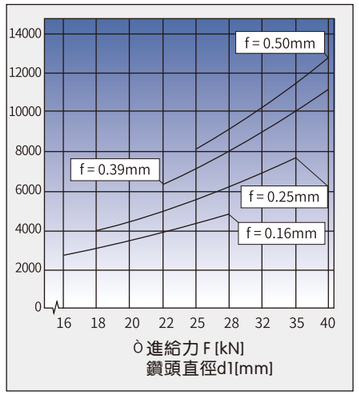
英制	切削直徑	規格型號	刀座尺寸
.844	21,43	SEM0844	3
.847	21.50	SEM2150	3
.859	21,83	SEM0859	3
.866	22,00	SEM2200	3
.875	22.23	SEM0875	4
.884	22,44	SEM0884	4
.886	22.50	SEM2250	4
.906	23.00	SEM2300	4
.922	23.42	SEM0922	4
.925	23.50	SEM2350	4
.938	23,81	SEM0938	4
.945	24.00	SEM2400	4
.965	24.50	SEM2450	5
.969	24.61	SEM0969	5
.984	25,00	SEM2500	5
1.000	25,40	SEM1000	5
1.004	25.50	SEM2550	5
1.011	25,67	SEM1011	5
1.024	26,00	SEM2600	5
1.031	26,19	SEM1031	6
1.043	26,50	SEM2650	6
1.047	26,59	SEM1047	6
1.063	27,00	SEM2700	6
1.083	27,50	SEM2750	6
1.094	27,78	SEM1094	6
1.102	28,00	SEM2800	6
1.109	28,18	SEM1109	7
1 122	28.50	SEM2850	7
1.125	28,58	SEM1125	7
1.142	29,00	SEM2900	7
1.156	29,37	SEM1156	7
1.161	29,50	SEM2950	7
1.172	29,77	SEM1172	7
1.181	30,00	SEM3000	7
1.188	30,16	SEM1188	8
1.201	30,50	SEM3050	8
1.203	30,56	SEM1203	8
1.219	30,96	SEM1219	8
1.220	31,00	SEM3100	8
1.240	31,50	SEM3150	8
1.250	31,75	SEM1250	8
1.260	32,00	SEM3200	8

SEM DRILL CUTTING CONDITION
SEM皇冠钻加工参数

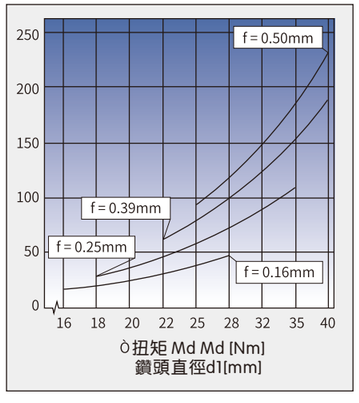
◎ 驅動功率（KW）

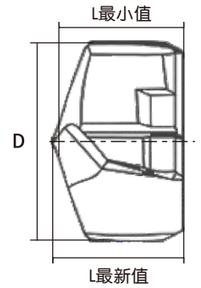


◎ 進給力（KN）



◎ 扭矩（Nm）





◎ 建議采用以下冷却壓力參數：

相對鑽孔深度	冷却劑壓力
3 x D	8 bars
5 x D	12 bars
8 x D	20 bars
10 x D	30 bars

刀片 安裝座尺寸	直徑範圍D (mm)	L最小值 (mm)	L最新值 (mm)
C	12.50–13.50	8.5	9.6
B	13.51–14.50	8.9	10.1
A	14.51–15.89	9.4	10.6
1	15.90–18.00	10.3	11.6
2	18.01–19.99	11.2	12.6
3	20.00–22.00	12.1	13.6
4	22.01–24.00	13.0	14.6
5	24.01–26.00	13.9	15.6
6	26.01–28.00	14.8	16.6
7	28.01–30.00	15.7	17.6
8	30.01–32.00	16.6	18.6

◀注：左側圖表作爲確定驅動功率、進給力、以及扭矩參數使用。它們是根據對切削材料分組6中的回火鋼材料在加工過程中的切削力測量而得出的。
抗拉强度:Rm=600 N/mm 。
采用的基礎切削速度爲:vc=80 m/min.

SEM Plus DRILL
SEM Plus皇冠鉆

◉ SEM PLUS模塊化鑽削刀具

我們生產的 SEM PLUS鑽采用了簡潔高效的設計理念。這款產品將SEM皇冠鑽的優勢(高進給率以及高長徑比LD)與可轉位鑽的優勢(切削速度高，消耗成本低)結合在一起。SEM PLUS是一款模塊化鑽削刀具，提供預先安裝的HSS刀頭，以及安裝硬質合金刀片的刀座。SEM PLUS可以安裝兩種類型的刀頭，使用我們生產的多功能 FDS接口，可以在適合的刀體上進行互換。

◎ 主要應用

SEM PLUS適用于鋼、鑄鐵、不銹鋼、以及先進材料的加工。特別適合替換舊型 HSS 刀具或低性能的可轉位鑽，從而用于高性能鑽孔加工應用。SEM PLUS產品的尺徑範圍爲28–101mm(1.102–4”，長徑比爲1.5–10xD。這款產品在能源市場以及通用加工市場有着廣泛的應用(例如，風力機的軸承擋圈,液壓系統的歧管，大型發動機配件、發電機殼體，等。)這款刀具可以大幅提高生產率,提高客户的機械加工能力，

SEM PLUS A1 刀頭
經濟，高性能鑽孔。

DS 槽型可用于
長切屑材料加工。

特点及优势

◎ 帶有 FDS 接口的可換式鑽頭

- 在無需將整個刀具從機床上拆除的情況下，即可快速簡便地更換切削刀片或鑽頭。
- 因爲衹需更換磨損鑽頭，因此可以節省成本并減少刀具庫存。
- 一個鑽體可以應用不同規格和類型的鑽頭（在使用相同規格的 FDS 產品時，一衹鑽頭可安裝在各種規格的鑽體上。）

◎ SEM PLUS A1 鑽頭

- 高金屬去除率。
- 在正常切削條件下，性能非常穩定。
- 具有良好成本優勢的可轉位 Dril Fix“ DFT刀片。

◎ DFR /DFT /DFC 外側刀片

- 極高的切削速度和極高的金屬去除率
- 在各種切削條件下，都有更好的穩定性
- 可轉位刀片可以獲得滿意的表面加工精度和孔徑精度

◎ 兩個高效切削刃

- SEM PLUS 產品在操作中有兩個完整的切削刃發揮作用
- 與相同尺徑的可轉位鑽相比，生產率可以提高100%。
- 高長徑比，庫存標準產品爲1.5xD–10xD。提供更長尺寸的定制型產品。

◎ SEM PLUS 引導刀片

- 極高的進給率，可與模塊化鑽相比。
- 因爲可以避免切屑阻塞的出現，SEM PLUS刀具的中心刀片和模塊化鑽頭有超長的使用壽命。
- 長徑比在5xD以内的鑽頭不需要預定心操作。

◎ 定制材質 – 中心刀片

- Ac7315 材質，以 TiAIN 爲基體材料的復合塗層，可用于高速切削適合中高碳鋼，合金鋼，調質鋼和鑄鐵等加工應用。
- Ac7320 材質采用以 AITiN 爲基體材料的 PVD 塗層，特別適合不銹鋼材料的鑽削加工應用。
- ACPM45 材質，TiAIN 復合塗層韌性極佳的基體材料。改善了抗崩刃性能，斷削好，壽命高，特別適合軟硬剛材質的加工應用。

◎ Drill Fix 外側刀片

- KCU25”材質–高金屬去除率，采用先進的TiCN –Al–CVD 塗層，在穩定工況的加工應用中有超長的使用壽命。
- KCU40材質 – TiAln–PVD 復合塗層，耐磨性强，可靠性好，適合多種材料的一般速度加工。
- KC7140材質 – 以 TiCN 材料爲基體，采用 PVD 塗層的硬質合金刀片，可應用于 SEM PLUS 刀具系統，適合合金鋼、不銹鋼材料的加工。
- KC7225材質 – TiAIN PVD 塗層細晶粒硬質合金材料，在非鐵材料、超級合金，以及鈦材料加工中有極好的安全性。

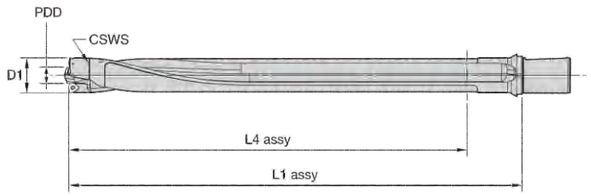
◎ DFT和 DFC外側刀片(DS 槽型)

- 在長切屑材料加工中有卓越的性能和。穩定性。
- 用于低碳鋼、難加工不銹鋼，以及非鐵材料等容易產生切屑問題的加工應用。
- 提供 KCU40材質產品。

◎ 客户定制

- 提供中間尺徑的非標鑽頭產品，最大直徑可達127mm。
- 提供各種常見類型刀杆的刀體產品，最大刀杆長度可達1200mm。在長徑比超過20xD的應用中會出現性能限制。
- 刀柄可設計爲螺旋槽型式，從而確保更好的排屑性能(入鑄鐵材料的孔加工)。
- 提供采用可修磨中心刀片的非標鑽頭。
- SEM PLUS 產品可以根據客户要求定制。歡迎聯系我們，了解適合您的金屬切削解决方案。

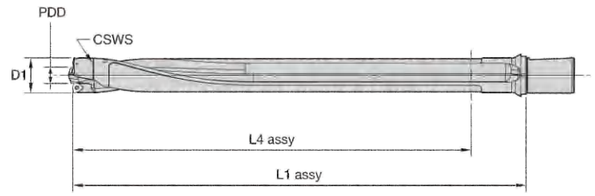
SEM Plus DRILL
SEM Plus皇冠鑽



提供SEM PLUS 刀頭			每個鑽頭的規定刀片尺寸		CSWS	提供鑽體 每個 CSWS 連接尺寸 3xD,5xD,8xD,10xD(公制及英制鑽體)			
D1		SEM PLUS 刀頭型號	中心刀片尺寸	外側刀片 Drill Fix DFR/DFT		SEM PLUS刀體 ANSI型號	長徑比	L4 裝配尺寸（mm）	L1 裝配尺寸（mm）
mm	in								
28.000	1.1024	SEMP2800FDS28A1M	14.000	DFR040304D28	28	WD32FDS28076M	1.5xD	57	101
28.575	1.1250	SEMP1125FDS28A1	15.000	DFR040304D28	28	WD32FDS28128M	3xD	96	153
29.000	1.1417	SEMP2900FDS28A1M	15.000	DFR040304D28	28	WD32FDS28190M	5xD	158	215
29.362	1.1563	SEMP1156FDS28A1	16.000	DFR040304D28	28	WD32FDS28283M	8xD	251	308
30.000	1.1811	SEMP3000FDS28A1M	16.000	DFR040304D28	28	WD32FDS28345M	10xD	313	370
30.175	1.1875	SEMP1188FDS28A1	17.000	DFR040304D28	28	SSF150FDS280299	1.5xD	57	101
30.963	1.2188	SEMP1219FDS28A1	17.000	DFR040304D28	28	SSF150FDS280502	3xD	96	153
31.000	1.2205	SEMP3100FDS28A1M	17.000	DFR040304D28	28	SSF150FDS280746	5xD	158	215
						SSF150FDS281112	8xD	251	308
						SSF150FDS281356	10xD	313	370
31.750	1.2500	SEMP1250FDS32A1	15.000	DFTO5T308D32	32	WD32FDS32082M	1.5xD	59	107
32.000	1.2598	SEMP3200FDS32A1M	15.000	DFTO5T308D32	32	WD32FDS32146M	3xD	110	171
33.000	1.2992	SEMP3300FDS32A1M	16.000	DFTO5T308D33	32	WD32FDS32216M	5xD	180	241
33.200	1.3071	SEMP3320FDS32A1M	16.000	DFT05T308D33	32	WD32FDS32321M	8xD	285	346
33.350	1.3130	SEMP1313FDS32A1	17.000	DFTO5T308D33	32	WD32FDS32391M	10xD	355	416
34.000	1.3386	SEMP3400FDS32A1M	17.000	DFTO5T308D33	32	SSF150FDS320323	1.5xD	59	107
34.925	1.3750	SEMP1375FDS32A1	18.000	DFTO5T308D33	32	SSF150FDS320573	3xD	110	171
35.000	1.3780	SEMP3500FDS32A1M	18.000	DFTO5T308D33	32	SSF150FDS320850	5xD	180	241
						SSF150FDS321263	8xD	285	346
						SSF150FDS321539	10xD	355	416
36.000	1.4173	SEMP3600FDS36A1M	13.000	DFTO6T308D36	36	WD32FDS36092M	1.5xD	65	117
36.525	1.4380	SEMP1438FDS36A1	14.000	DFTO6T308D36	36	WD32FDS36166M	3xD	122	191
37.000	1.4567	SEMP3700FDS36A1M	14.000	DFT06T308D36	36	WD32FDS36244M	5xD	200	269
37.500	1.4764	SEMP3750FDS36A1M	15.000	DFTO6T308D36	36	WD32FDS36361M	8xD	317	386
38.000	1.4961	SEMP3800FDS36A1M	15.000	DFTO6T308D36	36	WD32FDS36439M	10xD	395	464
38.100	1.5000	SEMP1500FDS36A1	15.000	DFTU6T308D36	36	SSF150FDS360362	1.5xD	65	117
39.000	1.5354	SEMP3900FDS36A1M	16.000	DFTO6T308D39	36	SSF150FDS360652	3xD	122	191
39.200	1.5433	SEMP3920FDS36A1M	16.000	DFTO6T308D39	36	SSF150FDS360960	5xD	200	269
39.700	1.5630	SEMP1563FDS36A1	17.000	DFTO6T308D39	36	SSF150FDS361421	8xD	317	386
						SSF150FDS361728	10xD	395	464
40.000	1.5748	SEMP4000FDS40A1M	17.000	DFT06T308D39	40	WD50FDS40100M	1.5xD	73	125
41.000	1.6142	SEMP4100FDS40A1M	18.000	DFTO6T308D39	40	WD50FDS40183M	3xD	137	213
41.275	1.6250	SEMP1625FDS40A1	18.000	DFTO6T308D39	40	WD50FDS40271M	5xD	225	301
42.000	1.6535	SEMP4200FDS40A1M	19.000	DFTO6T308D39	40	WD50FDS40403M	8xD	357	433
43.000	1.6929	SEMP4300FDS40A1M	20.000	DFTO6T308D39	40	WD50FDS40491M	10xD	445	521
44.000	1.7323	SEMP4400FDS40A1M	21.000	DFTO6T308D44	40	SSF200FDS400394	1.5xD	73	125
44.450	1.7500	SEMP1750FDS40A1	22.000	DFTO6T308D44	40	SSF200FDS400721	3xD	137	213
						SSF200FDS401066	5xD	225	301
						SSF200FDS401586	8xD	357	433
						SSF200FDS401933	10xD	445	521

SEM Plus DRILL
SEM Plus皇冠鑽

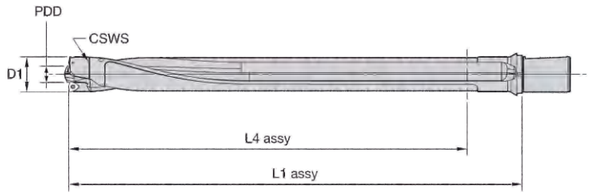
◎ SEM PLUS 產品概述及應用 A1 刀頭的系統組裝 – 續)



提供SEM PLUS 刀頭			每個鑽頭的規定刀片尺寸		CSWS	提供鑽體 每個 CSWS 連接尺寸 3xD,5xD,8xD,10xD(公制及英制鑽體)			
D1		SEM PLUS 刀頭型號	中心刀片尺寸	外側刀片 Drill Fix DFR/DFT		SEM PLUS刀體 ANSI型號	長徑比	L4 裝配尺寸（mm）	L1 裝配尺寸（mm）
mm	in								
45.000	1.7717	SEMP4500FDS45A1M	18.000	DFR070408D45	45	WD50FDS45112M	1.5xD	85	147
46.000	1.8110	SEMP4600FDS45A1M	19.000	DFR070408D45	45	WD50FDS45206M	3xD	152	236
47.000	1.8504	SEMP4700FDS45A1M	20.000	DFR070408D45	45	WD50FDS45304M	5xD	250	334
47.625	1.8750	SEMP1875FDS45A1	21.000	DFR070408D45	45	WD50FDS45451M	8xD	397	481
48.000	1.8898	SEMP4800FDS45A1M	21.000	DFR070408D45	45	WD50FDS45549M	10xD	495	579
49.000	1.9291	SEMP4900FDS45A1M	22.000	DFR070408D45	45	SSF200FDS450441	1.5xD	85	147
						SSF200FDS450809	3xD	152	236
						SSF200FDS451196	5xD	250	334
						SSF200FDS451775	8xD	397	481
						SSF200FDS452161	10xD	4995	579
50.000	1.9685	SEMP5000FDS50A1M	23.000	DFR070408D50	50	WD50FDS50122M	1.5xD	89	157
50.800	2.0000	SEMP2000FDS50A1	24.000	DFR070408D50	50	WD50FDS50228M	3xD	170	263
51.000	2.0079	SEMP5100FDS50A1M	24.000	DFR070408D50	50	WD50FDS50338M	5xD	280	373
52.000	2.0472	SEMP5200FDS50A1M	25.000	DFR070408D50	50	WD50FDS50503M	8xD	445	538
53.000	2.0866	SEMP5300FDS50A1M	26.000	DFR070408D50	50	WD50FDS50613M	10xD	555	648
53.975	2.1250	SEMP2125FDS50A1	27.000	DFR070408D50	50	SSF200FDS500480	1.5xD	89	157
54.000	2.1260	SEMP5400FDS50A1M	27.000	DFR070408D50	50	SSF200FDS500896	3xD	170	263
55.000	2.1654	SEMP5500FDS50A1M	28.000	DFR070408D50	50	SSF200FDS501330	5xD	280	373
						SSF200FDS501980	8xD	445	538
						SSF200FDS502413	10xD	555	648
56.000	2.2047	SEMP5600FDS56A1M	20.000	DFR090508D56	56	WD50FDS56140M	1.5xD	130	175
57.000	2.2441	SEMP5700FDS56A1M	21.000	DFR090508D56	56	WD50FDS56259M	3xD	191	294
57.150	2.2500	EMP2250FDS56A1	21.000	DFR090508D56	56	WD50FDS56383M	5xD	315	418
58.000	2.2835	SEMP5800FDS56A1M	22.000	DFR090508D56	56	WD50FDS56569M	8xD	501	604
59.000	2.3228	SEMP5900FDS56A1M	23.000	DFR090508D56	56	WD50FDS56693M	10xD	625	728
60.000	2.3622	SEMP6000FDS56A1M	24.000	DFR090508D56	56	SSF200FDS560551	1.5xD	130	175
60.330	2.3750	SEMP2375FDS56A1	24.000	DFR090508D56	56	SSF200FDS561020	3xD	191	294
61.000	2.4016	SEMP6100FDS56A1M	25.000	DFR090508D56	56	SF200FDS561507	5xD	315	418
62.000	2.4409	SEMP6200FDS56A1M	26.000	DFR090508D56	56	SSF200FDS562240	8xD	501	604
						SSF200FDS562783	10xD	625	728
63.000	2.4803	SEMP6300FDS63A1M	27.000	DFR090508D63	63	WD50FDS63154M	1.5xD	111	194
63.500	2.5000	SEMP2500FDS63A1	28.000	DFR090508D63	63	WD50FDS63289M	3xD	214	329
64.000	2.5197	SEMP6400FDS63A1M	28.000	DFR090508D63	63	WD50FDS63429M	5xD	354	469
65.000	2.5591	SEMP6500FDS63A1M	29.000	DFR090508D63	63	WD50FDS63639M	8xD	564	679
66.000	2.5984	SEMP6600FDS63A1M	30.000	DFR090508D63	63	WD50FDS63779M	10xD	704	819
66.680	2.6250	SEMP2625FDS63A1	31.000	DFR090508D63	63	SSF200FDS630606	1.5xD	111	194
67.000	2.6378	SEMP6700FDS63A1M	31.000	DFR090508D63	63	SSF200FDS631138	3xD	214	329
68.000	2.6772	SEMP6800FDS63A1M	32.000	DFR090508D63	63	SSF200FDS631688	5xD	354	469
69.000	2.7165	SEMP6900FDS63A1M	33.000	DFR090508D63	63	SSF200FDS632515	8xD	564	679
69.850	2.7500	SEMP2750FDS63A1	34.000	DFR090508D63	63	SSF200FDS633066	10xD	704	819
70.000	2.7559	SEMP7000FDS63A1M	34.000	DFR090508D63	63				

SEM Plus DRILL
SEM Plus皇冠钻

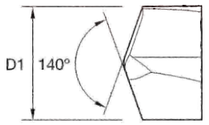
◎ SEM PLUS 產品概述及應用 A1 刀頭的系統組裝 – 續)



提供SEM PLUS 刀頭			每個鑽頭的規定刀片尺寸		CSWS	提供鑽體 每個 CSWS 連接尺寸 3xD,5xD,8xD,10xD(公制及英制鑽體)			
D1		SEM PLUS 刀頭型號	中心刀片尺寸	外側刀片 Drill Fix DFR/DFT		SEM PLUS刀體 ANSI型號	長徑比	L4 裝配尺寸（mm）	L1 裝配尺寸（mm）
mm	in								
71.000	2.7950	SEMP7100FDS71A1M	26.000	4xDFT06T308D44	71	WD50FDS71172M	1.5xD	128	217
72.000	2.8350	SEMP7200FDS71A1M	27.000		71	WD50FDS71292M	3xD	241	333
73.000	2.8740	SEMP7300FDS71A1M	28.000		71	WD50FDS71452M	5xD	401	493
73.025	2.8750	SEMP2875FD71A1	28.000		71	SSF200FDS710677	1.5xD	128	217
74.000	2.9130	SEMP7400FDS71A1M	29.000		71	SSF200FDS711150	3xD	241	333
75.000	2.9530	SEMP7500FDS71A1M	30.000		71	SSF200FDS711780	5xD	401	493
76.000	2.9920	SEMP7600FDS71A1M	31.000		71				
76.200	3.0000	SEMP3000FDS71A1	31.000		71				
77.000	3.0310	SEMP7700FDS71A1M	32.000		71				
78.000	3.0710	SEMP7800FDS71A1M	33.000		71				
79.000	3.1100	SEMP7900FDS71A1M	34.000		71				
79.375	3.1250	SEMP3125FDS80A1	31.000	2xDFT06T308D44 & 2xDFT070408D50	80	WD50FDS80192M	1.5xD	145	247
80.000	3.1500	SEMP8000FDS80A1M	31.000		80	WD50FDS80327M	3xD	271	373
81.000	3.1890	SEMP8100FDS80A1M	32.000		80	WD50FDS80507M	5xD	451	553
82.000	3.2280	SEMP8200FDS80A1M	33.000		80	SSF200FDS800756	1.5xD	145	247
83.000	3.2680	SEMP8300FDS80A1M	34.000		80	SSF200FDS801287	3xD	271	373
82.550	3.2500	SEMP3250FDS80A1	34.000		80	SSF200FDS801996	5xD	451	553
84.000	3.3070	SEMP8400FDS80A1M	35.000		80				
85.000	3.3070	SEMP8500FDS80A1M	36.000		80				
85.725	3.3750	SEMP3375FDS80A1	37.000		80				
86.000	3.3860	SEMP8600FDS80A1M	37.000		80				
87.000	3.4250	SEMP8700FDS80A1M	38.000		80				
88.000	3.4650	SEMP8800FDS80A1M	39.000		80				
88.900	3.5000	EMP3500FDS80A1	40.000		80				
89.000	3.5040	SEMP8900FDS80A1M	40.000		80				
90.000	3.5430	SEMP9000FDS90A1M	37.000	4xDFT070408D50	90	WD50FDS90212M	1.5xD	160	272
91.000	3.5830	SEMP9100FDS90A1M	38.000		90	WD50FDS90362M	3xD	302	414
92.000	3.6220	SEMP9200FD906A1M	39.000		90	WD50FDS90562M	5xD	502	614
92.075	3.6250	SEMP3625FDS90A1	39.000		90	SSF200FDS900835	1.5xD	160	272
93.000	3.6610	SEMP9300FDS90A1M	40.000		90	SSF200FDS901425	3xD	302	414
						SSF200FDS902213	5xD	502	614
94.000	3.7010	SEMP9400FDS90A1M	26.000	6xDFT06T308D44	90				
95.000	3.7400	SEMP9500FDS90A1M	27.000		90				
95.250	3.7500	SEMP3750FDS90A1	27.000		90				
96.000	3.7800	SEMP9600FDS90A1M	28.000		90				
97.000	3.8190	SEMP9700FDS90A1M	29.000		90				
98.000	3.8580	SEMP9800FDS90A1M	30.000		90				
98.425	3.8750	SEMP3875FDS90A1	31.000		90				
99.000	3.8980	SEMP9900FDS90A1M	31.000		90				
100.000	3.9370	SEMP10000FDS90A1M	32.000		90				
101.600	4.0000	SEMP4000FDS90A1	34.000		90				

SEM PLUS A1 Heads
用于A1刀头的SEM PLUS 中心式刀片

◎ 爲了確保 100% 的刀具穩定性，SEM PLUS刀具使用的SEM刀片不得進行修磨。



D1 (mm) = PDD

P M K N S H	P M K N S H	● 首選 ○ 備選		
HZ・AC7315	HM・AC7320	切削直徑	英制直徑	刀座尺寸
SEMP1300HZ	SEMP1300HM	13.00	0.5118	C
SEMP1400HZ	SEMP1400HM	14.00	0.5512	B
SEMP1500HZ	SEMP1500HM	15.00	0.5906	A
SEMP1600HZ	SEMP1600HM	16.00	0.6299	1
SEMP1700HZ	SEMP1700HM	17.00	0.6693	1
SEMP1800HZ	SEMP1800HM	18.00	0.7087	1
SEMP1900HZ	SEMP1900HM	19.00	0.7480	2
SEMP2000HZ	SEMP2000HM	20.00	0.7874	3
SEMP2100HZ	SEMP2100HM	21.00	0.8268	3
SEMP2200HZ	SEMP2200HM	22.00	0.8661	3
SEMP2300HZ	SEMP2300HM	23.00	0.9055	4
SEMP2400HZ	SEMP2400HM	24.00	0.9449	4
SEMP2500HZ	SEMP2500HM	25.00	0.9843	5
SEMP2600HZ	SEMP2600HM	26.00	1.0236	5
SEMP2700HZ	SEMP2700HM	27.00	1.0630	6
SEMP2800HZ	SEMP2800HM	28.00	1.1024	6
SEMP2900HZ	SEMP2900HM	29.00	1.1417	7
SEMP3000HZ	SEMP3000HM	30.00	1.1811	7
SEMP3100HZ	SEMP3100HM	31.00	1.2205	8
SEMP3200HZ	SEMP3200HM	32.00	1.2598	8

◎ 公差HZ・公制

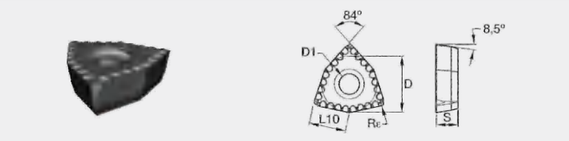
D1公制	公差h8
12.5–1	+0.000/–0.027
＞18–30	+0.000/–0.033
＞30–32	+0.000/–0.039

◎ 公差HM・公制

D1公制	公差h8
12.5–1	+0.000/–0.027
＞18–30	+0.000/–0.033
＞30–32	+0.000/–0.039

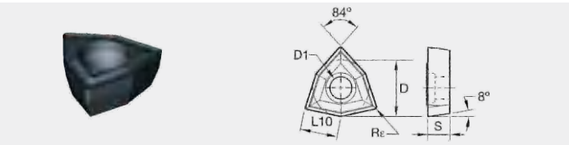
Indexable Insert Recommand
U钻适配刀片推荐表

◎ DFT–HP



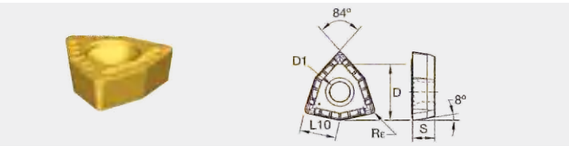
型號 Specification/Item	基本尺寸（mm）				
	L10	D	D1	S	R
DFT05T308D32HP	5.29	8.00	3.40	3.75	0.8
DFT05T308D33HP	5.29	8.00	3.40	3.75	0.8
DFT06T308D36HP	6.62	10.00	4.40	3.75	0.8
DFT06T308D39HP	6.62	10.00	4.40	3.75	0.8
DFT06T308D44HP	6.62	10.00	4.40	3.75	0.8
DFT070408D45HP	7.94	12.00	4.40	4.75	0.8
DFT070408D50HP	7.94	12.00	4.40	4.75	0.8
DFT090508D56HP	9.92	15.00	5.50	5.25	0.8
DFT090508D63HP	9.92	15.00	5.50	5.25	0.8

◎ DFT–DS



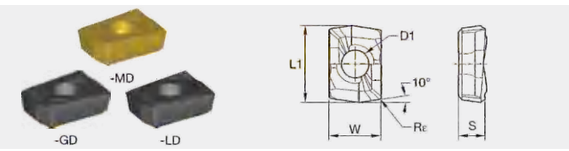
型號 Specification/Item	基本尺寸（mm）				
	L10	D	D1	S	R
DFT05T308D32DS	5.29	8.00	3.40	3.75	0.8
DFT05T308D33DS	5.29	8.00	3.40	3.75	0.8
DFT06T308D36DS	6.62	10.00	4.40	3.75	0.8
DFT06T308D39DS	6.62	10.00	4.40	3.75	0.8
DFT06T308D44DS	6.62	10.00	4.40	3.75	0.8
DFT070408D45DS	7.94	12.00	4.40	4.75	0.8
DFT070408D50DS	7.94	12.00	4.40	4.75	0.8
DFT090508D56DS	9.92	15.00	5.50	5.25	0.8
DFT090508D63DS	9.92	15.00	5.50	5.25	0.8

◎ DFT–MD



型號 Specification/Item	基本尺寸（mm）				
	L10	D	D1	S	R
DFT05T308D32MD	5.29	8.00	3.40	3.75	0.8
DFT05T308D33MD	5.29	8.00	3.40	3.75	0.8
DFT06T308D36MD	6.62	10.00	4.40	3.75	0.8
DFT06T308D39MD	6.62	10.00	4.40	3.75	0.8
DFT06T308D44MD	6.62	10.00	4.40	3.75	0.8
DFT070408D45MD	7.94	12.00	4.40	4.75	0.8
DFT070408D50MD	7.94	12.00	4.40	4.75	0.8
DFT090508D56MD	9.92	15.00	5.50	5.25	0.8
DFT090508D63MD	9.92	15.00	5.50	5.25	0.8

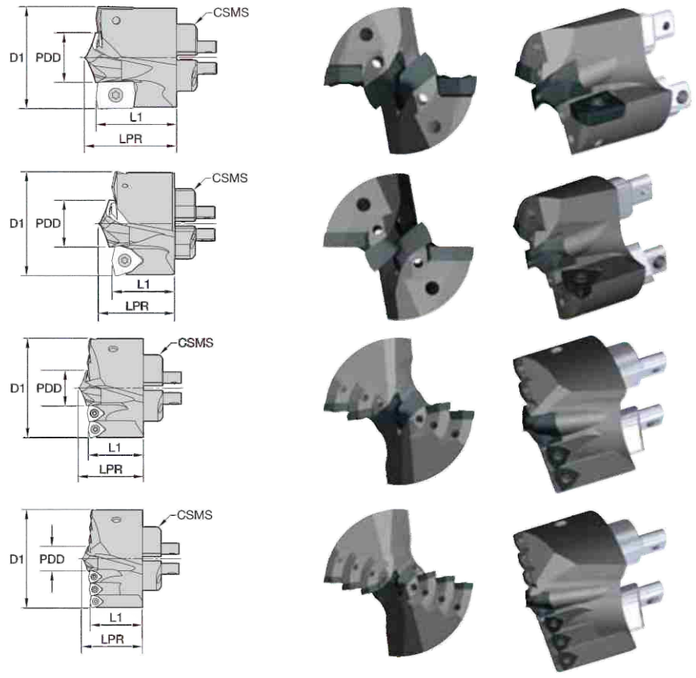
◎ SEM PLUS A1刀頭・Drill Fix DFR 刀片



型號 Specification/Item	基本尺寸（mm）				
	L10	D	D1	S	R
DFT040304D28GD	10.76	7.26	2.85	3.79	0.4
DFT040304D28LD	10.76	7.26	2.85	3.78	0.4
DFT040304D28MD	10.76	7.26	2.85	3.79	0.4

SEM PLUS A1 Heads
SEM PLUS A1刀头

◎ 爲了確保 100% 的刀具穩定性，SEM PLUS刀具使用的SEM刀片不得進行修磨。
◎ SEM PLUS 鑽頭在發貨時提供所有刀片螺釘。
◎ SEM PLUS 鑽頭在發貨時配有2個扳手:一個用于KSEM刀片，一個用于 DFT/DFR刀片以及鑽頭和鑽體之間的組裝。
◎ 在訂購 KSEM PLUS 刀杆時，應按照聯接裝置的尺寸 (CSMS)，以確定鑽頭和刀杆之間的配合
◎ 插圖中的PDD是指KSEM PLUS刀具使用KSEM HPG和HPCCL刀片的D1值。
◎ 訂購KSEM PLUS刀具所用刀片(KSEM,DFT,和 DFR) 需要單獨訂購。



2 x DFR
直徑：28–<31.75mm

2 x DFT
直徑：31.75–70.34mm

4 x DFT
直徑：70.35–93.34mm

6 x DFT
直徑：93.35–127mm

◎ SEM PLUS A1刀頭・Drill Fix DFR 刀片

型號 Specification/Item	D1		PDD		LPR		L1		CSMS
	mm	in	mm	in	mm	in	mm	in	
SEMP2800FDS28A1M	28.00	1.102	14.00	0.5512	24.9	0.980	22.0	0.866	FDS28
SEMP2858FDS28A1M	28.58	1.125	15.00	0.5906	25.0	0.984	22.0	0.866	FDS28
SEMP2900FDS28A1M	29.00	1.142	15.00	0.5906	25.0	0.984	22.0	0.866	FDS28
SEMP2937FDS28A1M	29.36	1.156	16.00	0.6299	25.2	0.992	22.0	0.866	FDS28
SEMP3000FDS28A1M	30.00	1.181	16.00	0.6299	25.2	0.992	22.0	0.866	FDS28
SEMP3017FDS28A1M	30.18	1.188	17.00	0.6693	25.4	1.000	22.0	0.866	FDS28
SEMP3096FDS28A1M	30.96	1.219	17.00	0.6693	25.4	1.000	22.0	0.866	FDS28
SEMP3100FDS28A1M	31.00	1.221	17.00	0.6693	25.4	1.000	22.0	0.866	FDS28
SEMP3175FDS32A1M	31.75	1.250	15.00	0.5906	23.0	0.907	20.0	0.787	FDS32
SEMP3200FDS32A1M	32.00	1.260	15.00	0.5906	23.0	0.907	20.0	0.787	FDS32
SEMP3300FDS32A1M	33.00	1.299	16.00	0.6299	23.2	0.913	20.0	0.787	FDS32
SEMP3320FDS32A1M	33.20	1.307	16.00	0.6299	23.2	0.913	20.0	0.787	FDS32
SEMP3334FDS32A1M	33.35	1.313	17.00	0.6693	23.4	0.920	20.0	0.787	FDS32
SEMP3400FDS32A1M	34.00	1.339	17.00	0.6693	23.4	0.920	20.0	0.787	FDS32
SEMP3493FDS32A1M	34.93	1.375	18.00	0.7087	23.6	0.928	20.0	0.787	FDS32
SEMP3500FDS32A1M	35.00	1.378	18.00	0.7087	23.6	0.928	20.0	0.787	FDS32

SEM PLUS A1 Heads
SEM PLUS A1刀头

◎ SEM PLUS A1刀頭28–101.60mm（1.102–4）–續

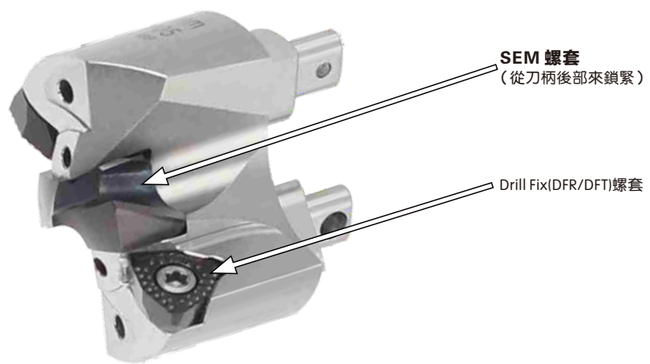
型號 Specification/Item	D1		PDD		LPR		L1		CSMS
	mm	in	mm	in	mm	in	mm	in	
SEMP3600FDS36A1M	36.00	1.417	13.00	0.5118	22.7	0.893	20.0	0.787	FDS36
SEMP3651FDS36A1	36.53	1.438	14.00	0.5512	22.9	0.900	20.0	0.787	FDS36
SEMP3700FDS36A1M	37.00	1.457	14.00	0.5512	22.9	0.900	20.0	0.787	FDS36
SEMP3750FDS36A1M	37.50	1.476	15.00	0.5906	23.0	0.907	20.0	0.787	FDS36
SEMP3800FDS36A1M	38.00	1.496	15.00	0.5906	23.0	0.907	20.0	0.787	FDS36
SEMP3810FDS36A1	38.10	1.500	15.00	0.5906	23.0	0.907	20.0	0.787	FDS36
SEMP3900FDS36A1M	39.00	1.535	16.00	0.6299	23.2	0.913	20.0	0.787	FDS36
SEMP3920FDS36A1M	39.20	1.543	16.00	0.6299	23.2	0.913	20.0	0.787	FDS36
SEMP3970FDS36A1	39.70	1.563	17.00	0.6693	23.4	0.920	20.0	0.787	FDS36
SEMP4000FDS40A1M	40.00	1.575	17.00	0.6693	28.6	1.125	25.0	0.984	FDS40
SEMP4100FDS40A1M	41.00	1.614	18.00	0.7087	28.8	1.132	25.0	0.984	FDS40
SEMP4128FDS40A1	41.28	1.625	18.00	0.7087	28.8	1.132	25.0	0.984	FDS40
SEMP4200FDS40A1M	42.00	1.654	19.00	0.7480	28.9	1.139	25.0	0.984	FDS40
SEMP4300FDS40A1M	43.00	1.693	20.00	0.7874	29.1	1.146	25.0	0.984	FDS40
SEMP4400FDS40A1M	44.00	1.732	21.00	0.8268	29.3	1.153	25.0	0.984	FDS40
SEMP4445FDS40A1	44.45	1.750	22.00	0.8661	29.5	1.160	25.0	0.984	FDS40
SEMP4500FDS45A1M	45.00	1.772	18.00	0.7087	28.8	1.132	25.0	0.984	FDS45
SEMP4600FDS45A1M	46.00	1.811	19.00	0.7480	28.9	1.139	25.0	0.984	FDS45
SEMP4700FDS45A1M	47.00	1.850	20.00	0.7874	29.1	1.146	25.0	0.984	FDS45
SEMP4763FDS45A1	47.63	1.875	21.00	0.8268	29.3	1.153	25.0	0.984	FDS45
SEMP4800FDS45A1M	48.00	1.890	21.00	0.8268	29.3	1.153	25.0	0.984	FDS45
SEMP4900FDS45A1M	49.00	1.929	22.00	0.8661	29.5	1.160	25.0	0.984	FDS45
SEMP5000EDS50A1M	50.00	1.969	23.00	0.9055	34.8	1.372	30.0	1.181	FDS50
SEMP5080FDS50A1	50.80	2.000	24.00	0.9449	35.0	1.379	30.0	1.181	FDS50
SEMP5100FDS50A1M	51.00	2.008	24.00	0.9449	35.0	1.379	30.0	1.181	FDS50
SEMP5200FDS50A1M	52.00	2.047	25.00	0.9843	35.2	1.386	30.0	1.181	FDS50
SEMP5300FDS50A1M	53.00	2.087	26.00	1.0236	35.4	1.392	30.0	1.181	FDS50
SEMP5398FDS50A1	53.98	2.125	27.00	1.0630	35.6	1.399	30.0	1.181	FDS50
SEMP5400FDS50A1M	54.00	2.126	27.00	1.0630	35.6	1.399	30.0	1.181	FDS50
SEMP5500FDS50A1M	55.00	2.165	28.00	1.1024	35.7	1.406	30.0	1.181	FDS50
SEMP5600FDS56A1M	56.00	2.205	20.00	0.7874	34.3	1.151	30.0	1.181	FDS56
SEMP5700FDS56A1M	57.00	2.244	21.00	0.8268	34.5	1.358	30.0	1.181	FDS56
SEMP5715FDS56A1	57.15	2.250	21.00	0.8268	34.5	1.358	30.0	1.181	FDS56
SEMP5800FDSS6A1M	58.00	2.284	22.00	0.8661	34.7	1.365	30.0	1.181	FDS56
SEMP5900FDS56A1M	59.00	2.323	23.00	0.9055	34.8	1.372	30.0	1.181	FDS56
SEMP6000FDS56A1M	60.00	2.362	24.00	0.9449	35.0	1.379	30.0	1.181	FDS56
SEMP6033FDS56A1	60.33	2.375	24.00	0.9449	35.0	1.379	30.0	1.181	FDS56
SEMP6100FDS56A1M	61.00	2.402	25.00	0.9843	35.2	1.386	30.0	1.181	FDS56
SEMP6200FDS56A1M	62.00	2.441	26.00	1.0236	35.4	1.392	30.0	1.181	FDS56
SEMP6300FDS63A1M	63.00	2.480	27.00	1.0630	41.8	1.643	36.0	1.417	FDS63
SEMP6350FDS63A1	63.50	2.500	28.00	1.1024	41.9	1.650	36.0	1.417	FDS63
SEMP6400FDS63A1M	64.00	2.520	28.00	1.1024	41.9	1.650	36.0	1.417	FDS63
SEMP6500FDS63A1M	65.00	2.559	29.00	1.1417	42.1	1.657	36.0	1.417	FDS63
SEMP6600FDS63A1M	66.00	2.598	30.00	1.1811	42.3	1.664	36.0	1.417	FDS63
SEMP6668FDS63A1M	66.68	2.625	31.00	1.2205	42.5	1.671	36.0	1.417	FDS63
SEMP6700FDS63A1M	67.00	2.638	31.00	1.2205	42.5	1.671	36.0	1.417	FDS63
SEMP6800FDS63A1M	68.00	2.677	32.00	1.2598	42.6	1.678	36.0	1.417	FDS63
SEMP6900FDS63A1M	69.00	2.717	33.00	1.2992	42.8	1.685	36.0	1.417	FDS63
SEMP6985FDS63A1	69.85	2.750	34.00	1.3386	43.0	1.692	36.0	1.417	FDS63
SEMP7000FDS63A1M	70.00	2.756	34.00	1.3386	43.0	1.692	36.0	1.417	FDS63
SEMP7100FDS71A1M	71.00	2.795	26.00	1.0240	46.8	1.842	46.8	1.842	FDS71
SEMP7200EDS71A1M	72.00	2.835	27.00	1.0630	47.0	1.849	47.0	1.849	FDS71
SEMP7300FDS71A1M	73.00	2.874	28.00	1.1020	47.1	1.855	47.1	1.855	FDS71
SEMP7303FDS71A1	73.03	2.875	28.00	1.1020	47.1	1.855	47.1	1.855	FDS71
SEMP7400FDS71A1M	74.00	2.913	29.00	1.1420	47.3	1.863	47.3	1.863	FDS71
SEMP7500FDS71A1M	75.00	2.953	30.00	1.1810	47.5	1.869	47.5	1.869	FDS71

SEM PLUS A1 Heads
SEM PLUS A1刀头

◎ SEM PLUS A1刀頭28–101.60mm（1.102–4）–續

型號 Specification/Item	D1		PDD		LPR		L1		CSMS
	mm	in	mm	in	mm	in	mm	in	
SEMP7600FDS71A1M	76.00	2.992	31.00	1.2200	47.7	1.876	47.7	1.876	FDS71
SEMP7620FDS71A1M	76.20	3.000	31.00	1.2200	47.7	1.876	47.7	1.876	FDS71
SEMP7700FDS71A1M	77.00	3.031	32.00	1.2600	47.8	1.883	47.8	1.883	FDS71
SEMP7800FDS71A1M	78.00	3.071	33.00	1.2990	48.0	1.890	48.0	1.890	FDS71
SEMP7900FDS71A1M	79.00	3.110	34.00	1.3390	48.2	1.897	48.2	1.897	FDS71
SEMP7938FDS80A1M	79.38	3.125	31.00	1.2200	52.8	2.077	52.8	2.077	FDS80
SEMP8000FDS80A1M	80.00	3.150	31.00	1.2200	52.8	2.077	52.8	2.077	FDS80
SEMP8100FDS80A1M	81.00	3.189	32.00	1.2600	52.9	2.085	52.9	2.085	FDS80
SEMP8200FDS80A1M	82.00	3.228	33.00	1.2990	53.1	2.091	53.1	2.091	FDS80
SEMP8255FDS80A1M	82.55	3.250	34.00	1.3390	53.3	2.098	53.3	2.098	FDS80
SEMP8300FDS80A1M	83.00	3.268	34.00	1.3390	53.3	2.098	53.3	2.098	FDS80
SEMP8400FDS80A1M	84.00	3.307	35.00	1.3780	53.5	2.105	53.5	2.105	FDS80
SEMP8500FDS80A1M	85.00	3.346	36.00	1.4170	53.6	2.112	53.6	2.112	FDS80
SEMP8573FDS80A1M	85.73	3.375	37.00	1.4570	53.8	2.119	53.8	2.119	FDS80
SEMP8600FDS80A1M	86.00	3.386	37.00	1.4567	53.8	2.119	53.8	2.119	FDS80
SEMP8700FDS80A1M	87.00	3.425	38.00	1.4960	54.0	2.126	54.0	2.126	FDS80
SEMP8800FDS80A1M	88.00	3.465	39.00	1.5354	54.2	2.133	54.2	2.133	FDS80
SEMP8890FDS80A1M	88.90	3.500	40.00	1.5748	54.3	2.140	45.0	1.172	FDS80
SEMP8900FDS80A1M	89.00	3.504	40.00	1.5750	54.3	2.140	54.3	2.140	FDS80
SEMP9000FDS90A1M	90.00	3.543	37.00	1.4567	59.2	2.332	59.2	2.332	FDS90
SEMP9100FDS90A1M	91.00	3.583	38.00	1.4960	59.4	2.339	59.4	2.339	FDS90
SEMP9200FDS90A1M	92.00	3.622	39.00	1.5354	59.6	2.346	59.6	2.346	FDS90
SEMP9208FDS90A1M	92.08	3.625	39.00	1.5350	59.6	2.346	59.6	2.346	FDS90
SEMP9300FDS90A1N	93.00	3.661	40.00	1.5750	59.7	2.352	59.7	2.352	FDS90
SEMP9400FDS90A1M	94.00	3.701	26.00	1.0236	58.0	2.283	58.0	2.283	FDS90
SEMP9500FDS90A1M	95.00	3.740	27.00	1.0630	58.2	2.290	58.2	2.290	FDS90
SEMP9525FDS90A1M	95.25	3.750	27.00	1.0630	58.2	2.289	58.2	1.969	FDS90
SEMP9600FDS90A1M	96.00	3.780	28.00	1.1024	58.3	2.297	58.3	2.297	FDS90
SEMP9700FDS90A1M	97.00	3.819	29.00	1.1420	58.5	2.304	58.5	2.304	FDS90
SEMP9800FDS90A1M	98.00	3.858	30.00	1.1811	58.7	2.311	58.7	2.311	FDS90
SEMP9843FDS90A1M	98.43	3.875	31.00	1.2200	58.9	2.317	58.9	2.317	FDS90
SEMP9900FDS90A1M	99.00	3.898	31.00	1.2200	58.9	2.317	58.9	2.317	FDS90
SEMP10000FDS90A1M	100.00	3.937	32.00	1.2600	59.0	2.324	59.0	2.324	FDS90
SEMP10160FDS90A1M	101.60	4.000	34.00	1.3390	59.4	2.338	59.4	2.338	FDS90

◎ SEM PLUS A1刀頭・配件



SEM PLUS A1 Heads
SEM PLUS A1刀头

◎ SEM PLUS A1刀頭28–101.60mm（1.102–4）–配件

D1		PDD						
mm	in	mm	in	csms	螺套	扳手	Drill Fix螺絲	Drill Fix 扳手
28.00	1.102	14.00	0.551	FDS28	364.016	170.350	192.432	170.352
28.58	1.125	15.00	0.591	FDS28	364.016	170.350	192.432	170.352
29.00	1.142	15.00	0.591	FDS28	364.016	170.350	192.432	170.352
29.36	1.156	16.00	0.630	FDS28	364.010	170.345	192.432	170.352
30.00	1.181	16.00	0.630	FDS28	364.010	170.345	192.432	170.352
30.18	1.188	17.00	0.669	FDS28	364.010	170.345	192.432	170.352
30.96	1.219	17.00	0.669	FDS28	364.010	170.345	192.432	170.352
31.00	1.221	17.00	0.669	FDS28	364.010	170.345	192.432	170.352
31.75	1.250	15.00	0.591	FDS32	364.016	170.350	191.924	170.353
32.00	1.260	15.00	0.591	FDS32	364.016	170.350	191.924	170.353
33.00	1.299	16.00	0.630	FDS32	364.010	170.345	191.924	170.353
33.20	1.307	16.00	0.630	FDS32	364.010	170.345	191.924	170.353
33.35	1.313	17.00	0.669	FDS32	364.010	170.345	191.924	170.353
34.00	1.339	17.00	0.669	FDS32	364.010	170.345	191.924	170.353
34.93	1.375	18.00	0.709	FDS32	364.010	170.345	191.924	170.353
35.00	1.378	18.00	0.709	FDS32	364.010	170.345	191.924	170.353
36.00	1.417	13.00	0.512	FDS36	364.016	170.350	191.916	170.355
36.53	1.438	14.00	0.551	FDS36	364.016	170.350	191.916	170.355
37.00	1.457	14.00	0.551	FDS36	364.016	170.350	191.916	170.355
37.50	1.476	15.00	0.591	FDS36	364.016	170.350	191.916	170.355
38.00	1.496	15.00	0.591	FDS36	364.016	170.350	191.916	170.355
38.10	1.500	15.00	0.591	FDS36	364.016	170.350	191.916	170.355
39.00	1.535	16.00	0.630	FDS36	364.010	170.345	191.916	170.355
39.20	1.543	16.00	0.630	FDS36	364.010	170.345	191.916	170.355
39.70	1.563	17.00	0.669	FDS36	364.010	170.345	191.916	170.355
40.00	1.575	17.00	0.669	FDS40	364.010	170.345	191.916	170.355
41.00	1.614	18.00	0.709	FDS40	364.010	170.345	191.916	170.355
41.28	1.625	18.00	0.709	FDS40	364.010	170.345	191.916	170.355
42.00	1.654	19.00	0.748	FDS40	364.010	170.345	191.916	170.355
43.00	1.693	20.00	0.787	FDS40	364.011	170.346	191.916	170.355
44.00	1.732	21.00	0.827	FDS40	364.011	170.346	191.916	170.355
44.45	1.750	22.00	0.866	FDS40	364.011	170.346	191.916	170.355
45.00	1.772	18.00	0.709	FDS45	364.010	170.345	191.698	170.355
46.00	1.811	19.00	0.748	FDS45	364.010	170.345	191.698	170.355
47.00	1.850	20.00	0.787	FDS45	364.011	170.346	191.698	170.355
47.63	1.875	21.00	0.827	FDS45	364.011	170.346	191.698	170.355
48.00	1.890	21.00	0.827	FDS45	364.011	170.346	191.698	170.355
49.00	1.929	22.00	0.866	FDS45	364.011	170.346	191.698	170.355
50.00	1.969	23.00	0.906	FDS50	364.011	170.346	191.698	170.355
50.80	2.000	24.00	0.945	FDS50	364.011	170.346	191.698	170.355
51.00	2.008	24.00	0.945	FDS50	364.011	170.346	191.698	170.355
52.00	2.047	25.00	0.984	FDS50	364.012	170.347	191.698	170.355
53.00	2.087	26.00	1.024	FDS50	364.012	170.347	191.698	170.355
53.98	2.125	27.00	1.063	FDS50	364.012	170.347	191.698	170.355
54.00	2.216	27.00	1.063	FDS50	364.012	170.347	191.698	170.355
55.00	2.165	28.00	1.102	FDS50	364.012	170.347	191.698	170.355
56.00	2.205	20.00	0.787	FDS56	364.011	170.346	191.726	170.356
57.00	2.244	21.00	0.827	FDS56	364.011	170.346	191.726	170.356
57.15	2.250	21.00	0.827	FDS56	364.011	170.346	191.726	170.356
58.00	2.284	22.00	0.866	FDS56	364.011	170.346	191.726	170.356
59.00	2.323	23.00	0.906	FDS56	364.011	170.346	191.726	170.356
60.00	2.362	24.00	0.945	FDS56	364.011	170.346	191.726	170.356
60.33	2.375	24.00	0.945	FDS56	364.011	170.346	191.726	170.356
61.00	2.402	25.00	0.984	FDS56	364.012	170.347	191.726	170.356
62.00	2.441	26.00	1.024	FDS56	364.012	170.347	191.726	170.356
63.00	2.480	27.00	1.063	FDS63	364.012	170.347	191.726	170.356

SEM PLUS A1 Heads
用于A1刀头的SEM PLUS 中心式刀片

◎ SEM PLUS A1刀頭28–101.60mm（1.102–4）–配件

D1		PDD						
mm	in	mm	in	csms	螺套	扳手	Drill Fix螺絲	Drill Fix 扳手
63.50	2.500	28.00	1.102	FDS63	364.012	170.347	191.726	170.356
64.00	2.520	28.00	1.102	FDS63	364.012	170.347	191.726	170.356
65.00	2.559	29.00	1.142	FDS63	364.013	170.348	191.726	170.356
66.00	2.598	30.00	1.181	FDS63	364.013	170.348	191.726	170.356
66.68	2.625	31.00	1.221	FDS63	364.013	170.348	191.726	170.356
67.00	2.638	31.00	1.221	FDS63	364.013	170.348	191.726	170.356
68.00	2.677	32.00	1.260	FDS63	364.013	170.348	191.726	170.356
69.00	2.717	33.00	1.299	FDS63	364.015	170.348	191.726	170.356
69.85	2.750	34.00	1.339	FDS63	364.015	170.348	191.726	170.356
70.00	2.756	34.00	1.339	FDS63	364.015	17.0348	191.726	170.356
71.00	2.795	26.00	1.024	FDS71	364.012	170.347	191.916	170.355
72.00	2.835	27.00	1.063	FDS71	364.012	170.347	191.916	170.355
73.00	2.874	28.00	1.102	FDS71	364.012	170.347	191.916	170.355
73.03	2.875	28.00	1.102	FDS71	364.012	170.347	191.916	170.355
74.00	2.913	29.00	1.142	FDS71	364.013	170.365	191.916	170.355
75.00	2.953	30.00	1.181	FDS71	364.013	170.365	191.916	170.355
76.00	2.992	31.00	1.220	FDS71	364.013	170.365	191.916	170.355
76.20	3.000	31.00	1.220	FDS71	364.013	170.365	191.916	170.355
77.00	3.031	32.00	1.260	FDS71	364.013	170.365	191.916	170.355
78.00	3.071	33.00	1.299	FDS71	364.015	170.365	191.916	170.355
79.00	3.110	34.00	1.339	FDS71	364.015	170.365	191.916	170.355
79.38	3.125	31.00	1.220	FDS80	364.013	170.365	191.916	170.355
80.00	3.150	31.00	1.220	FDS80	364.013	170.365	191.916	170.355
81.00	3.189	32.00	1.260	FDS80	364.013	170.365	191.916	170.355
82.00	3.228	33.00	1.299	FDS80	364.015	170.365	191.916	170.355
82.55	3.250	34.00	1.339	FDS80	364.015	170.365	191.916	170.355
83.00	3.268	34.00	1.339	FDS80	364.015	170.365	191.916	170.355
84.00	3.307	35.00	1.378	FDS80	364.015	170.365	191.916	170.355
85.00	3.346	36.00	1.417	FDS80	364.015	170.365	191.916	170.355
85.73	3.375	37.00	1.457	FDS80	364.015	170.365	191.916	170.355
86.00	3.386	37.00	1.457	FDS80	364.015	170.365	191.916	170.355
87.00	3.425	38.00	1.496	FDS80	364.015	170.365	191.916	170.355
88.00	3.465	39.00	1.535	FDS80	364.015	170.365	191.916	170.355
88.90	3.500	40.00	1.575	FDS80	364.015	170.365	191.916	170.355
89.00	3.504	40.00	1.575	FDS80	364.015	170.365	191.916	170.355
90.00	3.543	37.00	1.457	FDS90	364.015	170.365	191.916	170.355
91.00	3.583	38.00	1.496	FDS90	364.015	170.365	191.916	170.355
92.00	3.622	39.00	1.535	FDS90	364.015	170.365	191.916	170.355
92.08	3.625	39.00	1.535	FDS90	364.015	170.365	191.916	170.355
93.00	3.661	40.00	1.575	FDS90	364.015	170.365	191.916	170.355
94.00	3.701	26.00	1.024	FDS90	364.012	170.355	191.916	170.355
95.00	3.740	27.00	1.063	FDS90	364.012	170.355	191.916	170.355
95.25	3.750	27.00	1.063	FDS90	364.012	170.355	191.916	170.355
96.00	3.780	28.00	1.102	FDS90	364.012	170.355	191.916	170.355
97.00	3.819	29.00	1.142	FDS90	364.013	170.365	191.916	170.355
98.00	3.858	30.00	1.181	FDS90	364.013	170.365	191.916	170.355
98.43	3.875	31.00	1.220	FDS90	364.013	170.365	191.916	170.355
99.00	3.898	31.00	1.220	FDS90	364.013	170.365	191.916	170.355
100.00	3.937	32.00	1.260	FDS90	364.013	170.365	191.916	170.355
101.60	4.000	34.00	1.339	FDS90	364.015	170.365	191.916	170.355

YLMD MAX DRILL
YLMD 带定心大直径快速钻

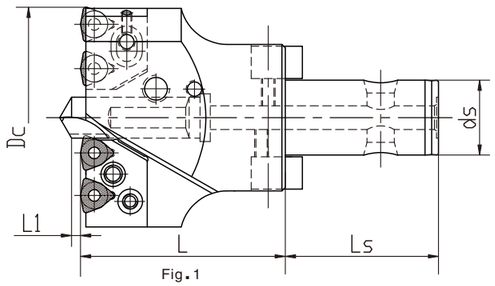
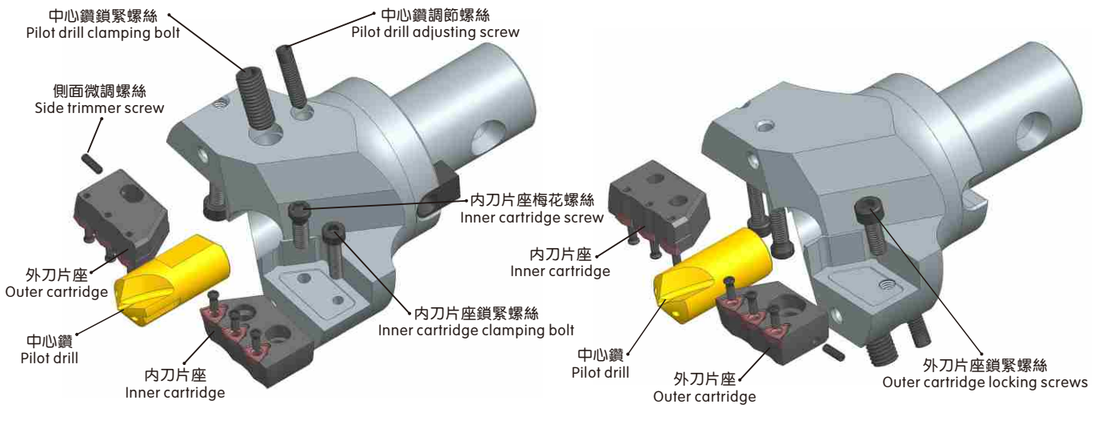
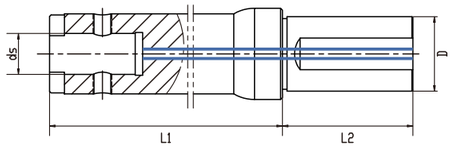


Fig.1

型號 Specification/Item	尺寸 Size					内刀片座(螺絲)		外刀片座(螺絲)		適用刀片 Insert	螺釘 Screw	扳手 Wrench	定位塊/螺絲		中心鑽 Pilot Drill	中心鑽(螺絲)	
	Dc	ds	Ls	L	L1	鎖緊	梅花	鎖緊	調節				型號	鎖緊		鎖緊	調節
YLMD-045050-C16	45-50	16	40	55	1.6	/	M5*12	M5*18	M3*6	WC..040208	M2.5*6	T8	FMB22	M4*12	PLD1035	M8*20	M5*20
YLMD-050055-C16	50-55	16	40	55	1.6	/	M5*12	M5*18	M3*6				FMB22	M4*12		M8*20	M5*20
YLMD-055060-C22	55-60	22	45	60	1.6	/	M5*12	M5*18	M3*6				FMB22	M4*12	PLD1238	M8*20	M5*20
YLMD-060065-C22	60-65	22	45	60	1.8	M4*16	M5*16	M5*18	M3*6	WC..050308	M3*7		FMB22	M4*12		M8*20	M5*20
YLMD-065070-C22	65-70	22	45	60	1.8	M4*16	M5*16	M5*18	M3*6				FMB22	M4*12		M8*20	M5*20
YLMD-070075-C22	70-75	22	45	60	1.8	M4*16	M5*16	M5*18	M3*6				FMB22	M4*12		M8*20	M5*20
YLMD-075080-C28	75-80	28	50	65	2.2	M5*18	M6*16	M6*20	M3*8	WC..06T308	M3.5*8.5	T15	FMB22	M4*12	PLD1645	M10*20	M6*20
YLMD-080085-C28	80-85	28	50	65	2.2	M5*18	M6*16	M6*20	M3*8				FMB22	M4*12		M10*20	M6*20
YLMD-085090-C28	85-90	28	50	65	2.2	M5*18	M6*16	M6*20	M3*8				FMB22	M4*12		M10*20	M6*20
YLMD-090095-C28	90-95	28	50	65	2.2	M5*18	M6*16	M6*20	M3*8				FMB22	M4*12		M10*20	M6*20
YLMD-095100-C28	95-100	28	50	65	2.2	M5*18	M6*16	M6*20	M3*8				FMB22	M4*12		M10*20	M6*20
YLMD-100105-C36	100-105	36	55	70	2.4	M5*18	M6*16	M6*20	M3*8	WC..050308	M3*7	T8	FMB27	M5*16	PLD2045	M12*20	M8*20
YLMD-105110-C36	105-110	36	55	70	2.4	M5*18	M6*16	M6*20	M3*8				FMB27	M5*16		M12*20	M8*20
YLMD-110115-C36	110-115	36	55	70	2.4	M5*18	M6*16	M6*20	M3*8				FMB27	M5*16		M12*20	M8*20
YLMD-115120-C40	115-120	40	60	76	2.4	M5*18	M6*16	M6*20	M3*10	WC..06T308	M3.5*8.5	T15	FMB32	M6*16		M12*20	M8*20
YLMD-120125-C40	120-125	40	60	76	3.2	M5*18	M6*16	M6*20	M3*10				FMB32	M6*16		M12*20	M8*20
YLMD-125130-C40	125-130	40	60	76	3.2	M5*18	M6*16	M6*20	M3*10				FMB32	M6*16		M12*20	M8*20
YLMD-130135-C40	130-135	40	60	76	3.2	M5*18	M6*16	M6*20	M3*10				FMB32	M6*16		M12*20	M8*20
YLMD-135140-C40	135-140	40	60	76	3.2	M5*18	M6*16	M6*20	M3*10				FMB32	M6*16		M12*20	M8*20
YLMD-140150-C50	140-150	50	60	98	3.2	M5*18	M6*16	M6*20	M3*10	WC..080412	M4*10		FMB40	M6*16	PLD2556	M12*20	M8*20
YLMD-150160-C50	150-160	50	60	98	3.2	M5*18	M6*16	M6*20	M3*10				FMB40	M6*16		M12*20	M8*20
YLMD-160170-C50	160-170	50	60	98	3.2	M5*18	M6*16	M6*20	M3*10				FMB40	M6*16		M12*20	M8*20
YLMD-170180-C50	170-180	50	60	98	3.2	M5*18	M6*16	M6*20	M3*10				FMB40	M6*16		M12*20	M8*20



YLMD HOLDER & PILOT DRILL
YLMD刀柄&中心钻

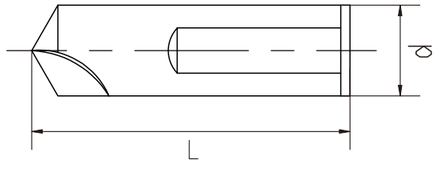


型號 Specification/Item	數據 Data			
	D	L2	L1	ds
C40-D16-125	40	70	125	16
C40-D16-165	40	70	165	16
C40-D16-205	40	70	205	16
C40-D22-125	40	70	125	22
C40-D22-165	40	70	165	22
C40-D22-205	40	70	205	22
C40-D22-255	40	70	255	22
C40-D22-305	40	70	305	22
C40-D22-355	40	70	355	22
C40-D28-125	40	70	125	28
C40-D28-165	40	70	165	28
C40-D28-205	40	70	205	28
C40-D28-255	40	70	255	28
C40-D28-305	40	70	305	28
C40-D28-355	40	70	355	28
C40-D28-405	40	70	405	28
C40-D36-125	40	70	125	36
C40-D36-165	40	70	165	36
C40-D36-205	40	70	205	36

型號 Specification/Item	數據 Data			
	D	L2	L1	ds
C40-D36-255	40	70	255	36
C40-D36-305	40	70	305	36
C40-D36-355	40	70	355	36
C40-D36-405	40	70	405	36
C50-D40-125	50	80	125	40
C50-D40-165	50	80	165	40
C50-D40-205	50	80	205	40
C50-D40-255	50	80	255	40
C50-D40-305	50	80	305	40
C50-D40-355	50	80	355	40
C50-D40-405	50	80	405	40
C50-D50-125	50	80	125	50
C50-D50-165	50	80	165	50
C50-D50-205	50	80	205	50
C50-D50-255	50	80	255	50
C50-D50-305	50	80	305	50
C50-D50-355	50	80	355	50
C50-D50-405	50	80	405	50

▲ 使用時要堵住螺紋孔，防止漏水。
使用內冷時，請用堵頭堵住出水孔。
Plug the thread hole when using to prevent water leakage. When using internal cooling, plug the water outlet hole with a plug

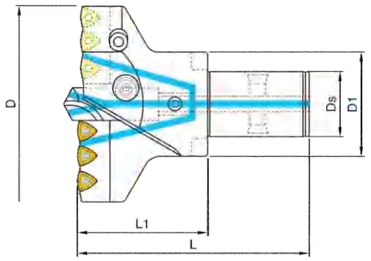
◎ 中心鑽 PILOT DRILL



◎ The hole tolerance of U Drill

型號 Specification/Item	數據 Data	
	D	L
PLD-0620	06	20
PLD-0825	08	25
PLD-1035	10	35
PLD-1238	12	38
PLD-1645	16	45
PLD-2045	20	45
PLD-2556	25	56

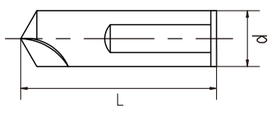
V- MAX DRILL
VMD 带定心大直径快速钻



◎ Mx模塊化柄型 MX Modular Shank Type

型號 Specification/Item	尺寸 Size					中心鑽 Pilot Drill	配套刀片座 Cartridge	適用刀片 Insert	部件 Component	
	D	Ds	D1	L1	L				螺釘 Screw	扳手 Wrench
VMD-045050	45-50	13	28	50	85	PLD-V1035 TiN-H	VMC-045050N/T	WCMX030208	TSB-22045	T6
VMD-050055	50-55	13	28	50	85		VMC-050055N/T		TSB-22045	T6
VMD-055060	55-60	16	32	60	100	PLD-V1238 TiN-H	VMC-055060N/T	WCMX040208	TSB-22045	T8
VMD-060065	60-65	16	32	60	100		VMC-060065N/T	WCMX050308	TSB-30070	T8
VMD-065070	65-70	16	32	60	100		VMC-065070N/T		TSB-30070	T8
VMD-070075	70-75	22	40	70	115		VMC-070075N/T		TSB-30070	T8
VMD-075080	75-80	22	40	70	115	PLD-V1645 TiN-H	VMC-075080N/T	WCMX06T308	TSB-35090	T15
VMD-080085	80-85	22	40	70	115		VMC-080085N/T		TSB-35090	T15
VMD-085090	85-90	27	48	70	120		VMC-085090N/T		TSB-35090	T15
VMD-090095	90-95	27	48	70	120		VMC-090095N/T		TSB-35090	T15
VMD-095100	95-100	27	48	70	120		VMC-095100N/T		TSB-35090	T15
VMD-100105	100-105	32	58	80	130	PLD-V2045 TiN-H	VMC-100105N/T	WCMX050308	TSB-30070	T8
VMD-105110	105-110	32	58	80	130		VMC-105110N/T	WCMX06T308	TSB-35090	T15
VMD-110115	110-115	32	58	80	130		VMC-110115N/T		TSB-35090	T15
VMD-115120	115-120	40	70	90	145		VMC-115120N/T		TSB-35090	T15
VMD-120125	120-125	40	70	90	145	PLD-V2556 TiN-H	VMC-120125N/T		TSB-35090	T15
VMD-125130	125-130	40	70	90	145		VMC-125130N/T		TSB-35090	T15
VMD-130135	130-135	40	70	90	145		VMC-130135N/T		TSB-35090	T15
VMD-135140	135-140	40	70	90	145		VMC-135140N/T		TSB-35090	T15
VMD-140150	140-150	50	80	100	160		VMC-140150N/T	WCMX080408	TSB-40110	T15
VMD-150160	150-160	50	80	100	160		VMC-150160N/T		TSB-40110	T15
VMD-160170	160-170	50	80	100	160	PLD-V3068 TiN-H	VMC-160170N/T		TSB-40110	T15
VMD-170180	170-180	50	80	100	160		VMC-170180N/T		TSB-40110	T15

◎ 中心鑽 PILOT DRILL



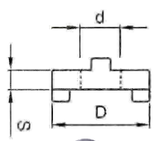
型號 Specification/Item	尺寸 Size(mm)	
	D	L
PLD-V1035 TiN-H	10	35
PLD-V1238 TiN-H	12	38
PLD-V1645 TiN-H	16	45
PLD-2045 TiN-H	20	45
PLD-2556 TiN-H	25	56
PLD-3068 TiN-H	30	68

V- MAX DRILL
VMD 带定心大直径快速钻

◎ Mx模塊化刀座 MX Modular Shank Type

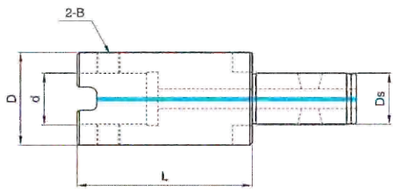
鑽孔範圍 Drilling Range	內刀座 inner	外刀座 Outer	適用刀片 Insert	安裝刀片數量 No.of Insert	部件 Component	
					螺釘 Screw	扳手 Wrench
45-50	VMC-045050N	VMC-045050T	WCMX030208	2	TSB-22045	T6
50-55	VMC-050055N	VMC-050055T			TSB-22045	T6
55-60	VMC-055060N	VMC-055060T	WCMX040208	2	TSB-22045	T8
60-65	VMC-060065N	VMC-060065T	WCMX050308	2	TSB-30070	T8
65-70	VMC-065070N	VMC-065070T			TSB-30070	T8
70-75	VMC-070075N	VMC-070075T			TSB-30070	T8
75-80	VMC-075080N	VMC-075080T	WCMX06T308	2	TSB-35090	T15
80-85	VMC-080085N	VMC-080085T			TSB-35090	T15
85-90	VMC-085090N	VMC-085090T			TSB-35090	T15
90-95	VMC-090095N	VMC-090095T			TSB-35090	T15
95-100	VMC-095100N	VMC-095100T			TSB-35090	T15
100-105	VMC-100105N	VMC-100105T	WCMX050308	3	TSB-30070	T8
105-110	VMC-105110N	VMC-105110T	WCMX06T308	3	TSB-35090	T15
110-115	VMC-110115N	VMC-110115T			TSB-35090	T15
115-120	VMC-115120N	VMC-115120T			TSB-35090	T15
120-125	VMC-120125N	VMC-120125T			TSB-35090	T15
125-130	VMC-125130N	VMC-125130T			TSB-35090	T15
130-135	VMC-130135N	VMC-130135T			TSB-35090	T15
135-140	VMC-135140N	VMC-135140T			TSB-35090	T15
140-150	VMC-140150N	VMC-140150T	WCMX080408	3	TSB-40110	T15
150-160	VMC-150160N	VMC-150160T			TSB-40110	T15
160-170	VMC-160170N	VMC-160170T			TSB-40110	T15
170-180	VMC-170180N	VMC-170180T			TSB-40110	T15

◎ 驅動環 DRIVE RING



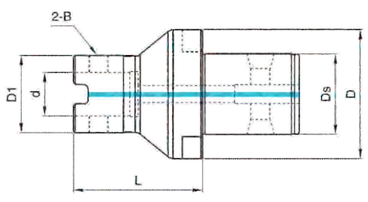
型號 Specification/Item	尺寸 Size(mm)		
	D	d	S
DVR-281310	28	13	10
DVR-321610	32	16	10
DVR-402212	40	22	12
DVR-482712	48	27	12
DVR-583214	58	32	14
DVR-704014	70	40	14
DVR-805016	80	50	16

V- MAX DRILL
MXB/MXB連接杆



◎ 連接杆MXB/ MX Extension

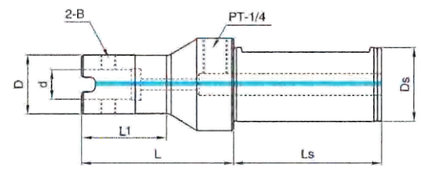
鑽孔範圍 Drilling Range	尺寸 Size				B	驅動環 Drive Ring
	D	d	L	Ds		
MXB-2813115	28	13	115	13	MTB-08115	DVR-281310
MXB-2813150			150			
MXB-2813200			200			
MXB-2813300			300			
MXB-3216115	32	16	115	16		DVR-321610
MXB-3216200			200			
MXB-3216300			300			
MXB-4022113	40	22	113	22	MTB-10145	DVR-402212
MXB-4022200			200			
MXB-4022300			300			
MXB-4827113	48	27	113	27	MTB-12175	DVR-472712
MXB-4827200			200			
MXB-4827300			300			
MXB-5832186	58	32	186	32	MTB-12195	DVR-583214
MXB-5832300			300			
MXB-7040186	70	40	186	40	MTB-16260	DVR-704014
MXB-7040300			300			
MXB-7040500			500			
MXB-8050204	80	50	204	50		DVR-805016
MXB-8050300			300			
MXB-8050500			500			



◎ 連接杆MXR/ MX Reducer

型號 Specification/Item	尺寸 Size					B	D1/Drive Ring	D/Drive Ring
	Ds	d	L	D	D1			
MXR-1613100	16	13	100	32	28	MXB-08115	DVR-281310	DVR-321610
MXR-2216100	22	16	100	40	32	MXB-08115	DVR-321610	DVR-402212
MXR-2722100	27	22	100	48	40	MXB-10145	DVR-402212	DVR-482712
MXR-3213100	32	13	100	58	28	MXB-08115	DVR-281310	DVR-583214
MXR-3216100	32	16	100	58	32	MXB-08115	DVR-321610	DVR-583214
MXR-3222100	32	22	100	58	40	MXB-10145	DVR-402212	DVR-583214
MXR-3227100	32	27	100	58	48	MXB-12175	DVR-482712	DVR-583214
MXR-4032100	40	32	100	70	58	MXB-12195	DVR-583214	DVR-704014
MXR-5013080	50	13	80	80	28	MXB-08115	DVR-281310	DVR-805016
MXR-5016080	50	16	80	80	32	MXB-08115	DVR-321610	DVR-805016
MXR-5022080	50	22	80	80	40	MXB-10145	DVR-402212	DVR-805016
MXR-5027080	50	27	80	80	48	MXB-12175	DVR-482712	DVR-805016
MXR-5032080	50	32	80	80	58	MXB-12195	DVR-583214	DVR-805016
MXR-5040150	50	40	150	80	70	MXB-16260	DVR-704014	DVR-805016

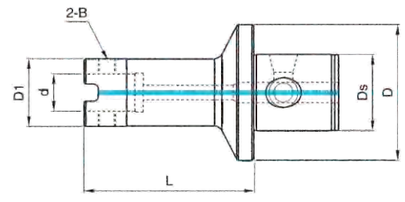
V- MAX DRILL
MXA/MXE連接杆



◎ 連接杆MXA/ MX+Cylindrical Adaptor

型號 Specification/Item	尺寸 Size						B	驅動環 Drive Ring
	Ds	d	L	L1	D	Ls		
MXA-3213115	32	13	115	77	28	70	MTB-08115	DVR-281310
MXA-3213200		13	200	165	28			
MXA-3213300		13	300	265	28			
MXA-4016125	40	16	125	86	32	80		DVR-321610
MXA-1016200		16	200	161	32			
MXA-4016300		16	300	261	32			
MXA-4022148		22	148	109	40		MTB-10145	DVR-402212
MXA-4022200		22	200	161	40			
MXA-4022300		22	300	261	40			
MXA-4027168		27	168	133	48		MTB-12175	DVR-472712
MXA-4027300		27	300	265	48			
MXA-4032186		32	186	151	58		MTB-12195	DVR-583214
MXA-4032300		32	300	265	58			
MXA-W5040186	50	40	186	151	70		MTB-16260	DVR-704014
MXA-W5040300		40	300	265	70			
MXA-W5050184		50	184	149	80			DVR-805016
MXA-W5050300		50	300	265	80			

※It is a Adaptor that converts the MX modular system to Side loick Type.



◎ 連接杆MXE/ MX+EXT Adaptorr

型號 Specification/Item	尺寸 Size					B	D1/Drive Ring
	Ds	d	L	D	D1		
MXE-3613100	36	13	100	63	28	MXB-08115	DVR-281310
MXE-3616100		16			32	MXB-08115	DVR-321610
MXE-3622100		22			40	MXB-10145	DVR-402212
MXE-3627100		13			28	MXB-12175	DVR-482712
MXE-3632100		16			32	MXB-12195	DVR-583214
MXE-4513100	45	22		80	40	MXB-08115	DVR-281310
MXE-4516100		27			48	MXB-08115	DVR-321610
MXE-4522100		32			58	MXB-10145	DVR-402212
MXE-4527100		13			28	MXB-12175	DVR-482712
MXE-4532100		16			32	MXB-12195	DVR-583214

※ It is a Adaptor that converts the MX modular system to EXT modular system.

TRACK DRILL
轨道钻

型號 Specification/Item	尺寸 Size					適用刀片 Insert
	D	D1	l	L	d	
420-28	28	13	60	137	32	WCMX06...
420-30	30	13	60	137	32	WCMX06...
420-32	32	13	60	137	32	WCMX06...
420-36	36	13	60	137	32	WCMX06...
422-22	22	–	60	137	32	WCMX05...
459-22	22	3.2	60	137	32	WCMX05...

型號 Specification/Item	尺寸 Size				適用刀片 Insert
	D	l	L	d	
424-25	25	60	137	32	WCMX06...
424-26	26	60	137	32	WCMX06...
424-28	28	60	137	32	WCMX06...
424-30	30	60	137	32	WCMX06...
424-32	32	60	137	32	WCMX06...
424-34	34	60	137	32	WCMX06...
424-36	36	60	137	32	WCMX06...
469-22	22	60	137	32	WCMX05...

型號 Specification/Item	尺寸 Size				適用刀片 Insert
	D	D1	l	L	
315-28	28	16.7	124	195	WCMX05...
315-30	30	16.7	124	195	WCMX05...
315-32	32	16.7	124	195	WCMX05...
315-36	36	16.7	124	195	WCMX05...
330-22	22	3.2	124	195	WCMX05...

InDexable Insert Drill Cutting Condition
U钻切削条件表

◎ 加工狀況良好，切削參數可增加1.5–2倍

◎ 推薦切削條件（2D~3D）Recommended Cutting Conditions (2D~3D)

(下限值 – **推薦值** – 上限值)
Minimum value–Recommended value–Maximum value

	被加工材料 Work Material		工件硬度 Hardness of Workpiece HB	推薦斷屑槽 Recommerded Chipbreaker	推薦刀片材質 Recommended Insert Grade	Vc切削速度 Cutting Speed (m/min)	F進給量Feed Rate（mm/rev）				
							ϕ 13.0~ ϕ 18.0	ϕ 18.5~ ϕ 29.0	ϕ 29.5~ ϕ 36.0	ϕ 37.0~ ϕ 55.0	ϕ 56.0~ ϕ 68.0
2D P	钢 Carbon Steel	A3钢/SS400	125	G	ACP300	105–**155**–205	0.04–**0.07**–0.09	0.04–**0.07**–0.09	0.04–**0.07**–0.10	0.04–**0.07**–0.11	0.05–**0.08**–0.12
	"	15#鋼/S15C	125	L	ACP300	115–**145**–190	0.03–**0.07**–0.11	0.03–**0.07**–0.11	0.03–**0.07**–0.12	0.05–**0.10**–0.14	0.06–**0.11**–0.16
	"	45#鋼/S45C Hardened	190	G	ACP300	85–**130**–170	0.07–**0.12**–0.22	0.07–**0.12**–0.22	0.07–**0.13**–0.24	0.08–**0.15**–0.27	0.09–**0.16**–0.30
	"	45#鋼淬火/S45C	250	G	ACP300	70–**105**–140	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.07–**0.13**–0.22
	"	60#鋼/S75C	270	G	ACP300	85–**115**–140	0.07–**0.12**–0.20	0.07–**0.12**–0.20	0.07–**0.13**–0.21	0.08–**0.15**–0.24	0.09–**0.16**–0.27
	"	60#鋼淬火/S75C Hardened	300	G	ACP300	60–**85**–120	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	低合金钢 Low Alloy Steel	20crmo~42crmo/SCM,SNCM	180	L	ACP300	85–**120**–155	0.04–**0.09**–0.13	0.04–**0.07**–0.13	0.04–**0.07**–0.15	0.05–**0.08**–0.16	0.06–**0.09**–0.18
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	275	G	ACP300	70–**105**–140	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	300	G	ACP300	65–**95**–120	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	350	G	ACP300	55–**75**–95	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	高合金钢 High Alloy Steel	高速鋼和合金工具鋼/SKD,SKT,SKH	200	G	ACP300	85–**115**–140	0.07–**0.12**–0.22	0.07–**0.12**–0.22	0.07–**0.13**–0.24	0.08–**0.15**–0.27	0.09–**0.16**–0.30
	"	高速鋼和合金工具鋼淬火/SKD,SKT,SKH	325	G	ACP300	70–**85**–105	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.07–**0.13**–0.22
M	不锈钢 Stainless Steel	405–440及其他 (马氏体系/铁素体系) SUS403 and other's(Martenste/Ferrite)	200	G	ACP300	85–**120**–155	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.08–**0.13**–0.22
	"	405–440及其他 马氏体系 (淬火) SUS403 and other's Martensitic (Hardened)	240	G	ACP300	80–**105**–130	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.08–**0.13**–0.22
	"	304–316 奥氏体系 SUS304, SUS316 Austenitic	180	G	ACP300	85–**120**–155	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.08–**0.13**–0.22
K	铸铁 Cast Iron			H	ACK300	105–**140**–170	0.08–**0.19**–0.30	0.09–**0.20**–0.34	0.10–**0.22**–0.37	0.11–**0.24**–0.41	0.12–**0.27**–0.45
	球墨铸铁 Ductile Cast Iron			H	ACK300	80–**105**–130	0.08–**0.19**–0.30	0.09–**0.20**–0.34	0.10–**0.22**–0.37	0.11–**0.24**–0.41	0.12–**0.27**–0.45
S	难削材(耐热合金、超合金、钛合金etc.) Exotic Alloy (Heat Resistant Alloy, super Alloy, Ti Alloy, etc.)		200	G	ACP300	25–**45**–60	0.05–**0.10**–0.17	0.05–**0.10**–0.17	0.05–**0.11**–0.18	0.06–**0.12**–0.20	0.07–**0.13**–0.22
N	铝合金 Aluminlum Alloy			G	DL1500	170–**225**–275	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	铜合金 Copper Alloy			G	DL1500	155–**200**–240	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20

It the first recommended insert grades for P and K , In such cases, Please use a cutting speed vc of 130% in the table above and a feed rate of 75% for the recommended cutting conditions.

	被加工材料 Work Material		工件硬度 Hardness of Workpiece HB	推薦斷屑槽 Recommerded Chipbreaker	推薦刀片材質 Recommended Insert Grade	Vc切削速度 Cutting Speed (m/min)	F進給量Feed Rate（mm/rev）				
							ϕ 13.0~ ϕ 18.0	ϕ 18.5~ ϕ 29.0	ϕ 29.5~ ϕ 36.0	ϕ 37.0~ ϕ 55.0	ϕ 56.0~ ϕ 68.0
3D P	钢 Carbon Steel	A3钢/SS400	125	G	ACP300	105–**155**–205	0.04–**0.06**–0.09	0.04–**0.06**–0.09	0.04–**0.07**–0.10	0.04–**0.07**–0.11	0.05–**0.08**–0.12
	"	15#鋼/S15C	125	L	ACP300	115–**145**–190	0.03–**0.06**–0.09	0.03–**0.06**–0.09	0.03–**0.07**–0.10	0.04–**0.08**–0.11	0.05–**0.09**–0.12
	"	45#鋼/S45C Hardened	190	G	ACP300	85–**130**–170	0.07–**0.11**–0.19	0.07–**0.11**–0.19	0.07–**0.12**–0.20	0.08–**0.13**–0.22	0.09–**0.15**–0.25
	"	45#鋼淬火/S45C	250	G	ACP300	70–**105**–140	0.06–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.15	0.06–**0.11**–0.17	0.07–**0.12**–0.19
	"	60#鋼/S75C	270	G	ACP300	85–**115**–140	0.08–**0.11**–0.17	0.07–**0.11**–0.17	0.07–**0.12**–0.18	0.08–**0.13**–0.20	0.09–**0.15**–0.22
	"	60#鋼淬火/S75C Hardened	300	G	ACP300	60–**85**–120	0.06–**0.09**–0.13	0.05–**0.09**–0.13	0.05–**0.10**–0.14	0.06–**0.11**–0.16	0.07–**0.12**–0.18
	低合金钢 Low Alloy Steel	20crmo~42crmo/SCM,SNCM	180	L	ACP300	85–**120**–155	0.04–**0.06**–0.11	0.04–**0.06**–0.11	0.04–**0.07**–0.12	0.05–**0.07**–0.14	0.06–**0.08**–0.15
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	275	G	ACP300	70–**105**–140	0.05–**0.09**–0.13	0.05–**0.09**–0.13	0.05–**0.10**–0.14	0.06–**0.11**–0.16	0.07–**0.12**–0.18
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	300	G	ACP300	65–**95**–120	0.05–**0.09**–0.13	0.05–**0.09**–0.13	0.05–**0.10**–0.14	0.06–**0.11**–0.16	0.07–**0.12**–0.18
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	350	G	ACP300	55–**75**–95	0.05–**0.09**–0.13	0.05–**0.09**–0.13	0.05–**0.10**–0.14	0.06–**0.11**–0.16	0.07–**0.12**–0.18
	高合金钢 High Alloy Steel	高速鋼和合金工具鋼/SKD,SKT,SKH	200	G	ACP300	85–**115**–140	0.07–**0.11**–0.19	0.07–**0.11**–0.19	0.07–**0.12**–0.20	0.08–**0.13**–0.22	0.09–**0.15**–0.25
	"	高速鋼和合金工具鋼淬火/SKD,SKT,SKH	325	G	ACP300	70–**85**–105	0.05–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.15	0.06–**0.11**–0.17	0.07–**0.12**–0.19
M	不锈钢 Stainless Steel	405–440及其他 (马氏体系/铁素体系) SUS403 and other's(Martenste/Ferrite)	200	G	ACP300	85–**120**–155	0.05–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.10	0.06–**0.11**–0.17	0.07–**0.12**–0.19
	"	405–440及其他 马氏体系 (淬火) SUS403 and other's Martensitic (Hardened)	240	G	ACP300	80–**105**–130	0.05–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.15	0.06–**0.11**–0.17	0.07–**0.12**–0.19
	"	304–316 奥氏体系 SUS304, SUS316 Austenitic	180	G	ACP300	85–**120**–155	0.05–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.15	0.06–**0.11**–0.17	0.07–**0.12**–0.19
K	铸铁 Cast Iron			H	ACK300	105–**140**–170	0.08–**0.17**–0.25	0.09–**0.19**–0.28	0.10–**0.20**–0.30	0.11–**0.22**–0.34	0.12–**0.24**–0.38
	球墨铸铁 Ductile Cast Iron			H	ACK300	80–**105**–130	0.08–**0.17**–0.25	0.09–**0.19**–0.28	0.10–**0.20**–0.30	0.11–**0.22**–0.34	0.12–**0.24**–0.38
S	难削材(耐热合金、超合金、钛合金etc.) Exotic Alloy (Heat Resistant Alloy, super Alloy, Ti Alloy, etc.)		200	G	ACP300	25–**45**–60	0.05–**0.09**–0.14	0.05–**0.09**–0.14	0.05–**0.10**–0.15	0.06–**0.11**–0.17	0.07–**0.12**–0.19
N	铝合金 Aluminlum Alloy			G	DL1500	170–**225**–275	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20
	铜合金 Copper Alloy			G	DL1500	155–**200**–240	0.05–**0.10**–0.16	0.05–**0.10**–0.16	0.05–**0.11**–0.17	0.06–**0.12**–0.19	0.07–**0.13**–0.20

It the first recommended insert grades for P and K , In such cases, Please use a cutting speed vc of 130% in the table above and a feed rate of 75% for the recommended cutting conditions.

InDexable Insert Drill Cutting Condition
U钻切削条件表

◎ 加工狀況良好，切削參數可增加1.5–2倍

◎ 推薦切削條件（4D~5D）Recommended Cutting Conditions (4D~5D)

(下限值 – **推薦值** – 上限值)
Minimum value–Recommended value–Maximum value

	被加工材料 Work Material		工件硬度 Hardness of Workpiece HB	推薦斷屑槽 Recommerded Chipbreaker	推薦刀片材質 Recommended Insert Grade	Vc切削速度 Cutting Speed (m/min)	F進給量Feed Rate（mm/rev）				
							ϕ 13.0~ ϕ 18.0	ϕ 18.5~ ϕ 29.0	ϕ 29.5~ ϕ 36.0	ϕ 37.0~ ϕ 55.0	ϕ 56.0~ ϕ 68.0
4D P	钢 Carbon Steel	A3钢/SS400	125	G	ACP300	105–**155**–205	0.04–**0.06**–0.09	0.04–**0.06**–0.09	0.04–**0.06**–0.09	0.04–**0.07**–0.09	0.05–**0.08**–0.10
	"	15#鋼/S15C	125	L	ACP300	115–**145**–190	0.03–**0.06**–0.08	0.03–**0.06**–0.08	0.03–**0.06**–0.08	0.04–**0.07**–0.09	0.05–**0.08**–0.10
	"	45#鋼/S45C Hardened	190	G	ACP300	85–**130**–170	0.07–**0.10**–0.16	0.07–**0.10**–0.16	0.07–**0.11**–0.17	0.08–**0.13**–0.20	0.09–**0.14**–0.21
	"	45#鋼淬火/S45C	250	G	ACP300	70–**105**–140	0.05–**0.09**–0.12	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
	"	60#鋼/S75C	270	G	ACP300	85–**115**–140	0.07–**0.10**–0.14	0.07–**0.10**–0.14	0.07–**0.11**–0.16	0.08–**0.13**–0.18	0.09–**0.14**–0.19
	"	60#鋼淬火/S75C Hardened	300	G	ACP300	60–**85**–120	0.05–**0.09**–0.11	0.05–**0.09**–0.11	0.05–**0.09**–0.12	0.06–**0.10**–0.13	0.07–**0.11**–0.15
	低合金钢 Low Alloy Steel	20crmo~42crmo/SCM,SNCM	180	L	ACP300	85–**120**–155	0.04–**0.06**–0.09	0.04–**0.06**–0.09	0.04–**0.06**–0.10	0.05–**0.07**–0.11	0.06–**0.08**–0.13
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	275	G	ACP300	70–**105**–140	0.05–**0.09**–0.11	0.05–**0.09**–0.11	0.05–**0.09**–0.12	0.06–**0.10**–0.13	0.07–**0.11**–0.15
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	300	G	ACP300	65–**95**–120	0.05–**0.09**–0.11	0.05–**0.09**–0.11	0.05–**0.09**–0.12	0.06–**0.10**–0.13	0.07–**0.11**–0.15
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	350	G	ACP300	55–**75**–95	0.05–**0.09**–0.11	0.05–**0.09**–0.11	0.05–**0.09**–0.12	0.06–**0.10**–0.13	0.07–**0.11**–0.15
	高合金钢 High Alloy Steel	高速鋼和合金工具鋼/SKD,SKT,SKH	200	G	ACP300	85–**115**–140	0.07–**0.10**–0.16	0.07–**0.10**–0.16	0.07–**0.11**–0.17	0.08–**0.13**–0.20	0.09–**0.14**–0.21
	"	高速鋼和合金工具鋼淬火/SKD,SKT,SKH	325	G	ACP300	70–**85**–105	0.05–**0.09**–0.12	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
M	不锈钢 Stainless Steel	405–440及其他 (马氏体系/铁素体系) SUS403 and other's(Martenste/Ferrite)	200	G	ACP300	85–**120**–155	0.05–**0.09**–0.12	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
	"	405–440及其他 马氏体系 (淬火) SUS403 and other's Martensitic (Hardened)	240	G	ACP300	80–**105**–130	0.05–**0.09**–0.12	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
	"	304–316 奥氏体系 SUS304, SUS316 Austenitic	180	G	ACP300	85–**120**–155	00.05–**0.09**–0.12	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
K	铸铁 Cast Iron			H	ACK300	105–**140**–170	0.08–**0.16**–0.21	0.09–**0.18**–0.24	0.10–**0.20**–0.26	0.11–**0.21**–0.29	0.12–**0.23**–0.32
	球墨铸铁 Ductile Cast Iron			H	ACK300	80–**105**–130	0.08–**0.16**–0.21	0.09–**0.18**–0.24	0.10–**0.20**–0.26	0.11–**0.21**–0.29	0.12–**0.23**–0.32
S	难削材(耐热合金、超合金、钛合金etc.) Exotic Alloy (Heat Resistant Alloy, super Alloy, Ti Alloy, etc.)		200	G	ACP300	25–**45**–60	0.06–**0.10**–0.13	0.05–**0.09**–0.12	0.05–**0.09**–0.13	0.06–**0.10**–0.14	0.07–**0.11**–0.16
N	铝合金 Aluminlum Alloy			G	DL1500	170–**225**–275	0.04–**0.09**–0.14	0.04–**0.09**–0.14	0.05–**0.10**–0.15	0.05–**0.11**–0.17	0.06–**0.12**–0.19
	铜合金 Copper Alloy			G	DL1500	155–**200**–240	0.04–**0.09**–0.14	0.04–**0.09**–0.14	0.05–**0.10**–0.15	0.05–**0.11**–0.17	0.06–**0.12**–0.19

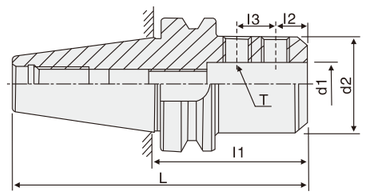
It the first recommended insert grades for P and K , In such cases, Please use a cutting speed vc of 130% in the table above and a feed rate of 75% for the recommended cutting conditions.

	被加工材料 Work Material		工件硬度 Hardness of Workpiece HB	推薦斷屑槽 Recommerded Chipbreaker	推薦刀片材質 Recommended Insert Grade	Vc切削速度 Cutting Speed (m/min)	F進給量Feed Rate（mm/rev）				
							ϕ 13.0~ ϕ 18.0	ϕ 18.5~ ϕ 29.0	ϕ 29.5~ ϕ 36.0	ϕ 37.0~ ϕ 55.0	ϕ 56.0~ ϕ 68.0
5D P	钢 Carbon Steel	A3钢/SS400	125	G	ACP300	105–**155**–205	0.04–**0.05**–0.08	0.04–**0.05**–0.08	0.04–**0.05**–0.08	0.04–**0.06**–0.08	
	"	15#鋼/S15C	125	L	ACP300	115–**145**–190	0.03–**0.05**–0.07	0.03–**0.05**–0.07	0.03–**0.05**–0.07	0.04–**0.06**–0.08	
	"	45#鋼/S45C Hardened	190	G	ACP300	85–**130**–170	0.06–**0.09**–0.14	0.06–**0.09**–0.14	0.07–**0.10**–0.16	0.08–**0.11**–0.18	
	"	45#鋼淬火/S45C	250	G	ACP300	70–**105**–140	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
	"	60#鋼/S75C	270	G	ACP300	85–**115**–140	0.06–**0.09**–0.13	0.06–**0.09**–0.13	0.07–**0.10**–0.14	0.08–**0.11**–0.16	
	"	60#鋼淬火/S75C Hardened	300	G	ACP300	60–**85**–120	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.12	
	低合金钢 Low Alloy Steel	20crmo~42crmo/SCM,SNCM	180	L	ACP300	85–**120**–155	0.04–**0.05**–0.08	0.04–**0.05**–0.08	0.04–**0.05**–0.09	0.04–**0.06**–0.10	
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	275	G	ACP300	70–**105**–140	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.12	
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	300	G	ACP300	65–**95**–120	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.12	
	"	20crmo~42crmo 淬火/SCM,SNCM Hardened	350	G	ACP300	55–**75**–95	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.12	
	高合金钢 High Alloy Steel	高速鋼和合金工具鋼/SKD,SKT,SKH	200	G	ACP300	85–**115**–140	0.06–**0.09**–0.14	0.06–**0.09**–0.14	0.07–**0.10**–0.16	0.08–**0.11**–0.18	
	"	高速鋼和合金工具鋼淬火/SKD,SKT,SKH	325	G	ACP300	70–**85**–105	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
M	不锈钢 Stainless Steel	405–440及其他 (马氏体系/铁素体系) SUS403 and other's(Martenste/Ferrite)	200	G	ACP300	85–**120**–155	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
	"	405–440及其他 马氏体系 (淬火) SUS403 and other's Martensitic (Hardened)	240	G	ACP300	80–**105**–130	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
	"	304–316 奥氏体系 SUS304, SUS316 Austenitic	180	G	ACP300	85–**120**–155	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
K	铸铁 Cast Iron			H	ACK300	105–**140**–170	0.07–**0.14**–0.20	0.08–**0.16**–0.21	0.08–**0.17**–0.23	0.10–**0.19**–0.26	
	球墨铸铁 Ductile Cast Iron			H	ACK300	80–**105**–130	0.07–**0.14**–0.20	0.08–**0.16**–0.21	0.08–**0.17**–0.23	0.10–**0.19**–0.26	
S	难削材(耐热合金、超合金、钛合金etc.) Exotic Alloy (Heat Resistant Alloy, super Alloy, Ti Alloy, etc.)		200	G	ACP300	25–**45**–60	0.04–**0.08**–0.10	0.04–**0.08**–0.10	0.05–**0.08**–0.11	0.05–**0.09**–0.13	
N	铝合金 Aluminlum Alloy			G	DL1500	170–**225**–275	0.04–**0.09**–0.14	0.04–**0.09**–0.14	0.05–**0.10**–0.15	0.05–**0.11**–0.17	
	铜合金 Copper Alloy			G	DL1500	155–**200**–240	0.04–**0.09**–0.14	0.04–**0.09**–0.14	0.05–**0.10**–0.15	0.05–**0.11**–0.17	

It the first recommended insert grades for P and K , In such cases, Please use a cutting speed vc of 130% in the table above and a feed rate of 75% for the recommended cutting conditions.

Weldon Tool Holder
側固式刀柄

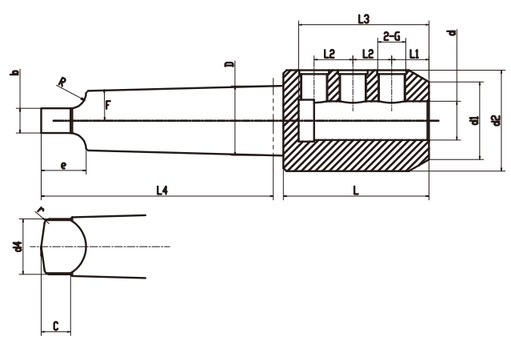
BT-SLA Weldon Tool Holder
BT-SLA側固式刀柄



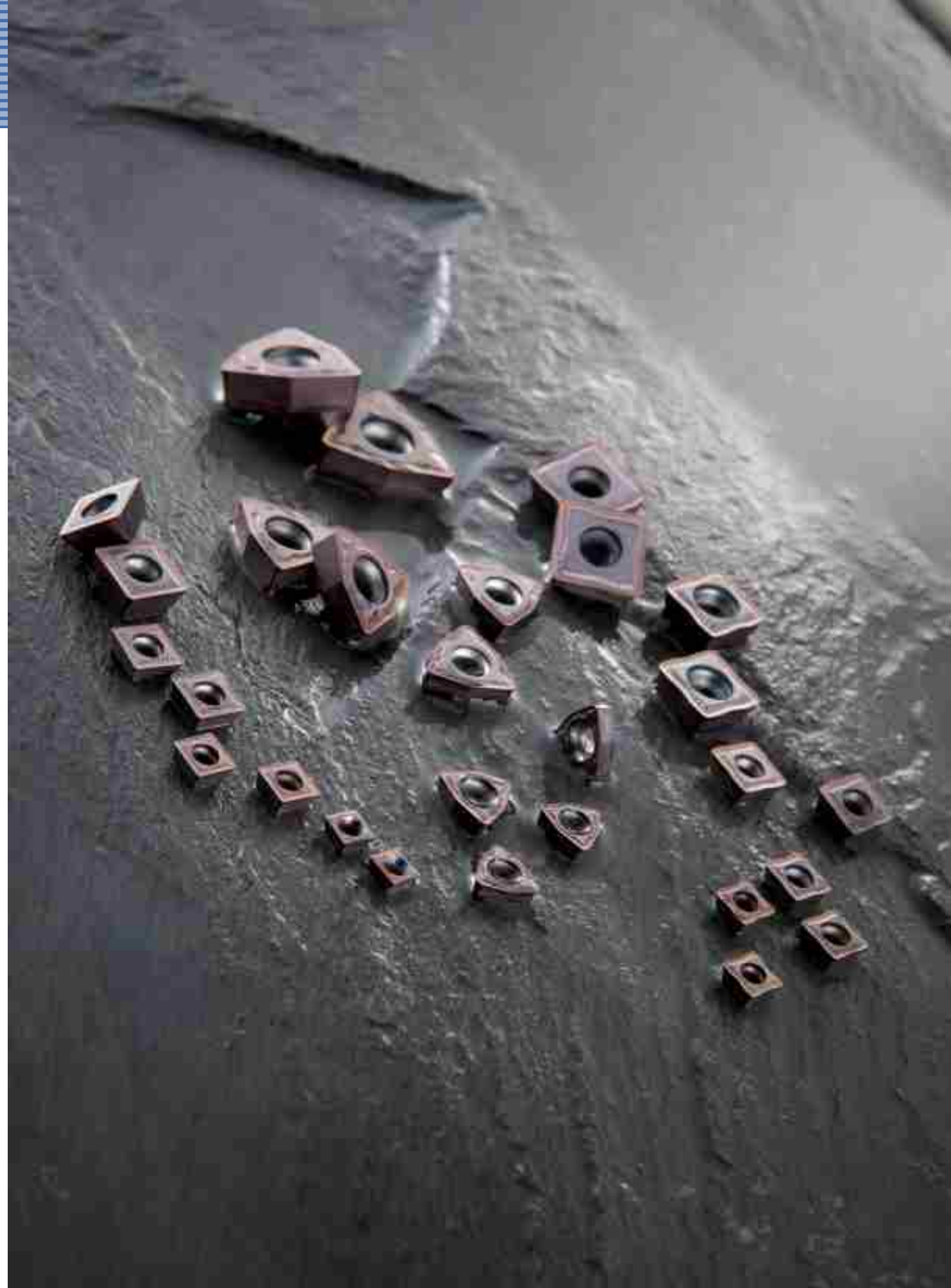
型號Cat.No		d1	d2	l1	l2	l3	T
BT40	-SLA20-75	20	52	75	25	20	M16×2.0P
	-SLA25-90	25	65	90	30	22	
	-SLA32-90	32	72		30	22	
	-SLA40-100	40	90	100	35	25	
BT50	-SLA20-90	20	52	90	25	20	M16×2.0P
	-SLA25-105	25	60	105	30	22	M16×2.0P
	-SLA32-105	32	63	105	30	22	M16×2.0P
	-SLA40-105	40	78/90	105	35	25	M16×2.0P

※非標件可訂制 Non-standard parts can be ordered

Weldon Tool Holder
莫氏側固式刀柄

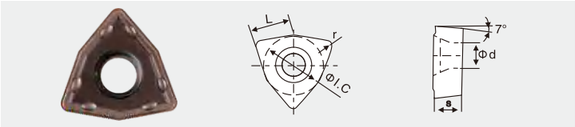


尺寸 / 規格型號	D	d	d1	d2	d4	G	F	b	C	e	L	L1	L2	L3	L4	R	r
MTA4-SLA25-80	31.27	25	38	55	24.5	M14	1:19.25	11.9	16	24	100	24	25	82	117.5	8	2.5
MTA4-SLA32-85	31.27	32	45	65	24.5	M14	1:19.25	11.9	16	24	105	24	28	86	117.5	8	2.5
MTA4-SLA40-95	31.27	40	55	75	24.5	M14	1:19.25	11.9	16	24	115	30	32	98	117.5	8	2.5
MTA5-SLA25-80	44.40	25	38	55	35.7	M14	1:19.0	15.9	19	29	100	24	25	82	149.5	12	3
MTA5-SLA32-85	44.40	32	45	65	35.7	M14	1:19.0	15.9	19	29	105	24	28	86	149.5	12	3
MTA5-SLA40-95	44.40	40	55	75	35.7	M14	1:19.0	15.9	19	29	115	30	32	98	149.5	12	3



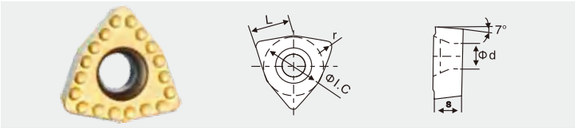
Indexable Insert Recommand
U鉆适配刀片推荐表

◎ WC系列刀片選型 / WC insert



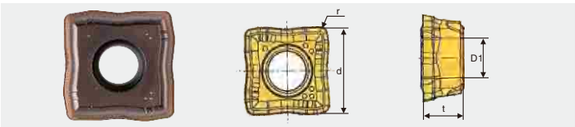
型號 Specification/Item	牌號	基本尺寸（mm）					U鑽直徑（mm）
		L	IC	s	d	r	
WCMT 020204 FN	AZ330	2.25	4.57	1.59	1.8	0.4	11–14.5
WCMT 030208 FN	AZ330	3.8	5.56	2.38	2.8	0.8	15–20.5
WCMT 040208 FN	AZ330	4.3	6.35	2.38	3.1	0.8	21–24.5
WCMT 050308 FN	AZ330	5.4	7.94	3.18	3.5	0.8	25–30.5
WCMT 06T308 FN	AZ330	6.5	9.525	3.97	3.7	0.8	31–41/63–80
WCMT 080412 FN	AZ330	8.7	12.7	4.76	4.3	1.2	42–62

◎ WC系列DS刀片（不銹鋼斷屑專用）/ WC type DS inserts（SS chip breaking）



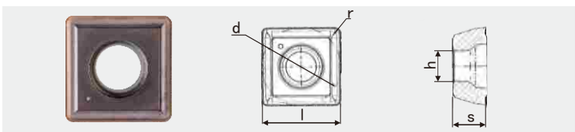
型號 Specification/Item	牌號	基本尺寸（mm）					U鑽直徑（mm）
		L	IC	s	d	r	
WCMT 030208 DS	BK9030	3.8	5.56	2.38	2.8	0.8	15–20.5
WCMT 040208 DS	BK9030	4.3	6.35	2.38	3.1	0.8	21–24.5
WCMT 050308 DS	BK9030	5.4	7.94	3.18	3.5	0.8	25–30.5
WCMT 06T308 DS	BK9030	6.5	9.525	3.97	3.7	0.8	31–41/63–80
WCMT 080412 DS	BK9030	8.7	12.7	4.76	4.3	1.2	42–62

◎ SO系列刀片選型 / SO insert



型號 Specification/Item	牌號	基本尺寸（mm）				U鑽直徑（mm）
		d	t	D1	r	
SOMT 050204 DP	AP9030	4.9	2.38	2.25	0.4	13–16
SOMT 060204 DP	AP9030	5.7	2.38	2.6	0.4	16.5–19
SOMT 070306 DP	AP9030	6.8	2.8	2.6	0.6	19.5–22
SOMT 08T306 DP	AP9030	7.9	3.97	2.85	0.6	22.5–26
SOMT 09T308 DP	AP9030	9.2	3.97	3.8	0.8	26.5–31.5
SOMT 11T308 DP	AP9030	11	3.97	3.8	0.8	32–36.5
SOMT 130408 DP	AP9030	12.8	4.4	4.4	0.8	37–43
SOMT 150510 DP	AP9030	15	4.8	5.4	1.0	44–50

◎ SP系列刀片選型 / SP insert



型號 Specification/Item	牌號	基本尺寸（mm）				U鑽直徑（mm）
		d	s	h	r	
SPGT 030104 DG	AT9030	3.5	1.4	1.9	0.4	8.5–9.5
SPGT 04T102 DG	AT9030	4	1.8	2.05	0.2	10–12.5
SPGT 050204 DG	AT9030	5	2.38	2.3	0.4	13–15.5
SPGT 060204 DG	AT9030	6	2.38	2.61	0.4	16–21.5
SPGT 07T308 DG	AT9030	7.94	3.97	2.85	0.8	22–28.5
SPGT 090408 DG	AT9030	9.8	4.3	4.05	0.8	29–34.5
SPGT 110408 DG	AT9030	11.5	4.8	4.45	0.8	35–41.5
SPGT 140512 DG	AT9030	14.3	5.2	5.75	1.2	42–50

Indexable Insert Recommand
U鉆适配刀片推荐表

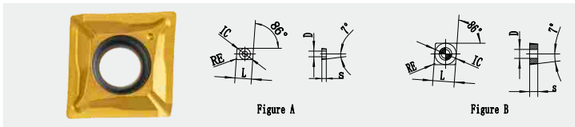
◎ SP/XO系列刀片選型/SP/XO insert

型號 Specification/Item		基本尺寸（mm）				U鑽直徑 (mm)
		d	r	s	di	
	SPMT 040204 DP	4.7	0.4	2.4	2.4	12–14
	SPMT 050204 DP	5.1	0.4	2.4	2.4	14–16
SPMT 060205 DL	SPMT 060205 DP	6.2	0.5	2.5	2.7	17–19
SPMT 07T208 DL	SPMT 07T208 DP	7.5	0.7	2.8	2.95	20–23
SPMT 090308 DL	SPMT 090308 DP	9.2	0.8	3.3	3.5	24–29
SPMT 11T308 DL	SPMT 11T308 DP	11	0.8	4	4.1	30–35
SPMT 130410 DL	SPMT 130410 DP	13	1	4.5	4.6	
SPMT 15M510 DL	SPMT 15M510 DP	15.2	1	4.98	5.65	

◎ SP/XO系列刀片選型/SP/XO insert

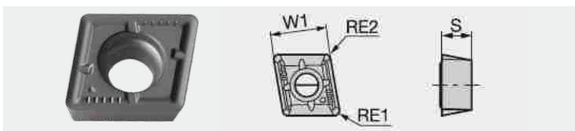
型號 Specification/Item		基本尺寸（mm）				U鑽直徑 (mm)
		d	r	s	di	
	XOMT 040204 DP	4.9	0.4	2.42	2.35	12–14
	XOMT 050204 DP	5.4	0.4	2.4	2.4	14–16
XOMT 060204 DL	XOMT 060204 DP	6.6	0.4	2.5	2.7	17–19
XOMT 07T205 DL	XOMT 07T205 DP	7.8	0.5	2.9	2.95	20–23
XOMT 090305 DL	XOMT 090305 DP	9.6	0.5	3.3	3.5	24–29
XOMT 11T306 DL	XOMT 11T306 DP	11.4	0.6	4	4.1	30–35
XOMT 130406 DL	XOMT 130406 DP	13.6	0.6	4.5	4.6	
XOMT 15M508 DL	XOMT 15M508 DP	15.9	0.8	5.04	5.65	

◎ XC系列刀片選型 / XC insert



型號 Specification/Item	基本尺寸（mm）					Figure	單刃鑽型號
	IC	L	S	RE	D		
XCMT 040104R TC	4.40	6.40	1.70	0.40	2.10	A	TCAP 08R
XCMT 040104L TC	4.40	6.40	1.70	0.40	2.10	A	TCAP 08L
XCMT 050204 TC	5.60	5.60	2.10	0.40	2.30	B	TCAP 10R
XCMT 060204 TC	6.40	6.40	2.38	0.40	2.60	B	TCAP 12R
XCMT 070304 TC	7.50	7.50	3.18	0.40	2.80	B	TCAP 14R
XCMT 080304 TC	8.40	8.40	3.18	0.40	3.40	B	TCAP 16R
XCMT 10T304 TC	10.50	10.50	3.97	0.40	4.20	B	TCAP 20R
XCMT 10T308 TC	10.50	10.50	3.97	0.80	4.20	B	TCAP 20R
XCMT 130404 TC	13.40	13.40	4.76	0.40	5.20	B	TCAP 25R
XCMT 130408 TC	13.40	13.40	4.76	0.80	5.20	B	TCAP 25R
XCMT 170508 TC	17.40	17.40	5.56	0.80	5.20	B	TCAP 32R

◎ G系列刀片選型 / G INSERT



型號 Specification/Item	牌號	基本尺寸（mm）				U鑽直徑（mm）
		W1	s	RE1	RE2	
WDXT042004–G	AP300	4.20	2.00	0.4	0.4	15
WDXT052504–G	AP300	5.00	2.50	0.4	0.4	16–18
WDXT063006–G	AP300	6.00	3.00	0.6	0.6	19–22
WDXT073506–G	AP300	7.50	3.50	0.6	0.6	23–28
WDXT094008–G	AP300	9.60	4.00	0.8	0.8	29–35
WDXT125012–G	AP300	12.40	5.00	1.2	1.2	/
WDXT156012–G	AP300	15.20	6.00	1.2	1.2	/

Indexable Insert Drill Cutting Condition
孔加工的计算式

轉速（N）

$$N = \frac{Vc}{\pi \times D1} \times 1000(m/min)$$

*用1000去除，爲將mm換算成m

Vc（m/min）：切削速度　D1(mm):鑽頭直徑
π（3.14）：圓周率　N：主軸轉速

（例題）切削速度Vc=130m/min 鑽頭直徑 ϕ25 求轉速（N）

（答） 將π=3.14，D1=25，Vc=130代入公式，

$$N = \frac{130}{3.14 \times 25} \times 1000 = 1656r/min$$

據此，得出轉速爲1656r/min。

主軸進給量（Vf）

$$Vf = f \cdot n\ (mm/min)$$

Vf (mm/min):主軸（Z軸）進給速度
f (mm/rev) :每轉進給量
n(min⁻¹) :主軸轉速

（例題）每轉進給量爲0.2mm/rev
轉速爲1350min⁻¹ 求主軸進給速度

（答） 代入公式

$$Vf = f \cdot n = 0.2 \times 1350 = 270mm/min$$

由此得出主軸每分鐘進給量爲270mm/min

孔加工時間（Tc）

$$Tc = \frac{Id \cdot i}{n \cdot f}$$

Tc(min):加工時間　Id(mm):鑽孔深
n(min⁻¹) :主軸轉速　f (mm/rev):每轉進給量
i:孔數

（例題）在SCM440鋼上鑽Φ15，深30mm的孔。切削速度爲50m/min,每轉進給數量爲0.15mm/rev,求鑽削時間

（答） 主軸轉速 $n = \frac{50 \times 1000}{15 \times 3.14} = 1061.57min^{-1}$

$$Tc = \frac{30 \times 1}{1061.57 \times 0.15} = 0.188$$

$= 0.188 \times 60 \fallingdotseq 11.3$ 秒可鑽削完畢

● Cutting speed(Vc)

$$Vc = \frac{Dc \times \pi \times n}{1000}$$

Vc(m/min):cutting speed
Dc(mm):drill diameter
n(rev/min):rotating speed

◆Example
spindle speed is 1600 rev/min. Drill diameter is 20 mm,thus cutting speed is:

$$Vc = \frac{Dc \times \pi \times n}{1000} = \frac{20 \times 3.14 \times 1600}{1000} = 100(m/min)$$

●Feed speed

$$Vf = fr \times n(mm/min)$$

Vf(mm/min):feed speed
fr(mm/rev):feed rate per revolution
n(rev/min):spindle speed

◆Example
Spindle speed is 1500 rev/min，feed rate per revolution is 0.1mm/rev，thus feed speed is:

$$Vf = fr \times n = 0.1 \times 1500 = 150(mm/min)$$

● Machining time

$$Tc = \frac{Id \times i}{n \times f}$$

Tc(min):machining time
fr(mm/rev):feed rate per revolution
i:number of holes Id(mm):drilling depth
n(rev/min):spindle speed

◆Example
Drilling a hole with a diameter of 20 mm and a depth of 40 mm,cutting speed is 100m/min and feed rate per revolution is 0.1mm/rev. Calculate the drilling time.

$$n = \frac{Vc \times 1000}{Dc \times \pi} = \frac{100 \times 1000}{20 \times 3.14} = 1600(rev/min)$$

$$Tc = \frac{Id \times i}{n \times fr} = \frac{40 \times 1}{1600 \times 0.1} = 0.25(min)$$

● Metal removal rate

$$Q = \frac{Vf \times \pi \times Dc^2}{4 \times 1000}$$

Q(cm³/min):metal removal rate
Dc(mm):drill diameter
Vf (mm/min):feed speed

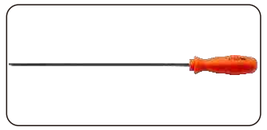
◆Example
Drill diameter is 20mm，feed speed is 160mm/rev, thus metal removal rate is:

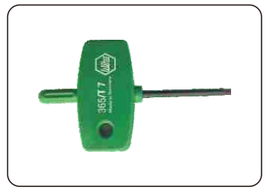
$$Q = \frac{Vf \times \pi \times Dc^2}{4 \times 1000} = \frac{160 \times 3.14 \times 20^2}{4 \times 1000} = 50.24(cm^3/min)$$

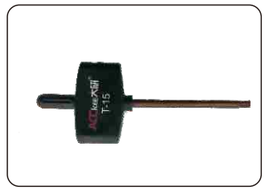
Indexable U drill and Boring Head spares
U钻、镗刀配件表

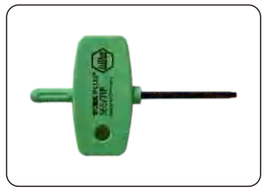

大研黄黑盒acckee yellow box


大研白盒acckee white box


皇冠钻扳手Sem drill wrench


扳手（德国威汉）T6/T7/T8/T15
WRENCH(wiha)


扳手（黑色大研）T6/T7/T8/T15
WRENCH(black acckee)


扳手（德国威汉）PLUS T6/T7/T8/T15
WRENCH(wiha)PLUS


镗刀刀柄侧固螺丝（1-6#）
side fastening screw for chuck(1-6#)


压刀片座螺丝（1-6#）
cutter block screw(1-6#)


堵头
end cap


粗镗刀配件-粗镗刀压紧杯头螺丝
roug boring head fitting-tightening, screws for rough boring head


侧固螺丝/精镗球头螺丝
side fastening screw
screw for finish boring head

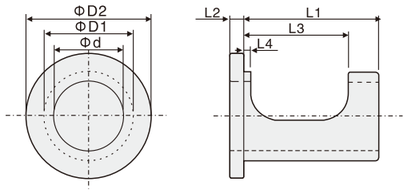

梅花螺丝
screw


皇冠钻双头螺丝
Sem drill Screw

SP SO WC WDX TCAP 6D&8D 880 皇冠鑽系列 SEM Drill Inserts 大直徑U鑽 YLMD MAX Drill 刀片系列 Carbide Inserts 粗鏜刀系列 Rough Boring Head 精鏜刀系列 Finish Boring Head 鏜刀柄系列 Chuck 小刀夾系列 Accessories 鏜刀倒角環 Chamfering Tools 槍鑽工藝 Gun Drill Technology

Working Condition In VMC Machine
快速钻在车床的应用

SHE型



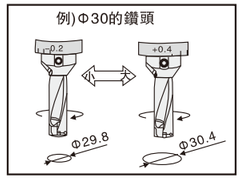
套筒尺寸

型號	庫存	尺寸(mm)							※加工徑調整範圍	中心高調整範圍
		Φd	ΦD1	ΦD2	L1	L2	L3	L4		
SHE2025-43	●	20	25	41	43	4	36	3.0	+0.4~-0.2	+0.2~-0.15
SHE2532-48	●	25	32	49	48	6	38	2.5	+0.4~-0.2	+0.2~-0.15
SHE3240-53	●	32	40	58	53	6	43	2.5	+0.4~-0.2	+0.2~-0.15
SHE4050-63	●	40	50	74	63	6	49	3.0	+0.6~-0.2	+0.2~-0.2

●:標準庫存

1.加工徑調整~在加工中心上進行偏心加工~

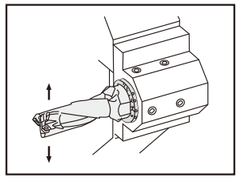
例)Φ30的鑽頭



●加工徑調整範圍(mm)

刀杆直徑	調整量
Φ20	+0.4~-0.2
Φ25	
Φ32	
Φ40	+0.6~-0.2

2.調整中心高~在車床上通過調整中心高解決加工故障~



●中心高調整量(mm)

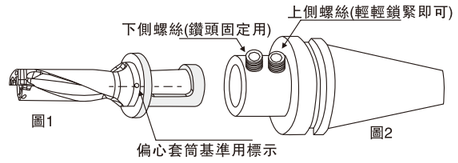
刀杆直徑	調整量
Φ20	+0.2~-0.15
Φ25	
Φ32	
Φ40	+0.3~-0.2

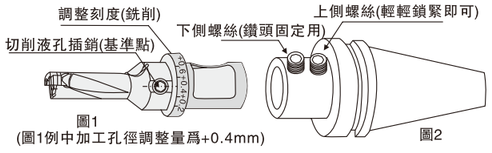
◎使用方法

1.調整加工徑時

①以鑽頭的偏心套筒基準用標示(切削液插銷的中央)爲基準，對準套筒的法蘭外側的調整刻度(參考圖1)
②要擴大加工徑時,套筒向(+)方向轉動;要縮小加工徑時,套筒向(-)方向轉動。
③轉動套筒時，把鑽頭附的扳手插入套筒凸緣上的小孔，即可轉 動調整套筒。
④使用側固定式軸把的下側螺絲，從套筒的開口窗直接緊固鑽頭。
上側螺絲則在不傷及套筒的情況下緊鎖。(圖2)

注意: 1.不可使用彈簧筒夾固定型刀杆。
2.套筒上的刻度爲標準值。
調整後檢查實際加工徑。

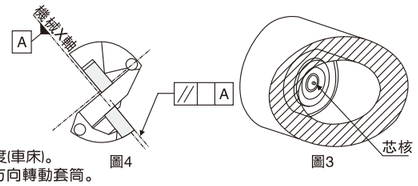




2.調整中心高時

車床上鑽頭加工故障的原因幾乎都是由中心高偏移引起的。
芯核的高度是在加工盲孔時，如圖3在被加工孔內側端面的中心處殘留直徑爲0.5mm的芯核，則中心高是合適的。

●完全無芯核殘留 或者●直徑大于1mm以上的芯核殘留

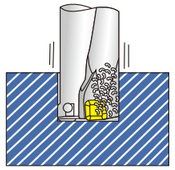


①設定鑽頭外刃面與刀具控制臺的傾斜角度成平行狀態。(參閱圖4)
②以裝恰在鑽頭法蘭上切削液孔插銷的中央爲基準,對準套筒的法蘭端面上的調整刻度(車床)。
③完全沒有芯核殘留時，向(+)方向轉動套筒；當芯核殘留爲直徑1mm以上時，向(-)方向轉動套筒。
④轉動套筒時，把鑽頭的專用扳手插入套筒法蘭外側的孔內，即可轉動調整套筒。
⑤用車床上的刀把固定螺釘時，從套筒開口窗直接固定鑽頭。

注意: 通過偏心套筒來調整中心高時，加工徑同時會有所變化。設定完畢後，請必須確認孔徑尺寸。

The Solutions Of Common Problems
问题与对策

振動



1.檢查鑽頭的安裝。
2.檢查工件的安裝。
3.提高進給量。如果是非常軟的材料，降低進給量并提高切削速度。
4.降低切削速度。

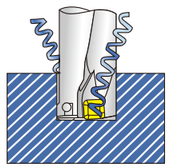
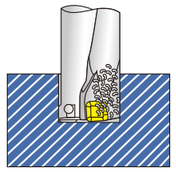
扭矩不足

-降低進給量。
-選擇用于較低進給量的針對更硬材料斷屑的槽型。

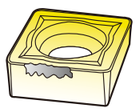
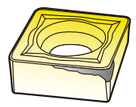
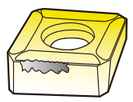
功率不足

-降低切削速度。
-降低進給量。
-選擇用于較低進給量的針對更硬材料斷屑的槽型。(SCGX-P1)

切屑堵塞問題

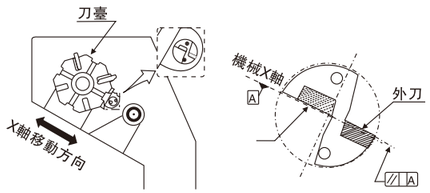
長切屑引起的切屑堵塞		盡管是短切屑，切屑仍堵塞	
	-提高進給量。如果是非常軟的材料，降低進給量并提高切削速度。 -選擇用于較低進給量的針對更硬材料斷屑的槽型。(SCGX-P1)		-提高冷卻液壓力/流量。 -降低切削速度。

刀具壽命問題

外緣刀片微崩		外緣刀片後刀面磨損太快	
	-降低入口處的進給量。 -選擇韌性更好的材質等級。 -選擇用于較高進給量的針對更軟材料斷屑的槽型。(SCGX-P2) -降低進給量。 -降低切削速度。		-降低切削速度。 -提高冷卻液壓力/流量。 -選擇耐磨性更好的材質等級。
中心刀片微崩			
	-檢查鑽頭的安裝。 -檢查工件的安裝。 -降低入口處的進給量。 -提高進給量。 -降低切削速度。		

◎車床上正確的安裝方法

1.外刃表面要與設備X成平行狀態設定(通過X軸的移動可以調整加工徑)
2.建議外刃的安裝朝向應使到外刃面朝向操作者。(如圖1)(但也可逆向180°使用)當車床上有上下兩個轉塔時，當需要將鑽頭安裝在下轉塔上時，則外刃面一定要朝向操作者。(此時逆向旋轉180° 也可)



(圖1)在車床上的安裝狀態

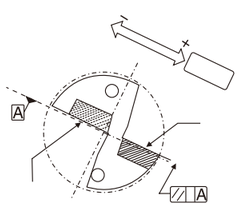
◎加工徑的調整方法

1.加工徑的調整方法

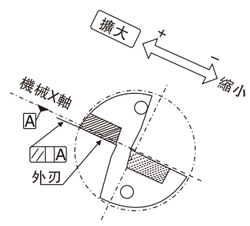
①可利用刀具的X軸方向移動來調整加工徑。X軸移動的方向取決于刀把的位置。
②要擴大孔徑，可沿X軸向外刃方向移動刀具。(圖-2,圖-3)要減小孔徑,可沿X軸向相反方向移動刀具。(這種平移叫偏心)但要確保孔徑不會比鑽頭直徑小超過0.2mm或更多。否則，刀柄就會與孔幹涉。(圖-4)
例)在使用Φ20的鑽頭時，孔徑不能小于19.8mm。

2.加工徑的偏心極限值

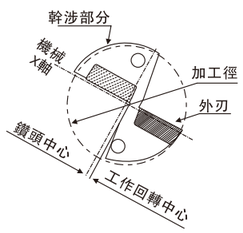
參考刀柄尺寸表中的"半徑方向偏心可能範圍:一欄，可以得到加工徑偏心極限。(這個數據表示半徑方向上能設定多大的偏心的尺寸。)例)可以使用Φ20鑽頭時鑽出一個Φ21的孔,這是因爲"半徑方向偏心可能範圍"是+0.5mm



(圖2)外刃面向上



(圖3)外刃面向下



(圖4)過分偏心(較小的孔徑)

◎中心高的調整方法

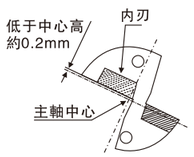
1.內刃的中心高

如圖-1所示方式安裝，內刃的中心高將低于中心高約0.2mm。(圖-5)這是通常的中心高且內刃被設計爲這樣的高。但是，車床的轉塔與主軸中心偏移不準的時候，中心太高或太低的情況也是有的。爲了穩定加工，確認內刃中心高是很重要的。

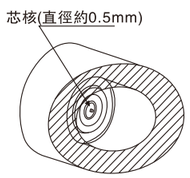
2.如何確認內刃中心高

要確認內刃中心高，要看鑽孔凹面的端面中心部的殘留芯核。(圖-6)若內刃中心高在正常位置,殘留芯核的直徑應約爲0.5mm。若有以下情況，則要調整中心高：
1.無殘留芯核
2.芯直徑大于1mm

★試切確認中心高時，先以0.1mm/刃以下的小進給量，作深度爲10mm的鑽孔加工。



(圖5)鑽頭正面圖

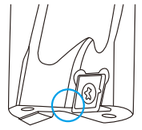


(圖6)中心部芯核

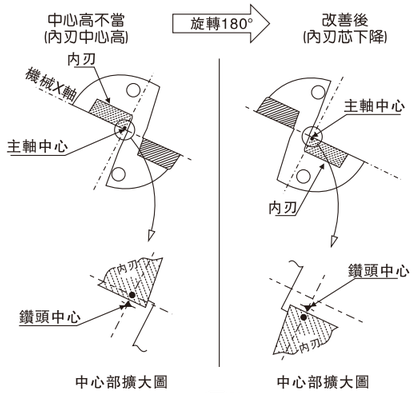
Working Condition In VMC Machine
快速钻在车床的应用

3.內刃中心高的調整方法

a)完全無芯核殘留(或者是非常小的芯核殘留)
這是在內刃高于中心高時發生的。
在這種情況下，內刃靠近鑽頭中心時，特別容易發生崩損，所以必須校正。(圖-7)

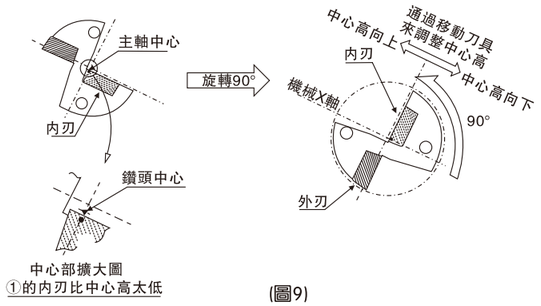

(圖7)內刃靠近鑽頭中心時崩損

【調整方法】
① 使鑽頭本體成180° 旋轉進行安裝。
大部分問題都可以通過這個方法解決。(圖8)



(圖8)

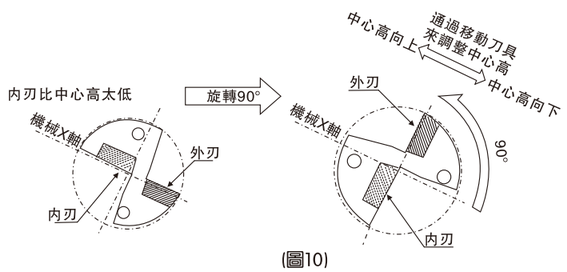
【調整方法】
② 通過①進行安裝、加工後仍然存在大芯核時，如圖-9所示，請將鑽頭本體成90° 旋轉、外刃靠下側、沿設備X軸方向移動刀具來調整中心高。(但是，這就不可能調整加工徑)此外,若用相反的方法安裝刀柄(外刃靠上側，則加工徑變小,這可能會引起刀柄與鑽孔的幹涉，請注意。
根本的對策,是調整轉塔本身的中心高。



(圖9)

b)芯核直徑過大(1mm以上)
這是在內刃低于中心高時發生的。
這會影響切屑排出性，有必要調整。

【調整方法】
逆時針旋轉90° 安裝鑽頭，如圖-10所示。(外刃靠上側),且沿X軸方向移動工具來調整中心高。(但是，這就不可能調整加工徑)此外，若用相反的方法安裝刀杆(外刃靠下側)，則加工徑變小了,這可能會引起刀杆與鑽孔的衝突。
根本的對策,是調整轉塔本身的中心高。



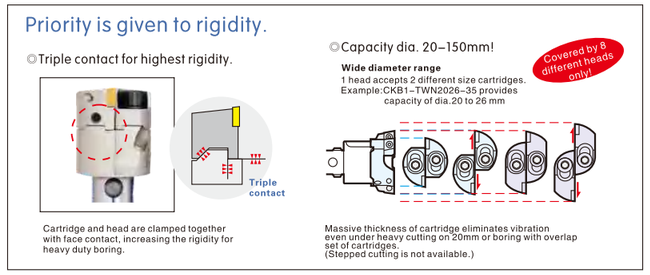
(圖10)

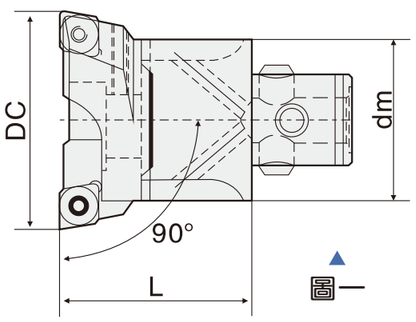
镗刀世界 U钻天下

ACCkee大研

TWN Twin-Cutter Boring Head
TWN系列双刃粗镗刀

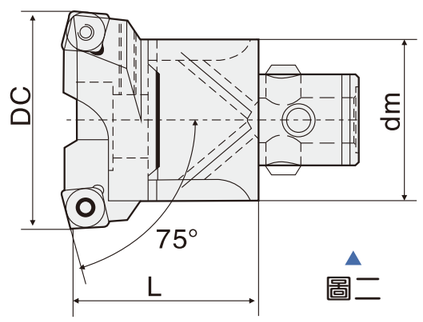
◎加工範圍: ϕ20–ϕ150
◎重視粗加工時的剛性
◎刀片座和鏜頭間采用三個面貼緊方式緊固，增強剛性
◎刀片座等高誤差≤0.02mm





▲圖一

盲孔用 Blind hole



▲圖二

通孔用 Through hole
定制款 Made to order item

◎ 盲孔用粗鏜刀-90°(Rough boring head for blind hole-90°)

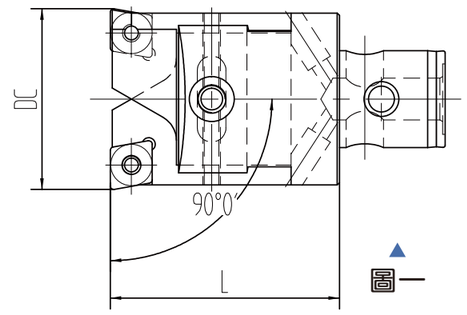
型號 Specification	Dc	dm	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	適用刀片座 Cutter block	刀片螺絲 Screw	壓刀片座螺絲 Cutter block screw	側面微調螺絲 Side trimmer screw	kg	圖
CKB1–TWN2026–35	20–26	19	35	CC..0602..	M2.5×6.5	T8	TW20–26M	M2.5*6	M4–0.7*16	M3*5	0.07	1
CKB2–TWN2533–38	25–33	24	38	CC..0602..	M2.5×6.5	T8	TW25–33M	M2.5*6	M5–0.8*18	M3*6	0.14	
CKB3–TWN3242–43	32–42	31	43	CC..09T3..	M4×10	T15	TW32–42M	M4*10	M6–1.0*20	M3*8	0.23	
CKB4–TWN4154–50	41–54	39	50	CC..09T3..	M4×10	T15	TW41–54M	M4*10	M8–1.25*25	M3*10	0.43	
CKB5–TWN5372–60	53–72	49	60	CC..1204..	M5×13	T20	TW53–72M	M5*12	M10–1.5*35	M4*12	0.82	
CKB6–TWN6890–75	68–90	63	75	CC..1204..	M5×13	T20	TW68–90M	M5*12	M10–1.5*35	M4*16	1.75	
CKB6–TWN89120–75	89–120	63	75	CC..1204..	M5×13	T20	TW89–120M	M5*12	M10–1.5*35	M4*16	2.25	
CKB6–TWN115150–75	115–150	63	75	CC..1204..	M5×13	T20	TW115–150M	M5*12	M10–1.5*35	M4*20	2.35	

◎ 通孔用粗鏜刀-75°(Rough boring head for through holes-75°)

型號 Specification	Dc	dm	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	適用刀片座 Cutter block	刀片螺絲 Screw	壓刀片座螺絲 Cutter block screw	側面微調螺絲 Side trimmer screw	kg	圖
CKB5–TWN5372–60–T	53–7	49	60	CC..1204..	M5×13	T20	TW53–72M	M5*12	M10–1.5*35	M4*12	0.82	2
CKB6–TWN6890–75–T	68–90	63	75	CC..1204..	M5×13	T20	TW68–90M	M5*12	M10–1.5*35	M4*16	1.75	
CKB6–TWN89120–75–T	89–120	63	75	CC..1204..	M5×13	T20	TW89–120M	M5*12	M10–1.5*35	M4*16	2.25	
CKB6–TWN115150–75–T	115–150	63	75	CC..1204..	M5×13	T20	TW115–150M	M5*12	M10–1.5*35	M4*20	2.35	

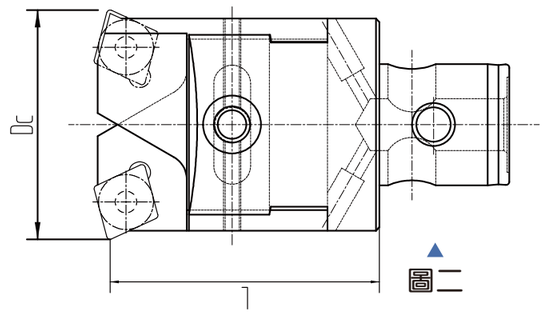
Heavy Cutting Rough Boring Head
重切削型粗镗刀（Φ25–Φ90）

◎ 加工范围Diameter:Φ25–Φ90



▲圖一

盲孔用 Blind hole



▲圖二

通孔用 Through hole

◎ 盲孔用粗鏜刀-90°(Rough boring head for blind hole-90°)

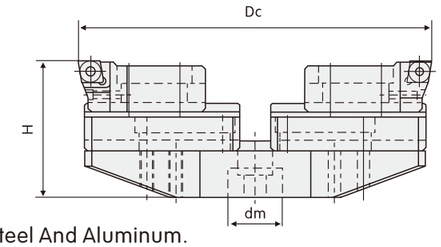
型號 Specification	Dc	dm	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	壓刀片座螺絲 Cutter block screw	L扳手 Wrench	側面微調螺絲 Side trimmer screw	扳手 Wrench	kg	圖
CKB2–TWN2533–38–A	25–33	24	38	CC..0602..	M2.5*6	T8	M5–0.8*18	L4	M3*6	L1.5	0.14	1
CKB3–TWN3242–43–A	32–42	31	45	CC..09T3..	M4*10	T15	M6–1.0*20	L5	M3*8	L1.5	0.23	
CKB4–TWN4154–50–A	41–54	39	52	CC..09T3..	M4*10	T15	M8–1.25*25	L6	M3*10	L1.5	0.43	
CKB5–TWN5372–60–A	53–72	49	66	CC..1204..	M5*12	T20	M10–1.5*35	L8	M4*12	L2	0.82	
CKB6–TWN6890–75–A	68–90	63	75	CC..1204..	M5*12	T20	M10–1.5*35	L8	M4*16	L2	1.75	

◎ 通孔用粗鏜刀-75°(Rough boring head for through holes-75°)

型號 Specification	Dc	dm	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	壓刀片座螺絲 Cutter block screw	L扳手 Wrench	側面微調螺絲 Side trimmer screw	扳手 Wrench	kg	圖
CKB2–TWN2533–38–A–75°	25–33	24	35	CC..0602..	M2.5*6	T8	M5–0.8*18	L4	M3*6	L1.5	0.14	2
CKB3–TWN3242–43–A–75°	32–42	31	41	CC..09T3..	M4*10	T15	M6–1.0*20	L5	M3*8	L1.5	0.23	
CKB4–TWN4154–50–A–75°	41–54	39	48	CC..09T3..	M4*10	T15	M8–1.25*25	L6	M3*10	L1.5	0.43	
CKB5–TWN5372–60–A–75°	53–72	49	61	CC..1204..	M5*12	T20	M10–1.5*35	L8	M4*12	L2	0.82	
CKB6–TWN6890–75–A–75°	68–90	63	70	CC..1204..	M5*12	T20	M10–1.5*35	L8	M4*16	L2	1.75	

TWN Large Diameter Boring Head
桥式大孔径双刃粗镗刀（Φ151–Φ750）

◎ 加工范围Diameter:Φ151–Φ750

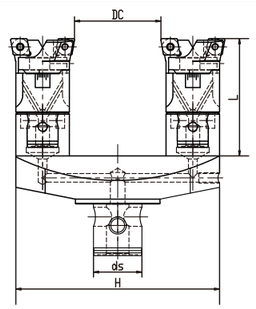


◎ 兩種材質：鋼制和鋁制　Two Kinds Of Material, Steel And Aluminum.

型號 Specification	Dc	dm	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	滑塊緊固螺絲 Slide fastening screws	刀片座緊固螺絲 boring cutter fastening screws	滑塊側面螺絲 Slide side screws	刀片座側面螺絲 boring cutter side screws	kg
RDH–D151–211–80L	151–211	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*20	M6*20	4.95
RDH–D210–290–80L	210–290	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	5.85
RDH–D290–370–80L	290–370	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	6.81
RDH–D370–450–80L	370–450	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	7.80
RDH–D450–550–80L	450–550	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	8.75
RDH–D550–650–80L	550–650	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	9.85
RDH–D650–750–80L	650–750	32	80	CC..1204..	M5*13	T20	M8*25	M8*26	M6*25	M6*25	10.85

Pin Turning Boring Head–for Roughing Boring
套镗粗镗刀（Φ13–Φ128）

◎ 加工范围Diameter:Φ13–Φ128

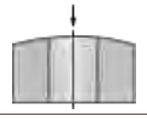


型號 Specification/Item	鏜孔範圍（外圓） Range（excircle）		深度 depth (L)	長度 length (H)	鏜孔範圍（内孔） Range（Inner）	接口 ds	鏜刀模塊 Head Model
CKB5–TW2230–56CK2	TWN2–1	22–30	56	79	80–88	28	CKB2–TWN2533–38
CKB5–TW3240–56CK2	TWN2–1	32–40	56	89	90–98	28	CKB2–TWN2533–38
CKB5–TW4555–67CK3	TWN3–1	45–55	67	118	119–129	28	CKB3–EWN3242–43
CKB6–TW5565–67CK3	TWN3–1	55–65	67	128	129–139	36	CKB3–EWN3242–43
CKB6–TW6575–67CK3	TWN3–1	65–75	67	138	139–149	36	CKB3–EWN3242–43
CKB6–TW87100–77CK4	TWN4–1	89–100	77	179	182–195	36	CKB4–EWN4154–50
CKB6–TW114127–77CK4	TWN4–1	114–127	77	206	209–222	36	CKB4–EWN4154–50

Technical Informations
技术信息

起始面不平整（铸造表面）　starting on uneven surfaces (cast surfaces)
- 在加工开始时根据表面质量状况降低进给
- subject to the starting angle, the feed must be reduced when starting the bore.
- 经验规则：3° = 30%；10° = 40%；25° = 60%　•Rule of thumb: 3° = 30%; 10° = 40%; 25° = 60%
- 使用强壮的刀片use tough insert
- 使用稳定的刀尖圆角use stable corner radius

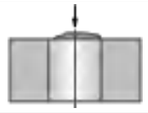
出口为斜面　Angled bore exit
- 加工至斜面发生断续切削后降低进给至 50% 以下　•from wear cut is interrupted reduce feed rate up to 50%
- 使用强壮的刀片　• use tough insert
- 使用稳定的刀尖圆角　• use stable corner radius



起始面为弧面　starting on cambered surfaces
- 没问题　• no problems
- 必要时降低进给　• reduce feed rate if necessary

粗镗贯穿孔　Roughing through a cross bore
- 必要时降低 50% 进给　• reduce feed rate 50% if necessary
- 注意刀具上的缠屑情况　• watch for chip jamming around tool
- 使用强壮的刀片　• use tough insert
- 使用稳定的刀尖圆角　• use stable corner radius

起始面有台阶　starting on an edge
- 降低 50% 进给　• reduce feed rate by 50%
- 使用强壮的刀片　• use tough insert
- 使用稳定的刀尖圆角　• use stable corner radius



起始面有焊缝　starting on a welded seam
- 降低进给　• reduce feed rate
- 最大使用 3 × D 刀具　• use max. 3 × D tools

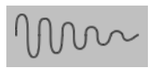
粗镗叠层板　Roughing through stacked plates
- 使用 80° 主偏角刀夹　• use holder with 80° approach angle
- 需要良好的工件压紧　• good workpiece clamping required
- 最大间隙 = 1 mm　• max. gap = 1 mm

问题 → 可能原因 → 解决方案 Problems → Possible causes → solutions

长切屑　Long chips
- 不是最佳的刀片槽型　• not optimum geometry

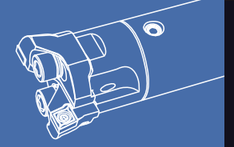
→选择合适的切深→ select correct cutting depth
→选择合适的切削参数→ select correct cutting values

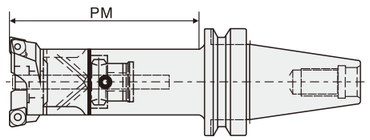
表面质量不好　Bad surface finish
- 进给太快→改善切削参数：增加切削速度，降低进给
- feed rate too high → improve cutting parameters: increase cutting speed, reduce feed
- 长切屑　• long chips



振动　Vibrations
- 进给太快　• feed rate too high
- 切削速度太高　• cutting speed too high
- 刀片槽型不够锋利　• geometry too obtuse
- 检查轴向/径向设置　• check axial / radial setting
- 检查刀具装配　• check tool assembly
- 如有需要使用抗振到并　• if required, use a damping element adaptor

TWN Rough Boring Cutting Conditions–BT40/BT50
TWN系列双刃粗镗刀切削条件表





◎BT40 MAS 403 BT (ISO40)

型號 Specification	被加工材料 Material		PM	刀尖半徑R Nose radius	切削速度 Vc(m/min)	切削量ap（mm/ϕ） 推薦值 Recommend	切削量ap（mm/ϕ） 最大值 MAX	進給率f（mm/rev） 推薦值 Recommend	進給率f（mm/rev） 最大值 MAX
CKB1–TWN2026–35	P	低碳鋼	73	0.4	110	1.7	2.0	0.16	0.20
		合金鋼			95	1.4	2.0	0.13	0.20
	M	不銹鋼			60	1.4	2.0	0.14	0.20
	K	鑄鐵			80	1.7	2.0	0.13	0.20
	S	鋁合金			130	2.0	2.5	0.20	0.25
CKB2–TWN2533–38	P	低碳鋼	89	0.4	110	2.2	3.0	0.18	0.25
		合金鋼			95	1.8	3.0	0.16	0.25
	M	不銹鋼			60	2.0	3.0	0.18	0.25
	K	鑄鐵			80	2.2	3.0	0.16	0.25
	S	鋁合金			130	3.0	4.0	0.25	0.30
CKB3–TWN3242–43	P	低碳鋼	105	0.8	150	3.2	4.0	0.22	0.30
		合金鋼			130	2.7	3.5	0.18	0.28
	M	不銹鋼			70	2.7	3.5	0.22	0.30
	K	鑄鐵			80	3.2	4.0	0.18	0.25
	S	鋁合金			130	3.5	5.0	0.25	0.30
CKB4–TWN4154–50	P	低碳鋼	113	0.8	150	3.5	4.5	0.22	0.32
		合金鋼			130	3.5	4.5	0.20	0.30
	M	不銹鋼			70	3.2	4.3	0.20	0.30
	K	鑄鐵			80	3.5	5.5	0.20	0.30
	S	鋁合金			130	4.5	6.5	0.28	0.35
CKB5–TWN5372–60	P	低碳鋼	122	0.8	150	5.3	6.5	0.25	0.35
		合金鋼			130	5.3	6.5	0.20	0.28
	M	不銹鋼			70	4.5	5.5	0.20	0.28
	K	鑄鐵			80	6.3	7.5	0.25	0.32
	S	鋁合金			130	7.5	9.0	0.30	0.38
CKB6–TWN6890–75 CKB6–TWN89120–75 CKB6–TWN115150–75	P	低碳鋼	138	0.8	150	7.0	9.0	0.25	0.35
		合金鋼			130	6.3	9.0	0.22	0.30
	M	不銹鋼			70	6.3	8.0	0.22	0.30
	K	鑄鐵			80	7.2	9.0	0.25	0.32
	S	鋁合金			130	8.0	10.0	0.30	0.38

◎BT50 MAS 403 BT (ISO50)

型號 Specification	被加工材料 Material		PM	刀尖半徑R Nose radius	切削速度 Vc(m/min)	切削量ap（mm/ϕ） 推薦值 Recommend	切削量ap（mm/ϕ） 最大值 MAX	進給率f（mm/rev） 推薦值 Recommend	進給率f（mm/rev） 最大值 MAX
CKB1–TWN2026–35	P	低碳鋼	81	0.4	110	1.7	2.0	0.16	0.20
		合金鋼			95	1.4	2.0	0.13	0.20
	M	不銹鋼			60	1.4	2.0	0.14	0.20
	K	鑄鐵			80	1.7	2.0	0.13	0.20
	S	鋁合金			130	2.0	2.5	0.20	0.25
CKB2–TWN2533–38	P	低碳鋼	98	0.4	120	2.2	3.2	0.18	0.25
		合金鋼			110	1.8	3.2	0.16	0.25
	M	不銹鋼			70	2.0	3.2	0.18	0.25
	K	鑄鐵			85	2.2	3.2	0.16	0.25
	S	鋁合金			130	3.0	4.5	0.25	0.30
CKB3–TWN3242–43	P	低碳鋼	125	0.8	170	3.2	4.5	0.22	0.30
		合金鋼			150	2.7	4.0	0.18	0.28
	M	不銹鋼			85	2.7	3.5	0.22	0.30
	K	鑄鐵			85	3.2	4.5	0.18	0.25
	S	鋁合金			130	3.5	5.0	0.25	0.30
CKB4–TWN4154–50	P	低碳鋼	130	0.8	170	4.0	4.5	0.22	0.32
		合金鋼			150	3.5	4.5	0.20	0.30
	M	不銹鋼			85	3.5	4.5	0.20	0.30
	K	鑄鐵			85	3.5	5.5	0.20	0.30
	S	鋁合金			150	4.5	6.5	0.28	0.35
CKB5–TWN5372–60	P	低碳鋼	140	0.8	180	6.3	7.2	0.25	0.38
		合金鋼			150	6.3	7.2	0.20	0.32
	M	不銹鋼			100	5.3	6.3	0.20	0.32
	K	鑄鐵			85	7.2	9.0	0.25	0.35
	S	鋁合金			170	8.0	11.0	0.30	0.40
CKB6–TWN6890–75 CKB6–TWN89120–75 CKB6–TWN115150–75	P	低碳鋼	150	0.8	180	8.0	10.0	0.25	0.38
		合金鋼			150	7.0	10.0	0.25	0.32
	M	不銹鋼			100	6.5	8.0	0.25	0.32
	K	鑄鐵			85	8.0	10.0	0.25	0.35
	S	鋁合金			170	9.0	11.0	0.30	0.40

EWN Pecision Boring Head
EWN系列微調精鏜刀

有預平衡設計，可獲得穩定的加工精度

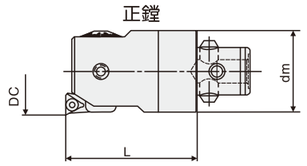
Reliable scale screw, 1 div=0.01mm on diameter and vernier scale.

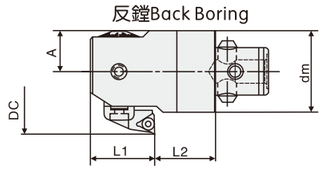
◎Stable and higher precision achieved by pre-balanced design.
◎Back boring is available as standard feature for greater versatility.

PAT.Diameter ϕ20-ϕ203

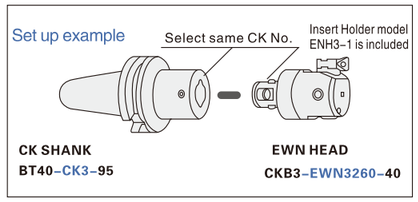
Coolant-Through hole

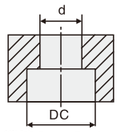
Vc max. 1200m/min





◎微調精度:D0.01mm/格 ◎加工範圍:D20-D203
◎1 div = 0.01mm ◎PAT. Diameter D20-D203





反鏜時 Back Boring：d>Dc/2+A

调节更精准
1刻度=0.01mm/ ϕ

型號 Specification	正鏜 Boring				反鏜 Counter boring					適配刀片 Insert Size	螺釘 Clamp screw	扳手 wrench	kg
	Dc	dm	L	刀片座 Cutter block	加工範圍 Dc	L1	L2	A	刀片座 Cutter block				
CKB1-EWN2036-32.5	20-26	19	32.5	ENH1-1		20	10	10		TP..0802..	M2.2*5	T7	0.09
	25-31			ENH1-2	30-31				ENH1-2				
	30-36			ENH1-3	31-36				ENH1-3				
CKB2-EWN2547-35.5	25-33	24	35.5	ENH2-1		22	10	12.5					0.15
	32-40			ENH2-2	38-41				ENH2-2				
	39-47			ENH2-3	45-47				ENH2-3				
CKB3-EWN3260-40	32-42	31	40	ENH3-1		25	9	16					0.25
	41-51			ENH3-2	48-52				ENH3-2				
	50-60			ENH3-3	52-60				ENH3-3				
CKB4-EWN4174-47	41-54	39	47	ENH4-1		30	13	20		TC..1102..	M2.5*6	T8	0.43
	53-66			ENH4-2	59-67				ENH4-2				
	61-74			ENH4-3	65-75				ENH4-3				
CKB5-EWN5395-57	53-70	49	57	ENH5-1	61-73	34	19	25.5	ENH5-1	TP..1103..	M3*7	T8	1.25
	68-85			ENH5-2	66-86				ENH5-2				
	78-95			ENH5-3	78-100				ENH5-3				
CKB6-EWN68150-71	68-100	63	71	ENH6-1	77-98	45	23	32.5	ENH6-1	TC..1102..	M2.5*6	T8	1.78
	93-125			ENH6-2	91-123				ENH6-2				
	125-150			ENH6-3	119-149				ENH6-3				
CKB6-EWN100203-71	100-153	63	71	ENH6-1	107-155	45	23	45.5	ENH6-1	TP..1103..	M3*7	T8	2.53
	125-178			ENH6-2	124-180				ENH6-2				
	150-203			ENH6-3	150-206				ENH6-3				

◎鏜刀模塊型號說明
Part Number Structure of Finish Boring Head

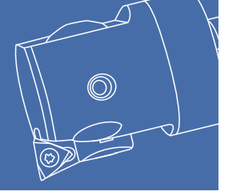
CKB 3 - EWN 3260- 40

- 模塊形式 CK NO . (CKB)
- 模塊接口尺寸(dm) CK NO . (3)
- EWN型精鏜刀 EWN Boring Head (EWN)
- 鏜孔範圍(Dc) Diameter (3260)
- 設計長度(L) Boring Head Length (40)

◎附帶ENH○-1刀片座。ENH○-2、ENH○-3刀片座需要另購。
◎反鏜加工時，主軸應反轉。
◎不附帶刀片。
◎CKB4以上有TP1103刀片和TC1102刀片座，可跟進需求訂購。

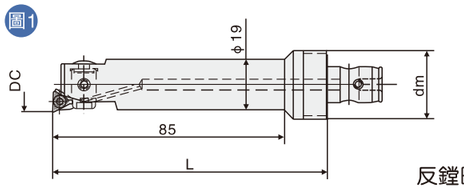
1. Insert Holder model ENH-1 is included. ENH-2 and ENH-3 are optional accessories.
2. Rotation becomes reverse when back-boring.
3. Insert must be ordered separately.
4. Insert

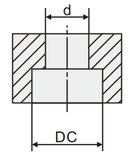
ABS-EWN Pecision Boring Head
ABS-EWN系列微調精鏜刀



有預平衡設計，可獲得穩定的加工精度 ◎微調精度:D0.01mm/格 ◎加工範圍:D20-D150

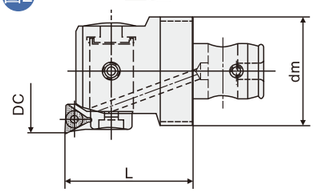
圖1

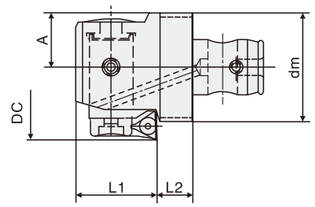




反鏜時 Back Boring：d>Dc/2+A

圖2





调节更精准
1刻度=0.01mm/ ϕ

型號 Specification		正鏜 Boring				反鏜 Counter boring					適配刀片 Insert Size	螺釘 Clamp screw	扳手 wrench	kg
		Dc	dm	L	刀片座 Cutter block	加工範圍 Dc	L1	L2	A	刀片座 Cutter block				
21CD25-EWN2036-85	1	20-26	25	101	ENH1-1		20	10	10		TP..0802..	M2×5	T6	0.13
		25-31			ENH1-2	30-31				ENH1-2				
		30-36			ENH1-3	30-36				ENH1-3				
21CD25-EWN2647-35.5	2	26-33	25	35.5	ENH2-1		22	10	12.5					0.16
		32-40			ENH2-2	36-40				ENH2-2				
		39-47			ENH2-3	39-47				ENH2-3				
21CD32-EWN3360-40		33-42	32	40	ENH3-1		25	9	16		TP..0802..	M2×5	T6	0.27
		41-51			ENH3-2	46-51				ENH3-2	TP..0902..	M2.5×6	T8	
		50-60			ENH3-3	50-60				ENH3-3				
21CD40-EWN4174-47		41-54	40	47	ENH4-1		30	13	20		TC..1102..	M2.5×6	T8	0.47
		50-63			ENH4-2	53-63				ENH4-2				
		61-74			ENH4-3	61-74				ENH4-3				
21CD50-EWN5395-57		53-70	50	57	ENH5-1	62-70	34	19	25.5	ENH5-1	TP..1103..	M3×8	T10	1.32
		65-82			ENH5-2	65-82				ENH5-2				
		78-95			ENH5-3	78-95				ENH5-3				
21CD63-EWN68150-71	2	68-100	63	71	ENH6-1	80-100	45	23	32.5	ENH6-1	TC..1102..	M2.5×6	T8	1.78
		94-126			ENH6-2	94-126				ENH6-2	TP..1103..	M3×8	T10	
		118-150			ENH6-3	118-150				ENH6-3				

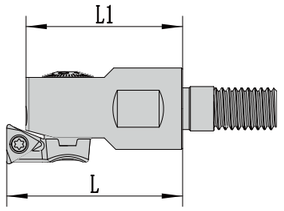
CAUTION

The max. allowable spindle speed for the EWN Head is 1200m/min. However, since the rigidity of machine spindle and workpiece, the length of boring tool and usage of Extension and Reduction adapters influence the condition, please increase the speed gradually to determine the best cutting condition.

刀片座(另售)
Insert Holder Pat.(Option)

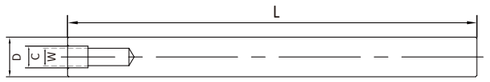
刀片座 Cutter block	形狀圖 Figure	對應鏜刀模塊 Head Model	加工範圍 Diameter ϕ
ENH1-1	3° 对应刀片 TP0802	CKB1-EWN2036-32.5	20-26
ENH1-2			25-31
ENH1-3			30-36
ENH2-1		CKB2-EWN2547-35.5	25-33
ENH2-2			32-40
ENH2-3			39-47
ENH3-1		CKB3-EWN3260-40	32-42
ENH3-2			41-51
ENH3-3			50-60
ENH4-1	0° 对应刀片 TC1102或 TP1103	CKB4-EWN4174-47	41-54
ENH4-2			50-66
ENH4-3			61-74
ENH5-1		CKB5-EWN5395-57	53-70
ENH5-2			65-85
ENH5-3			78-95
ENH6-1		CKB6-EWN68150-71	68-100
ENH6-2			93-125
ENH6-3			125-150
ENH6-1		CKB6-EWN100203-71	100-153
ENH6-2			125-178
ENH6-3			150-203

High Accuracy Precision Boring Head
EWN 螺纹接口小径精镗刀



搪頭型號	L1	L	鏜孔範圍	配套刀片
M8-EWN1626-32.5	36	37.5	16-21/21-26	TPGT0802
M10-EWN2036-32.5	29.5	32.5	20-26/25-31/30-36	TPGT0802
M12-EWN2547-35.5	32.5	35.5	25-33/32-40/39-47	TPGT0802
M16-EWN3260-40	35	40	32-42/41-51/50-60	TPGT0802

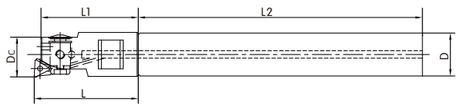
Carbide boring head holder
超硬整体钨钢抗震精搪刀杆



對應刀柄型號	柄徑D	螺紋M	總長
14-M8-100	14	M8	100
14-M8-150	14	M8	150
14-M8-200	14	M8	200
15-M8-100	15	M8	100
15-M8-150	15	M8	150
15-M8-200	15	M8	200
15.6-M8-100	15.6	M8	100
15.6-M8-150	15.6	M8	150
15.6-M8-200	15.6	M8	200
15.6-M8-250	15.6	M8	250
16-M8-100	16	M8	100
16-M8-150	16	M8	150
16-M8-200	16	M8	200
16-M8-250	16	M8	250
16-M8-300	16	M8	300
19-M10-100	19	M10	100
19-M10-150	19	M10	150
19-M10-200	19	M10	200
19-M10-250	19	M10	250

對應刀柄型號	柄徑D	螺紋M	總長
20-M10-100	20	M10	100
20-M10-150	20	M10	150
20-M10-200	20	M10	200
20-M10-250	20	M10	250
20-M10-300	20	M10	300
24-M12-150	24	M12	150
24-M12-200	24	M12	200
24-M12-250	24	M12	250
24-M12-300	24	M12	300
25-M12-150	25	M12	150
25-M12-200	25	M12	200
25-M12-250	25	M12	250
25-M12-300	25	M12	300
32-M16-150	32	M16	150
32-M16-200	32	M16	200
32-M16-250	32	M16	250
32-M16-300	32	M16	300
32-M16-350	32	M16	350

Carbide boring head holder
超硬整体钨钢抗震精搪刀杆

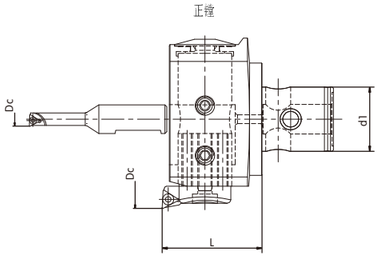


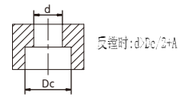
型號	DC	L1	L2	L	D
ST15W-EWN1621-195TP08	16-21	36	157	38	15
ST16W-EWN1822-195TP08	18-22	36	157	38	16

High Accuracy Precision Boring Head（2084）
高精度多功能鏜刀（2084）

◎微調精度: ϕ0.01mm/格（可選微調精度： ϕ0.005mm/格）
◎加工範圍: ϕ8–ϕ203mm
◎反鏜功能: ϕ112–ϕ203mm

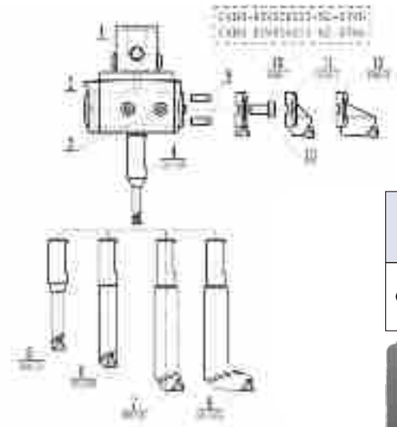
◎ 1 div = 0.01mm / 1 div=0.005mm
◎ PAT. Diameter ϕ8–ϕ203
◎ Counter Boring Functions: ϕ112–ϕ203mm



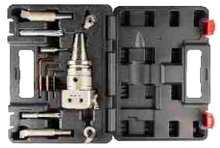


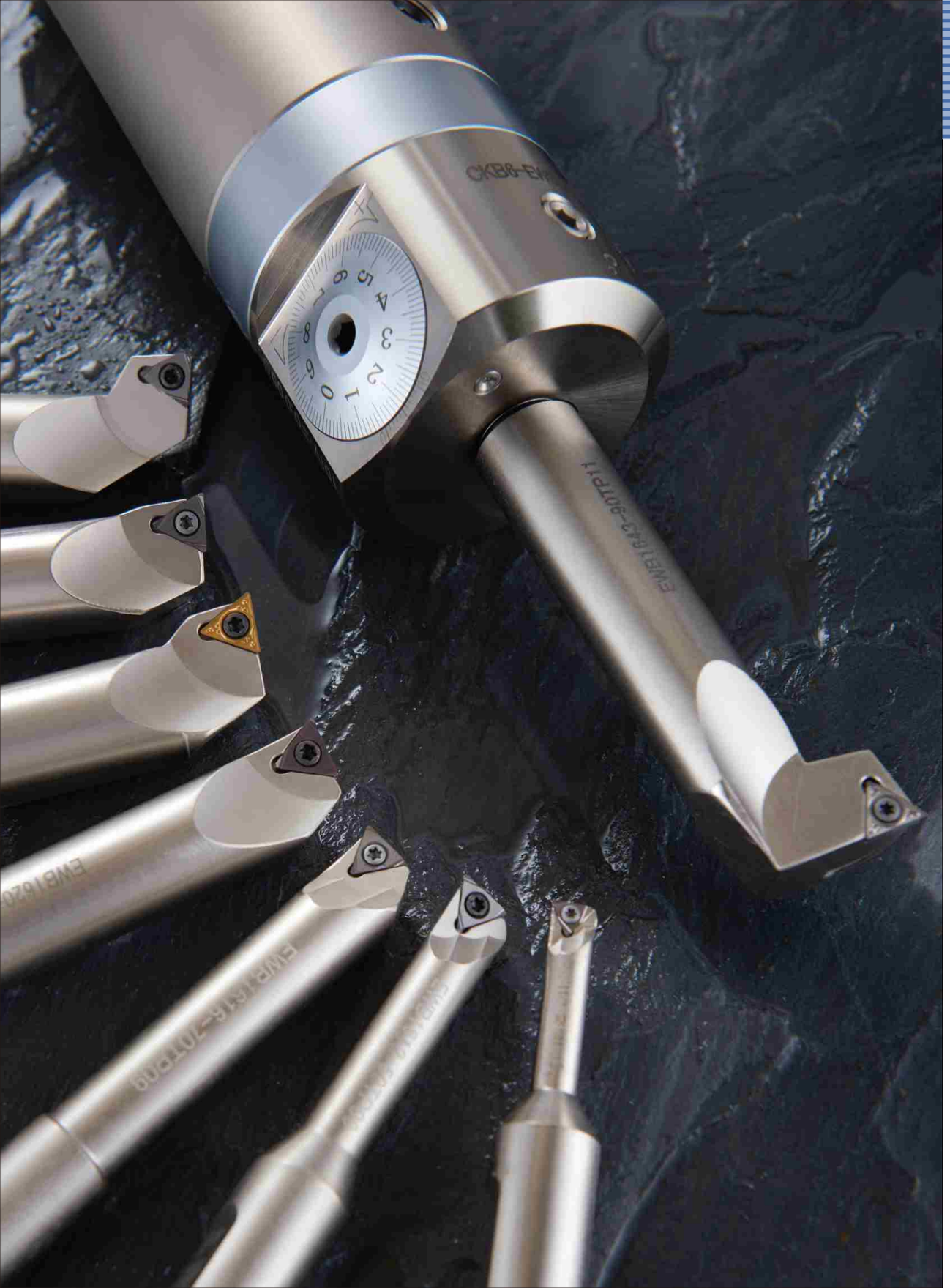
精鏜刀模塊型號 Specification	正 鏜 Boring				深度 Depth	適配刀片 Insert	螺釘 Clamp screw	扳手 wrench	kg
	Dc	d1	L	適用鏜刀座 Cutter Block					
CKB6–EWB08203–52	08–43	63	52	YBJ1608	32	TB..0601	M2.2*5	T7	0.11
	12–47			YBJ1612	50	TP..0902	M2.5*6	T8	0.12
	16–51			YBJ1616	65				0.18
	31–66			YBJ1631	90	TP..1103	M3*7		0.47
	65–100			YBJ1665	90				0.65
	100–135			ENH6–1	—				—
	134–169			ENH6–2F	—				—
	168–203			ENH6–3F	—				—

◎鏜刀模塊型號說明
Part Number Structure of Finish Boring Head

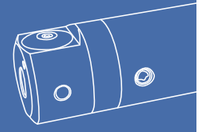


精鏜刀模塊型號 Specification	反 鏜 Counter Boring				
	Dc	L1	L2	A	適用鏜刀座 Cutter Block
CKB6–EWB08203–52	112–135	20	32	–	ENH6–1
	134–169	20	32	–	ENH6–2F
	168–203	20	32	–	ENH6–3F



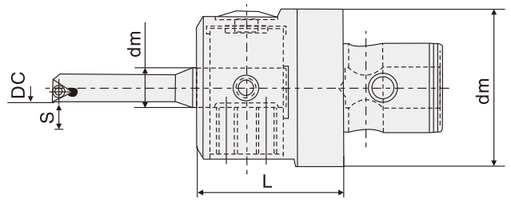


EWB Prescison Boring Heads
EWB小孔径微调精镗刀



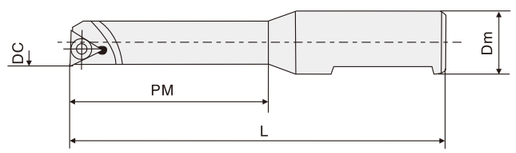
◎微調精度: ϕ0.01mm/格
◎加工範圍: ϕ8–ϕ50

◎ 1 div = 0.01mm
◎ PAT. Diameter ϕ8–ϕ50



型號 Specification	鏜孔範圍Dc Boring range	適用鏜杆D1 Modular Holder	微調行程S Micro distance	L	dm	kg
CKB6–EWB0850–65	08–50	YBJ16	3.5	65	63	1.1

EWB Boring Bar System
EWB镗杆系列

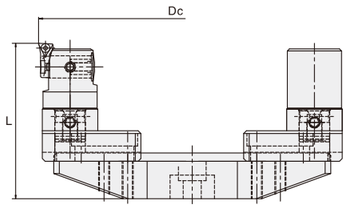


型號 Specification	尺寸				適配刀片 Insert	螺釘 Clamp screw	扳手 wrench	kg
	Dc	dm	PM	L				
EWB1608–32	08–15	16	32	80	TB..0601	M2.2*5	T7	0.11
EWB1612–50	12–19		50	98	TP..0902	M2.5*6	T8	0.12
EWB1616–65	16–23		65	115				0.18
EWB1620–85	20–27		85	135	TP..1103	M3*7	T8	0.29
EWB1625–90	25–32		90	145				0.37
EWB1631–90	31–38		90	145				0.47
EWB1637–90	37–44		90	145				0.58
EWB1643–90	43–50		90	145				0.65

EWN Large Diameter Boring Head
桥式大孔径微调精镗刀

◎加工範圍：φ151－φ750 ◎ PAT. Diameter φ151－φ750 ◎微調精度：φ0.01mm/格 ◎ 1 div = 0.01mm

鋁制 Aluminum



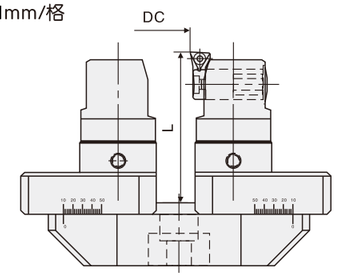
鋼制 Steel

◎ 兩種材質：鋼制和鋁制 Two Kinds Of Material, Steel And Aluminum.

型號 Specification	Dc	L	適用刀片 Insert	螺釘 Screw	扳手 Wrench	滑塊緊固螺絲 Slide fastening screws	扳手 Wrench	滑塊側固調節螺絲 Slider retaining adjustment screws	扳手 Wrench	kg
CDH-D151-211-84L	151-211	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*20	L2.5	4.75
CDH-D210-290-84L	210-290	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	5.15
CDH-D290-370-84L	290-370	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	6.12
CDH-D370-450-84L	370-450	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	7.05
CDH-D450-550-84L	450-550	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	8.00
CDH-D550-650-84L	550-650	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	9.05
CDH-D650-750-84L	650-750	84	TP1103..	M3*7	M3*7	M8*25	L6	M6*25	L2.5	10.05

Pin Turning Boring Head – For Finishing Boring
套镗外径微调精镗刀

◎加工範圍:φ8－φ120 ◎微調精度：φ0.01mm/格
◎ PAT. Diameter φ8－φ120 ◎ 1 div = 0.01mm

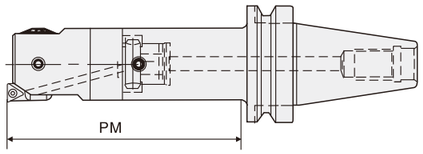


◎ 兩種材質：鋼制和鋁制 Two Kinds Of Material, Steel And Aluminum.

型號 Specification	Dc	L	適配刀片 Insert	螺釘 Clamp screw	扳手 wrench	kg
CDH2-D8-55-78L	8-55	78	TP1103...	M3X7	T8	2.9
CDH3-D30-120-78L	30-120	78	TP1103...	M3X7	T8	3.4

EWN Prescison Boring Bar Cutting Conditions–BT40/BT50
EWN系列精鏜刀切削条件表

◎MAS 403 BT40



◎BT40 MAS 403 BT (ISO40)

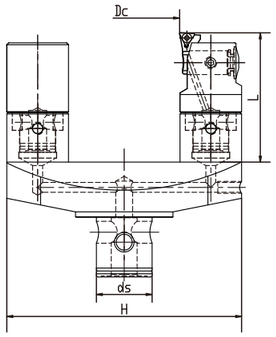
型號 Specification		被加工材料 Material		PM	刀尖半徑R Nose radius	切削速度Vc (m/min)	切削量ap (mm/ϕ)	進給率f (mm/rev) 推薦值 Recommend	進給率f (mm/rev) 最大值 MAX
BT40	CKB1–EWN2036–32.5	P	碳鋼/合金鋼	78	0.2	130	0.18	0.05	0.12
		M	不銹鋼		0.2	100	0.18	0.05	0.12
		N	淬火鋼		0.2	65	0.15	0.04	0.08
		K	鑄鐵		0.2	80	0.25	0.05	0.10
		S	鋁合金		0.4	170	0.25	0.05	0.12
	CKB2–EWN2547–35.5	P	碳鋼/合金鋼	93	0.2	150	0.25	0.05	0.12
		M	不銹鋼		0.2	120	0.25	0.05	0.12
		N	淬火鋼		0.2	80	0.15	0.04	0.08
		K	鑄鐵		0.2	80	0.25	0.05	0.10
		S	鋁合金		0.4	180	0.25	0.08	0.12
	CKB3–EWN3260–40	P	碳鋼/合金鋼	105	0.2	150	0.30	0.05	0.12
		M	不銹鋼		0.2	120	0.30	0.05	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.10
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	210	0.35	0.08	0.12
	CKB4–EWN4174–47	P	碳鋼/合金鋼	105	0.4	150	0.30	0.06	0.12
		M	不銹鋼		0.4	120	0.30	0.06	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.08
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	210	0.35	0.08	0.12
	CKB5–EWN5395–57 CKB6–EWN68150–71 CKB6–EWN100203–71	P	碳鋼/合金鋼	105	0.4	150	0.30	0.06	0.12
		M	不銹鋼		0.4	120	0.30	0.06	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.08
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	210	0.35	0.08	0.12

◎BT50 MAS 403 BT (ISO50)

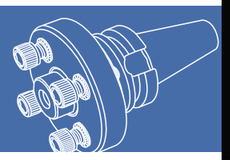
型號 Specification		被加工材料 Material		PM	刀尖半徑R Nose radius	切削速度Vc (m/min)	切削量ap (mm/ϕ)	進給率f (mm/rev) 推薦值 Recommend	進給率f (mm/rev) 最大值 MAX
BT50	CKB1–EWN2036–32.5	P	碳鋼/合金鋼	78	0.2	130	0.18	0.05	0.12
		M	不銹鋼		0.2	100	0.18	0.05	0.12
		N	淬火鋼		0.2	65	0.15	0.04	0.08
		K	鑄鐵		0.2	80	0.25	0.05	0.10
		S	鋁合金		0.4	170	0.25	0.05	0.12
	CKB2–EWN2547–35.5	P	碳鋼/合金鋼	105	0.2	150	0.25	0.05	0.12
		M	不銹鋼		0.2	120	0.25	0.05	0.12
		N	淬火鋼		0.2	80	0.15	0.04	0.08
		K	鑄鐵		0.2	80	0.25	0.05	0.10
		S	鋁合金		0.4	180	0.25	0.08	0.12
	CKB3–EWN3260–40	P	碳鋼/合金鋼	122	0.2	150	0.30	0.05	0.12
		M	不銹鋼		0.2	120	0.30	0.05	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.10
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	210	0.35	0.08	0.12
	CKB4–EWN4174–47	P	碳鋼/合金鋼	122	0.4	150	0.30	0.06	0.12
		M	不銹鋼		0.4	120	0.30	0.06	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.08
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	210	0.35	0.08	0.12
	CKB5–EWN5395–57 CKB6–EWN68150–71 CKB6–EWN100203–71	P	碳鋼/合金鋼	138	0.4	150	0.30	0.06	0.12
		M	不銹鋼		0.4	120	0.30	0.06	0.12
		N	淬火鋼		0.4	80	0.15	0.06	0.08
		K	鑄鐵		0.4	80	0.35	0.08	0.12
		S	鋁合金		0.4	230	0.35	0.08	0.12

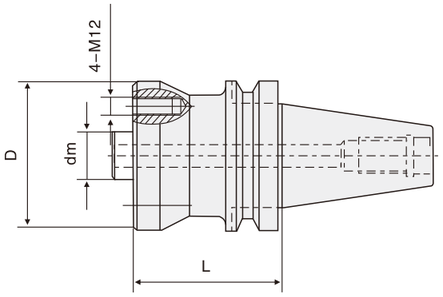
Pin Turning Boring Head–for Finishing Boring
套鏜精鏜刀

型號 Specification/Item	鏜孔範圍DC			內孔範圍	接口 ds	深度 depth (L)	長度 length (H)	鏜刀模塊 Head Model
CKB5–EW0830–52CK2	8–30	ENH2–1	22–30	80–88	28	52	79	CKB2–EWN2547–35.5
		ENH2–2	15–23	87–95				
		ENH2–3	8–16	94–102				
CKB5–EW1840–52CK2	18–40	ENH2–1	32–40	90–98	28	52	89	
		ENH2–2	25–33	97–105				
		ENH2–3	18–26	104–112				
CKB5–EW2855–63CK3	28–55	ENH3–1	46–55	119–129	28	63	118	CKB3–EWN3260–40
		ENH3–2	36–46	128–138				
		ENH3–3	28–37	137–147				
CKB6–EW3865–63CK3	38–65	ENH3–1	56–65	129–139	36	63	128	
		ENH3–2	46–56	138–148				
		ENH3–3	38–47	147–157				
CKB6–EW4875–63CK3	48–75	ENH3–1	65–75	139–149	36	63	138	
		ENH3–2	56–66	148–158				
		ENH3–3	48–57	157–167				
CKB6–EW68100–74CK4	68–100	ENH4–1	87–100	182–195	36	74	179	CKB4–EWN4174–47
		ENH4–2	75–88	194–207				
		ENH4–3	68–80	202–215				
CKB6–EW95127–74CK4	95–127	ENH4–1	114–127	209–222	36	74	206	
		ENH4–2	102–115	221–234				
		ENH4–3	95–107	229–242				



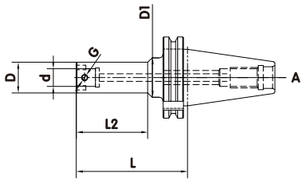
Holder for large Diameter Boring Head
桥式鏜刀柄

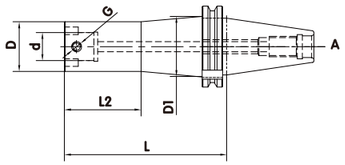




型號 Specification	L	D	dm	G	kg
BT40–DM32–60	60	100	32	4–M12	2.42
BT50–DM32–100	100	100	32	4–M12	6.3
BT50–DM32–150	150	100	32	4–M12	9.2
BT50–DM32–200	200	100	32	4–M12	11.1
BT50–DM32–250	250	100	32	4–M12	12.9
BT50–DM32–300	300	100	32	4–M12	14.8

SK Holder
SK系列镗刀柄

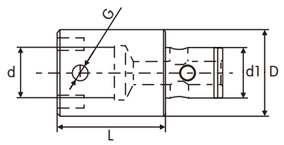




◎DIN69871-A/AD-SK

型號 Specification	圖 Figure	L	L2	D	d	D1	G	kg
SK30-CKB1-80	A	80	46	19	11	31	M4*0.5	0.75
SK30-CKB2-80		80	46	24	14	31	M5*0.5	0.83
SK30-CKB3-80		80	58	31	18	31	M6*0.75	0.91
SK30-CKB4-80		80	58	39	22	39	M8*0.75	1.02
SK40-CKB1-85		85	49	19	11	31	M4*0.5	1.18
SK40-CKB1-115		115	79	19	11	31	M4*0.5	1.21
SK40-CKB2-85		85	49	24	14	31	M5*0.5	1.21
SK40-CKB2-115		115	79	24	14	31	M5*0.5	1.27
SK40-CKB3-95		95	68	31	18	31	M6*0.75	1.32
SK40-CKB3-125		125	80	31	18	31	M6*0.75	1.46
SK40-CKB3-155	B	155	85	31	18	37	M6*0.75	1.62
SK40-CKB3-185		185	115	31	18	37	M6*0.75	1.75
SK40-CKB4-95	A	95	68	39	22	39	M8*0.75	1.54
SK40-CKB4-125		125	98	39	22	39	M8*0.75	1.86
SK40-CKB4-155	B	155	128	39	22	46	M8*0.75	2.15
SK40-CKB4-185		185	148	39	22	46	M8*0.75	2.42
SK40-CKB5-95	A	95	68	49	28	/	M10*1	1.81
SK40-CKB5-125		125	98	49	28	/	M10*1	2.35
SK40-CKB5-155		155	128	49	28	/	M10*1	2.75
SK40-CKB5-185		185	155	49	28	/	M10*1	3.05
SK40-CKB5-215		215	180	49	28	/	M10*1	3.3
SK40-CKB6-70		70	43	63	36	/	M12*1	2.2
SK40-CKB6-95		95	68	63	36	/	M12*1	2.75
SK40-CKB6-125		125	98	63	36	/	M12*1	3.2
SK40-CKB6-155		155	128	63	36	/	M12*1	3.4
SK40-CKB6-185		185	158	63	36	/	M12*1	3.6
SK40-CKB6-215		215	188	63	36	/	M12*1	3.8

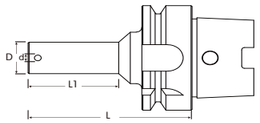
Extension
等径延长杆



型號 Specification	D	L	d	d1	G
CKB2-2-30L	24	30	14	14	M5*0.5
CKB3-3-38L	31	38	18	18	M6*0.75
CKB4-4-45L	39	45	22	22	M8*0.75
CKB5-5-55L	49	55	28	28	M10*1
CKB5-5-90L	49	90	28	28	M10*1
CKB6-6-60L	63	60	36	36	M12*1
CKB6-6-100L	63	100	36	36	M12*1

HSK Holder
HSK 刀柄

◎ 跳動：0.005毫米孔徑
◎ 公差：H5
◎ 平衡：G6.3/15000轉/分
◎ 可根據要求進行G2.5平衡
◎ 用途：用于直綫夾緊工具

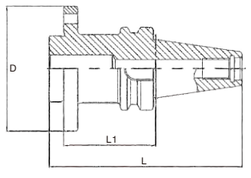


型號 Specification	D	d	L	L1	kg
HSK63A-CKB1-85	19	11	85	47	1.18
HSK63A-CKB1-115	19	11	115	77	1.21
HSK63A-CKB2-85	24	14	85	47	1.21
HSK63A-CKB2-115	24	14	115	77	1.27
HSK63A-CKB2-145	24	14	145	107	1.30
HSK63A-CKB3-95	31	18	95	69	1.32
HSK63A-CKB3-125	31	18	125	99	1.46
HSK63A-CKB3-155	31	18	155	129	1.62
HSK63A-CKB4-95	39	22	95	69	1.54
HSK63A-CKB4-125	39	22	125	99	1.86
HSK63A-CKB4-155	39	22	155	129	2.15
HSK63A-CKB5-95	50	28	95	69	1.81
HSK63A-CKB5-125	50	28	125	99	2.35
HSK63A-CKB5-155	50	28	155	129	2.75
HSK63A-CKB6-95	63	36	95	69	2.75
HSK63A-CKB6-125	63	36	125	99	3.2
HSK63A-CKB6-155	63	36	155	129	3.4

Unit: mm

BST Boring Holder
BST鏜刀刀柄

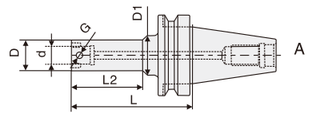
◎ BT NO錐柄錐度執行AT3標準;
◎ D内孔執行公差H6;
◎ 整支中心出水利于出水及抗振

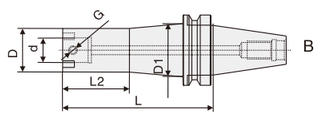


型號 Specification/Item	D	L	L1
BT40-BST-70	95	146.4	70
BT50-BST-100	95	212.8	100
BT50-BST-150	95	262.8	150
BT50-BST-200	95	312.8	200
BT50-BST-250	95	362.8	250
BT50-BST-300	95	412.8	300
BT50-BST-350	95	462.8	350
BT50-BST-400	95	512.8	400

Unit: mm

CKB Holder
CKB系列镗刀柄





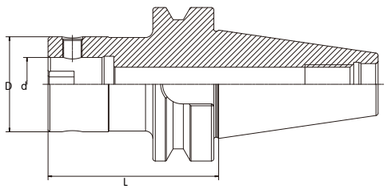
◎BT40 MAS 403 BT (IOS40)

型號 Specification	圖 Figure	L	L2	D	d	D1	G	kg
BT30-CKB1-80	A	80	46	19	11	31	M4×0.5	0.75
BT30-CKB2-80		80	46	24	14	31	M5×0.5	0.83
BT30-CKB3-80		80	58	31	18	31	M6×0.75	0.91
BT30-CKB4-80		80	58	39	22	39	M8×0.75	1.02
BT30-CKB5-65		65	42	49	28	49	M10×1	1.45
BT40-CKB1-85								
BT40-CKB1-115		115	79	19	11	31	M4×0.5	1.21
BT40-CKB2-85		85	49	24	14	31	M5×0.5	1.21
BT40-CKB2-115		115	79	24	14	31	M5×0.5	1.27
BT40-CKB2-145		145	105	24	14	31	M5×0.5	1.3
BT40-CKB3-95		95	68	31	18	31	M6×0.75	1.32
BT40-CKB3-125		125	80	31	18	37	M6×0.75	1.46
BT40-CKB3-155	B	155	85	31	18	37	M6×0.75	1.62
BT40-CKB3-185		185	115	31	18	37	M6×0.75	1.75
BT40-CKB4-95	A	95	68	39	22	39	M8×0.75	1.54
BT40-CKB4-125		125	98	39	22	39	M8×0.75	1.86
BT40-CKB4-155		155	128	39	22	46	M8×0.75	2.15
BT40-CKB4-185	B	185	120	39	22	46	M8×0.75	2.42
BT40-CKB5-95	A	95	68	49	28	49	M10×1	1.81
BT40-CKB5-125		125	98	49	28	49	M10×1	2.35
BT40-CKB5-155		155	128	49	28	49	M10×1	2.75
BT40-CKB5-185		185	155	49	28	49	M10×1	3.05
BT40-CKB5-215		215	180	49	28	49	M10×1	3.30
BT40-CKB6-65		65	43	63	36	63	M12×1	2.20
BT40-CKB6-95		95	68	63	36	63	M12×1	2.75
BT40-CKB6-125		125	98	63	36	63	M12×1	3.20
BT40-CKB6-155		155	128	63	36	63	M12×1	3.40
BT40-CKB6-185		185	158	63	36	63	M12×1	3.60
BT40-CKB6-215		215	188	63	36	63	M12×1	3.80

◎BT50 MAS 403 BT (IOS50)

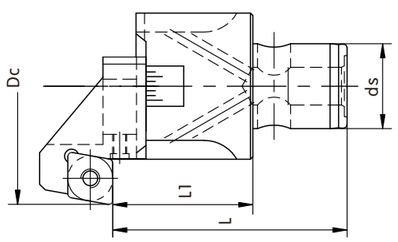
型號 Specification	圖 Figure	L	L2	D	d	D1	G	kg
BT50-CKB1-125	A	125	67	19	11	27	M4×0.5	3.93
BT50-CKB1-165	B	165	75	19	11	27	M4×0.5	4.05
BT50-CKB2-125	A	125	67	24	14	31	M5×0.5	4.08
BT50-CKB2-165	B	165	75	24	14	35	M5×0.5	4.20
BT50-CKB3-125	A	125	75	31	18	36	M6×0.75	4.10
BT50-CKB3-165	B	165	90	31	18	36	M6×0.75	4.35
BT50-CKB3-205		205	130	31	18	36	M6×0.75	4.70
BT50-CKB4-125	A	125	82	39	22	45	M8×0.75	4.35
BT50-CKB4-165		165	95	39	22	45	M8×0.75	4.70
BT50-CKB4-205	B	205	110	39	22	45	M8×0.75	5.02
BT50-CKB4-245		245	150	39	22	45	M8×0.75	5.30
BT50-CKB5-125	A	125	82	49	28	49	M10×1	4.75
BT50-CKB5-165		165	95	49	28	58	M10×1	5.20
BT50-CKB5-205	B	205	110	49	28	58	M10×1	5.53
BT50-CKB5-245		245	150	49	28	58	M10×1	5.95
BT50-CKB6-125	A	125	87	63	36	73	M12×1	5.15
BT50-CKB6-165		165	127	63	36	73	M12×1	6.10
BT50-CKB6-205	B	205	165	63	36	73	M12×1	7.40
BT50-CKB6-245		245	150	63	36	73	M12×1	7.75
BT50-CKB6-285		285	185	63	36	73	M12×1	8.10

BBT Boring Holder
BBT镗刀刀柄



型號 Specification/Item	CK NO	D	d	L
BBT40–CK1–115	CK1	19	11	115
BBT40–CK2–125	CK2	24	14	125
BBT40–CK3–125	CK3	31	18	125
BBT40–CK4–135	CK4	39	22	135
BBT40–CK5–165	CK5	50	28	165
BBT40–CK6–60	CK6	64	36	60
BBT40–CK6–160	CK6	64	36	160

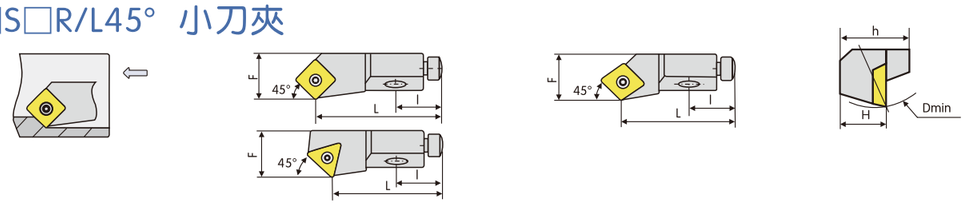
Counter Rough Boring Modular
反镗刀粗镗刀模块



型號 Specification/Item	數據 Data				適用刀片 Applicable Insert	螺釘 Screw	扳手 WRENCH	kg
	Dc	ds	L1	L				
CKB2–TWN3038F–29	30–38	14	29	65	CC..0602..	M2.5*6.5	T8	0.049
CKB3–TWN3747F–30	37–47	18	30	50	CC..09T3..	M4*10	T15	0.098
CKB4–TWN4660F–36	46–60	22	36	55	CC..09T3..	M4*10	T15	0.161
CKB5–TWN6081F–41	60–81	28	41	65	CC..1204..	M5*13	T20	0.301
CKB6–TWN79101F–56	79–101	36	56	70	CC..1204..	M5*13	T20	0.574
CKB6–TWN99130F–56	99–130	36	56	75	CC..1204..	M5*13	T20	1.225
CKB6–TWN129160F–56	129–160	36	56	75	CC..1204..	M5*13	T20	1.575

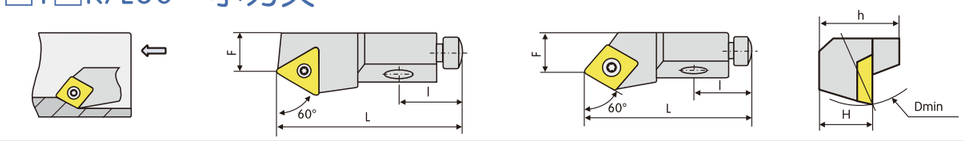
Accessories for Special Tools
可转位精密小刀夹

S□S□R/L45° 小刀夹



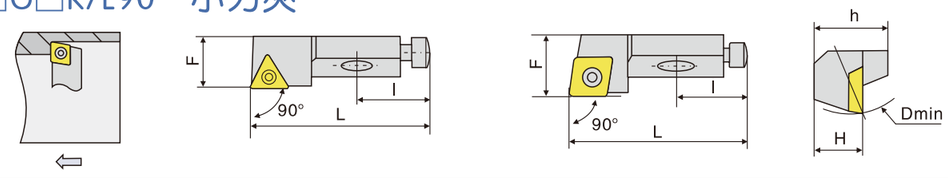
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCSCL06CA-06	SCSCR06CA-06	6	8	8.5	12	21	20	CC..060204	SIC025065	FT07	SDC035120	S2.5	SAC030085	SSC030050	S1.5
SCSCL08CA-06	SCSCR08CA-06	8	10	11	17	28	25	CC..060204	SIC025065	FT07	SCC040160	S3	SAC040130		
STSCL08CA-09	STSCR08CA-09	8	10	11	17	28	25	TC..090204	SIC022063						
SCSCL10CA-09	SCSCR10CA-09	10	14	15	20	44	40	CC..09T308	SIC035080	FT15	SCC060200	S4	SAC050145	SSC040080	S2
SSSCL10CA-09	SSSCR10CA-09	10	14	15	20	44	40	SC..09T308							
STSCL10CA-11	STSCR10CA-11	10	14	15	20	44	40	TC..110204	SIC025065	FT07					
SSSCL12CA-09	SSSCR12CA-09	12	20	20	20	47	50	SC..09T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
SSSCL12CA-12	SSSCR12CA-12	12	20	20	20	47	50	SC..120408	SID040110						
STSCL12CA-16	STSCR12CA-16	12	20	20	20	47	50	TC..16T308	SIC035080						
SSSCL16CA-12	SSSCR16CA-12	16	25	25	25	53	60	SC..120408	SID040110	FT15	SCC080350	S5	SAC060145	SSC060160	S3
STSCL16CA-16	STSCR16CA-16	16	25	25	25	53	60	TC..16T308	SIC035080						

S□T□R/L60° 小刀夹



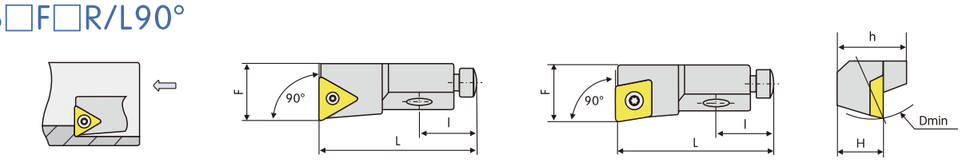
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCTCL06CA-06	SCTCR06CA-06	6	5.5	8.5	12	25	20	CC..060204	SIC025065	FT07	SDC035120	S2.5	SAC030085	SSC030050	S1.5
SCTCL08CA-06	SCTCR08CA-06	8	6	11	17	32	25	CC..060204	SIC025065		SCC040160	S3	SAC040130	SSC030050	S1.5
STTCL08CA-09	STTCR08CA-09	8	6	11	17	32	25	TC..090204	SIC022063						
STTCL10CA-11	STTCR10CA-11	10	9	15	20	50	40	TC..110204	SIC025065		SCC060200	S4	SAC050145	SSC040080	S2
STTCL12CA-16	STTCR12CA-16	12	13	20	20	55	50	TC..16T308	SIC035080	FT15	SCC060250		SAC060145	SSC050120	S2.5
STTCL16CA-16	STTCR16CA-16	16	15	25	25	63	60				SCC080350	S5		SSC060160	S3
SCTCL10CA-09	SCTCR10CA-09	10	9	15	20	50	40	CC..09T308			SCC060200	S4	SAC050145	SSC040080	S2

S□G□R/L90° 小刀夹



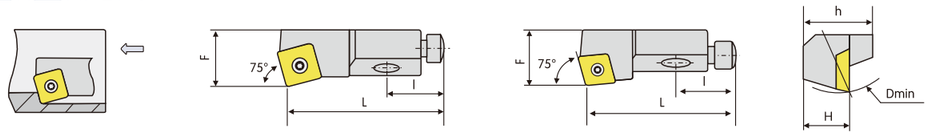
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCGCL08CA-06	SCGCR08CA-06	8	10	11	17	32	25	CC..060204	SIC025065	FT07	SCC040160	S3	SAC040130	SSC030050	S1.5
SCGCL10CA-09	SCGCR10CA-09	10	14	15	20	50	40	CC..09T308	SIC035080	FT15	SCC060200	S4	SAC050145	SSC040080	S2
SCGCL12CA-09	SCGCR12CA-09	12	20	20	20	55	50	CC..09T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
SCGCL12CA-12	SCGCR12CA-12	12	20	20	20	55	50	CC..120408	SID040110	FT15	SCC060250	S4	SAC060145		
SCGCL16CA-12	SCGCR16CA-12	16	25	25	25	63	60	CC..120408	SID040110	FT15	SCC080350	S5	SAC060145	SSC060160	S3
STGCL08CA-09	STGCR08CA-09	8	10	11	17	32	25	TC..090204	SIC022063	FT07	SCC040160	S3	SAC040130	SSC030050	S1.5
STGCL10CA-11	STGCR10CA-11	10	14	15	20	50	40	TC..110204	SIC025065	FT07	SCC060200	S4	SAC050145	SSC040080	S2
STGCL12CA-16	STGCR12CA-16	12	20	20	20	55	50	TC..16T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
STGCL16CA-16	STGCR16CA-16	16	25	25	25	63	60	TC..16T308	SIC035080	FT15	SCC080350	S5	SAC060145	SSC060160	S3

S□F□R/L90°



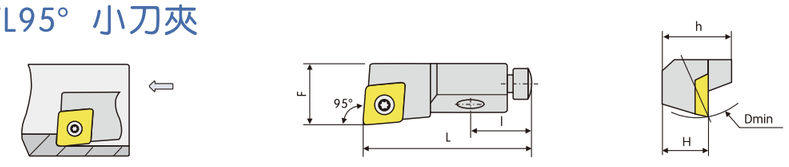
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCFCL06CA-06	SCFCR06CA-06	6	8	8.5	12	25	20	CC..060204	SIC025065	FT07	SDC035120	S2.5	SAC030085	SSC030050	S1.5
SCFCL08CA-06	SCFCR08CA-06	8	10	11	17	32	25	CC..060204	SIC025065	FT07	SCC040160	S3	SAC040130	SSC030050	S1.5
SCFCL10CA-09	SCFCR10CA-09	10	14	15	20	50	40	CC..09T308	SIC035080	FT15	SCC060200	S4	SAC050145	SSC040080	S2
SCFCL12CA-09	SCFCR12CA-09	12	20	20	20	55	50	CC..09T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
SCFCL12CA-12	SCFCR12CA-12	12	20	20	20	55	50	CC..120408	SID040110	FT15	SCC060250	S4	SAC060145		
SCFCL16CA-12	SCFCR16CA-12	16	25	25	25	63	60	CC..120408	SID040110	FT15	SCC080350	S5	SAC060145	SSC060160	S3
STFCL08CA-09	STFCR08CA-09	8	10	11	17	32	25	TC..090204	SIC022063	FT07	SCC040160	S3	SAC040130	SSC030050	S1.5
STFCL10CA-11	STFCR10CA-11	10	14	15	20	50	40	TC..110204	SIC025065	FT07	SCC060200	S4	SAC050145	SSC040080	S2
STFCL12CA-16	STFCR12CA-16	12	20	20	20	55	50	TC..16T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
STFCL16CA-16	STFCR16CA-16	16	25	25	25	63	60	TC..16T308	SIC035080	FT15	SCC080350	S5	SAC060145	SSC060160	S3

S□k□R/L75°



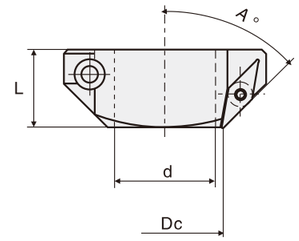
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCKCL06CA-05	SCKCR06CA-05	6	8	8.5	12	25	20	CC..060204	SIC025063	FT07	SDC035120	S2.5	SAC030085	SSC030050	S1.5
SCKCL08CA-06	SCKCR08CA-06	8	10	11	17	32	25	CC..060204	SIC025065	FT07	SCC040160	S3	SAC040130		
SSKCL10CA-09	SSKCR10CA-09	10	14	15	20	50	40	SC..09T308	SIC035080	FT15	SCC060200	S4	SAC050145	SSC040080	S2
SSKCL12CA-09	SSKCR12CA-09	12	20	20	20	55	50	SC..09T308	SIC035080	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5
SSKCL12CA-12	SSKCR12CA-12	12	20	20	20	55	50	SC..120408	SID040110	FT15	SCC060250	S4	SAC060145		
SSKCL16CA-12	SSKCR16CA-12	16	25	25	25	63	60	SC..120408	SID040110	FT15	SCC080350	S5	SAC060145	SSC060160	S3

SCL□R/L95° 小刀夹



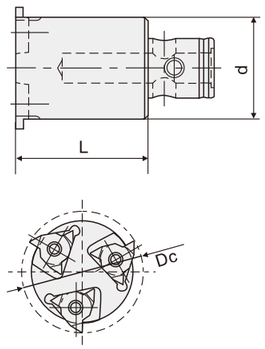
型號 Specification		尺寸 Size						刀片 Inserts	螺釘 Screw	扳手 Wrench	螺釘 Screw	扳手 Wrench	螺釘 Screw	螺釘 Screw	扳手 Wrench
左刀 Left	右刀 Right	H	F	h	l	L	Dmin								
SCLCL06CA-06	SCLCR06CA-06	6	8	8.5	12	25	20	CC..060204	SIC025065	FT07	SDC035120	S2.5	SAC030085	SSC030050	S1.5
SCLCL08CA-06	SCLCR08CA-06	8	10	11	17	32	25	CC..060204	SIC025065	FT07	SCC040160	S3	SAC040130		
SCLCL10CA-09	SCLCR10CA-09	10	14	15	20	50	40	CC..09T308	SIC035080	FT15	SCC060200	S4	SAC050145	SSC040080	S2
SCLCL12CA-12	SCLCR12CA-12	12	20	20	20	55	50	CC..120408	SID040110	FT15	SCC060250	S4	SAC060145	SSC050120	S2.5

Chamfering Tools
TWN系列鏜刀倒角环



型號 Specification	Dc	d	L	A	適用刀片 Insert	螺釘 Screw	扳手 Wrench	庫存 Store
CKB1-DJ2228-20A	22-28	19	20	45°	VCMT110304	M2.5X6.5	T8	○
CKB1-DJ2430-20B	24-30	19	20	30°	VCMT110304	M2.5X6.5	T8	○
CKB2-DJ2735-20A	27-35	24	20	45°	VCMT110304	M2.5X6.5	T8	○
CKB2-DJ2937-20B	29-37	24	20	30°	VCMT110304	M2.5X6.5	T8	○
CKB2-DJ3038-20A	30-38	24	20	45°	VCMT110304	M2.5X6.5	T8	○
CKB2-DJ3240-20B	32-40	24	20	30°	VCMT110304	M2.5X6.5	T8	○
CKB3-DJ3949-20A	39-49	31	20	45°	VCMT110304	M2.5X6.5	T8	○
CKB3-DJ4151-20B	41-51	31	20	30°	VCMT110304	M2.5X6.5	T8	○
CKB4-DJ4861-30A	48-61	39	30	45°	VCMT160408	M4X10	T15	○
CKB4-DJ5063-30B	50-63	39	30	30°	VCMT160408	M4X10	T15	○
CKB5-DJ6077-30A	60-77	49	30	45°	VCMT160408	M4X10	T15	○
CKB5-DJ6279-30B	62-79	49	30	30°	VCMT160408	M4X10	T15	○
CKB6-DJ7698-30A	76-98	63	30	45°	VCMT160408	M4X10	T15	○
CKB6-DJ78100-30B	78-100	63	30	30°	VCMT160408	M4X10	T15	○

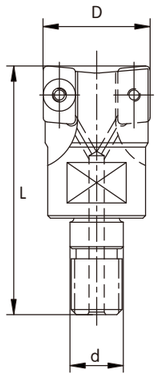
Slot Milling Cutters
CKB系列槽銑刀



型號 Specification	Dc	d	L	適用刀片 Insert	螺釘 Screw	刃數 Teeth	扳手 Wrench	緊定螺釘 Screw	kg	庫存 Store
CKB2-CZ28-35TGF32	28	24	35	TGF32L3050-TGF32L3280	M4X10	2	T15	TW40TS	0.14	○
CKB3-CZ37-40TGF32	37	31	40	TGF32L3050-TGF32L3280	M4X10	3	T15	TW40TS	0.23	○
CKB4-CZ45-47TGF32	45	39	47	TGF32L3050-TGF32L3280	M4X10	4	T15	TW40TS	0.43	○
CKB5-CZ55-57TGF32	55	50	57	TGF32L3050-TGF32L3280	M4X10	5	T15	TW40TS	0.82	○
CKB6-CZ70-70TGF32	70	63	70	TGF32L3050-TGF32L3280	M4X10	6	T15	TW40TS	1.75	○

Modular Type Milling Cutter
可换式锁牙刀头

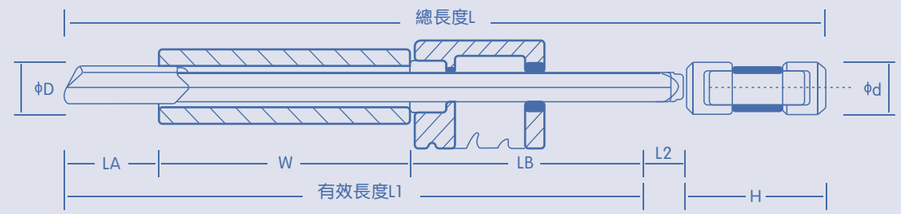
型號 Specification	尺寸毫米 Dimensions(mm)				牙Teeth	刀片規格Insert	kg
	D	d	L	M			
300R-16-M8-2T	16	8.5	25	M8	2	APMT1135	0.05
300R-17-M8-2T	17	8.5	25	M8	2		0.05
300R-20-M10-2T	20	10.5	30	M10	2		0.07
300R-20-M10-3T	20	10.5	30	M10	3		0.07
300R-21-M10-2T	21	10.5	30	M10	2		0.07
300R-21-M10-3T	21	10.5	30	M10	3		0.07
300R-22-M10-3T	22	10.5	30	M10	3		0.09
300R-25-M12-3T	25	12.5	35	M12	3		0.12
300R-25-M12-3T	25	12.5	35	M12	4		0.11
300R-26-M12-3T	26	12.5	35	M12	3		0.12
300R-26-M12-3T	26	12.5	35	M12	4		0.12
300R-32-M16-4T	32	17	43	M16	4		0.24
300R-32-M16-5T	32	17	43	M16	5		0.23
300R-33-M16-4T	33	17	43	M16	4		0.25
300R-33-M16-5T	33	17	43	M16	5		0.24
300R-35-M16-4T	35	17	43	M16	4		0.31
300R-35-M16-5T	35	17	43	M16	5		0.31
300R-36-M16-5T	36	17	43	M16	5		0.32
400R-25-M12-2T	25	12.5	38	M12	2	APMT1604	0.13
400R-26-M12-2T	26	12.5	38	M12	2		0.14
400R-32-M16-2T	32	17	43	M16	2		0.26
400R-32-M16-3T	32	17	43	M16	3		0.25
400R-33-M16-2T	33	17	43	M16	2	APMT1604	0.27
400R-33-M16-3T	33	17	43	M16	3		0.27
400R-35-M16-3T	35	17	43	M16	3		0.30



◎ 槍鑽訂貨標注格式及長度計算

- 槍鑽刃部直徑根據客户需要，公稱尺寸可細分至0.001mm
- 訂貨時請按如下標準標注

D（鑽頭直徑）*L（總長）–柄部編號

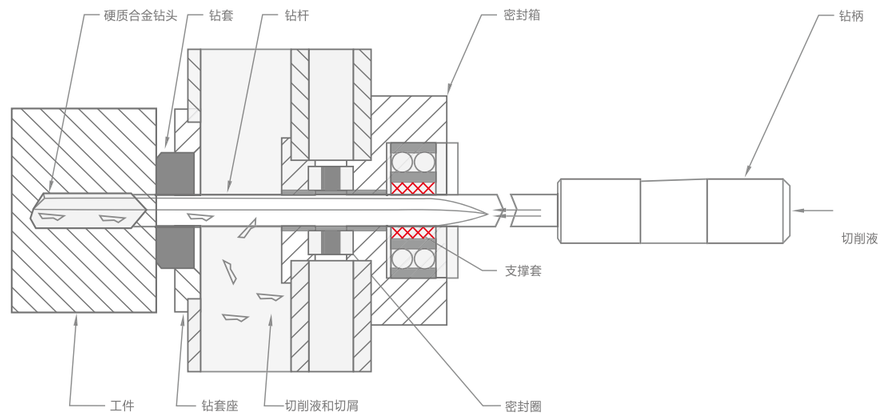


總長度L	D=鑽頭直徑	W=加工深度	L=鑽槍總長	LB=導向支撑機構寬度
有效長度L1	H=鑽柄柄長	LA=再研長度	L1=鑽槍有效長度	L2=最短排屑距離

槍鑽總長度按下式確定：
L=LA（在研長度）+W（孔深）+LB（導向支撑機構寬度）+L2（最短排屑距離）+H（柄長）

- 訂貨時請注明被加工材料，硬度，内孔公差，光潔度

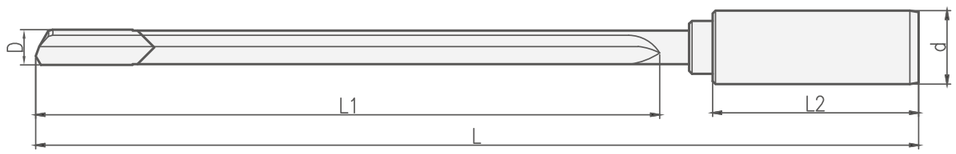
槍鑽可生産直徑1mm–50mm範圍，長徑比可達250倍以上，最長總長可達5000mm，槍鑽的種類分爲：標準槍鑽，异形槍鑽(階梯槍鑽，球型槍鑽等)，塗層槍鑽，PCD槍鑽，整體硬質合金槍鑽，機夾式槍鑽等。



- 使用具備高壓内冷系統的立、卧式設備。
- 使用深孔鑽專用切削油或冷却液，并保證和提供足够的壓力和流量。
  因槍鑽不具備自定心的能力，所以在加工時，必須使用配套的導向套。
- 或引導孔以作爲槍鑽加工的定心。
- 使用正確的加工參數，以達到最佳的孔加工效果。

◎ 焊接式單刃槍鑽

焊接式單刃槍鑽是由鑽尖、鑽杆和鑽柄三部分通過焊接成爲一個整體，可根據被加工材料的不同選擇不用牌號的硬質合金材料進行合理的刀具設計。鑽頭通常采用整體硬質合金，刀頭部分與經過熱處理的鑽杆釬焊在一起，然後再與精磨過的鋼制鑽柄進行釬焊鏈接。對于特殊材料也可以通過不同種類的塗層來應對。



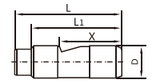
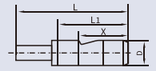
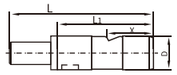
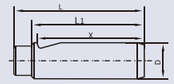
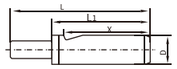
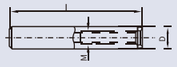
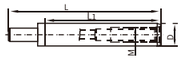
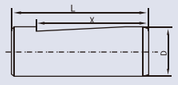
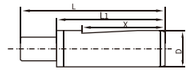
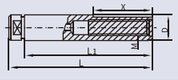
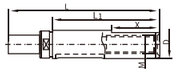
◎ 焊接式单刃枪钻库存表 Stock of brazed single flute gun drills

規格 specification	235mm（L）		270mm(L)		刀柄 handle/driver	800mm (L)	1000mm (L)	1200mm (L)	1440mm (L)	1650mm (L)	1800mm (L)	刀柄 handle/driver
	標準 standrad	塗層 coating	標準 standrad	塗層 coating								
ϕ3.02	●	●			10*40	●	●					25*70
ϕ3.52	●	●				●	●					
ϕ4.02	●	●				●	●	●				
ϕ4.52	●	●				●	●	●				
ϕ5.02	●	●				●	●	●	●			
ϕ5.52	●	●					●	●	●			
ϕ6.02	●	●					●	●	●	●		
ϕ6.52	●	●					●	●	●	●		
ϕ7.02	●	●	●				●	●	●	●		
ϕ7.52	●	●					●	●	●	●		
ϕ8.02	●	●	●				●	●	●	●	●	
ϕ8.52	●	●					●	●	●	●		
ϕ9.02	●	●	●				●	●	●	●		
ϕ9.52	●	●					●	●	●	●		
ϕ10.02	●	●	●				●	●	●	●	●	
ϕ10.52	●	●					●	●	●	●		
ϕ11.02	●	●	●					●	●	●		
ϕ11.52	●	●						●	●	●		
ϕ12.02	●	●	●					●	●	●	●	

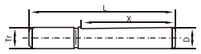
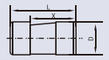
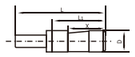
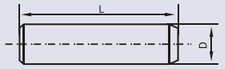
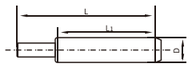
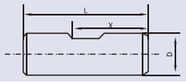
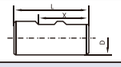
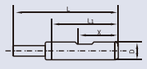
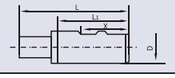
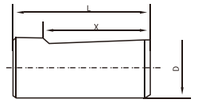
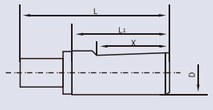
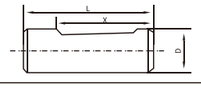
●= available stock

BRAZED GUNDRILLS
焊接式枪钻

◎ 焊接式槍鑽標準柄 Standard driver of the brazed gun drills

型號 specification	外形尺寸D Φdia.(mm) diameter Φdia.(mm)	簡圖 drawing	刀具長度計算 tool length calculation		定位槽 X fix position X	螺紋規格 M screw spec M
			鑽柄夾緊部 L1 clamping part L1	鑽柄過渡部 L transitional part L		
SH10-00	10		40		24.0	
SH16-03	16		45	53	31.0	
SH25-00	25		70	78	34.0	
SH10-01	10		40	57	24.0	
SH16-04	16		45	72	31.0	
SH25-01	25		70	105	34.0	
SH16-02	16		50	58	47.5	
SH16-33	16		50	77	47.5	
SH10-06	10			60		M6x0.5
SH16-15	16			80		M10x1
SH25-08	25			100		M16x1.5
SH10-28	10		60	77		M6x0.5
SH16-22	16		60	105		M10x1
SH25-10	25		100	140		M16x1.5
SH12.7-00	12.7			38.1	25.3	
SH19.05-01	19.05			70	45.0	
SH25.4-00	25.4			70	57.5	
SH31.7-00	31.7			70	57.5	
SH38.1-01	38.1			70	57.5	
SH19.05-11	19.05		70	97	45.0	
SH25.4-11	25.4		70	100	57.5	
SH31.7-01	31.7		70	111	57.5	
SH38.1-01	38.1		70	110	57.5	
SH10-44	10		60	68	35	M6x0.5
SH16-31	16		80	90	37	M10x1
SH25-34	25		100	100	45	M16x1.5
SH16-66	16		80	80	37	M10x1
SH25-40	25		100	100	45	M16x1.5
SH10-30	10		40	40	28.0	
SH12-14	12		45	45	33.0	
SH16-70	16		48	48	36.0	
SH20-56	20		50	50	38.0	

◎ 焊接式槍鑽標準柄 Standard driver of the brazed gun drills

型號 specification	外形尺寸D Φdia.(mm) diameter Φdia.(mm)	簡圖 drawing	刀具長度計算 tool length calculation		定位槽 X fix position X	螺紋規格 M screw spec M
			鑽柄夾緊部 L1 clamping part L1	鑽柄過渡部 L transitional part L		
SH16-00	16			112	73.0	TR16x1.5
SH20-00	20			126	82.0	TR 20x2
SH28-00	28			126	82.0	TR 28x2
SH36-00	36			162	109.0	TR 36x2
SH16-21	16			40	28.0	
SH25-16	25			50	35.0	
SH35-00	35			60	40.0	
SH16-30	16		40	67	28.0	
SH25-20	25		50	77	35.0	
SH35-01	35		60	100	40.0	
SH10-40	10		40			
SH12-18	12		45			
SH16-11	16		48			
SH20-01	20		50			
SH25-11	25		56			
SH32-24	32		60			
SH40-03	40		70			
SH10-41	10		40	57		
SH12-19	12		45	62		
SH16-20	16		48	75		
SH20-60	20		50	77		
SH25-21	25		56	86		
SH32-23	32		60	100		
SH40-04	40		70	110		
SH10-11	10			40	23.5	
SH12-07	12			45	26.5	
SH16-32	16			48	29.0	
SH20-29	20			50	30.5	
SH25-22	25			56	38.0	
SH32-10	32			60	43.0	
SH40-13	40			70	47.0	
SH10-23	10		40	57	23.5	
SH12-02	12		45	62	26.5	
SH16-53	16		48	75	29.0	
SH20-34	20		50	77	30.5	
SH25-31	25		56	86	38.0	
SH32-11	32		60	100	43.0	
SH40-14	40		70	110	47.0	
SH10-20	10			40	28.0	
SH12-08	12			45	33.0	
SH16-47	16			48	36.0	
SH20-40	20			50	38.0	
SH25-36	25			56	44.0	
SH32-12	32			60	48.0	
SH40-18	40			70	66.0	
SH10-24	10		40	57	28.0	
SH12-05	12		45	62	33.0	
SH16-51	16		48	75	36.0	
SH20-43	20		50	77	38.0	
SH25-37	25		56	86	44.0	
SH32-13	32		60	100	48.0	
SH40-17	40		70	110	66.0	
SH10-29	10			40	28.0	
SH12-13	12			45	33.0	
SH16-62	16			48	36.0	
SH20-55	20			50	38.0	

◎ 焊接式單刃槍鑽加工參數表 Machining parameters of the brazed single flute gun drill

工件材質	彈簧鋼 淬硬鋼 耐熱鋼 鑄鋼 冷硬鑄鐵 鈦合金 特殊合金 (鎳基耐熱合金 鎳合金等)	不銹鋼 耐酸不銹鋼 奧氏不銹鋼 18~25%Cr Ni > 8%	馬氏不銹鋼 鐵素體不銹鋼 (普通不銹鋼 不銹鑄鋼) 13~25%Cr 易切削鋼 (硫化鋼)	合金鋼 調質鋼 表面硬化鋼 氮處理鋼 工具鋼 > 900N/mm²	鑄鐵 灰口鑄鐵 <300N/mm² 球墨鑄鐵 < 400N/mm²	鑄鐵灰口鑄鐵 < 300N/mm² 球墨鑄鐵 < 400N/mm² 可鍛鑄鐵 白心可鍛鑄鐵 黑心可鍛鑄鐵	結構鋼 調質鋼 高碳低合金鋼 表面硬化鋼 氮處理鋼 工具鋼 > 900N/mm² 易切削鋼	黃銅 青銅 紫銅 塑料	鋁 鑄鋁 Si> 5% 易加工鋁	鋁 鑄鋁 Si> 5% 非淬硬鋁
切削速度 m/min	25~60	30~60	40~70	60~80	60~90	70~100	70~100	80~150	80~160	100~300

直徑 Φ diameter Φ	進給速度:毫米/轉: mm/rev feed rate: mm/rev									
2.0–2.49	0.001~0.002	0.002~0.005	0.002~0.006	0.002~0.005	0.005~0.018	0.005~0.019	0.003~0.007	0.003~0.015	0.002~0.012	0.005~0.005
2.5–2.99	0.001~0.005	0.004~0.007	0.004~0.007	0.004~0.006	0.008~0.028	0.008~0.02	0.005~0.010	0.005~0.020	0.004~0.026	0.004~0.008
3.0–3.49	0.002~0.007	0.006~0.008	0.005~0.009	0.005~0.007	0.009~0.038	0.009~0.038	0.007~0.012	0.006~0.030	0.006~0.037	0.006~0.012
3.5–3.99	0.004~0.008	0.008~0.009	0.007~0.011	0.007~0.010	0.011~0.042	0.011~0.046	0.009~0.015	0.007~0.045	0.007~0.055	0.007~0.025
4.0–4.49	0.006~0.009	0.009~0.010	0.008~0.013	0.008~0.012	0.012~0.047	0.012~0.050	0.012~0.019	0.008~0.050	0.008~0.071	0.008~0.026
4.5–4.99	0.008~0.011	0.010~0.013	0.009~0.017	0.011~0.015	0.016~0.052	0.016~0.057	0.014~0.020	0.009~0.057	0.009~0.094	0.009~0.028
5.0–5.99	0.010~0.014	0.012~0.015	0.013~0.019	0.013~0.018	0.018~0.065	0.018~0.068	0.016~0.026	0.010~0.069	0.010~0.109	0.010~0.036
6.0–6.99	0.012~0.016	0.014~0.017	0.015~0.023	0.015~0.022	0.024~0.071	0.024~0.074	0.018~0.028	0.012~0.079	0.012~0.125	0.012~0.045
7.0–7.99	0.015~0.018	0.016~0.019	0.18~0.026	0.018~0.025	0.028~0.084	0.028~0.085	0.021~0.035	0.014~0.092	0.018~0.130	0.014~0.049
8.0–8.99	0.018~0.021	0.018~0.021	0.020~0.031	0.020~0.027	0.032~0.092	0.032~0.096	0.024~0.036	0.016~0.101	0.020~0.144	0.016~0.056
9.0–9.99	0.021~0.025	0.020~0.028	0.023~0.034	0.023~0.030	0.36~0.110	0.036~0.114	0.027~0.040	0.018~0.113	0.023~0.158	0.018~0.034
10.0–11.99	0.025~0.030	0.025~0.033	0.025~0.041	0.025~0.038	0.045~0.116	0.050~0.120	0.030~0.04	0.020~0.139	0.025~0.174	0.020~0.074
12.0–13.99	0.027~0.033	0.030~0.044	0.030~0.045	0.029~0.044	0.051~0.126	0.060~0.138	0.036~0.060	0.024~0.156	0.030~0.182	0.024~0.087
14.0–15.99	0.029~0.040	0.035~0.044	0.035~0.052	0.035~0.050	0.057~0.138	0.070~0.154	0.042~0.071	0.028~0.179	0.035~0.194	0.028~0.099
16.0–17.99	0.033~0.044	0.041~0.050	0.042~0.060	0.039~0.053	0.620~0.158	0.079~0.170	0.048~0.079	0.033~0.199	0.050~0.209	0.033~0.108
18.0–19.99	0.037~0.049	0.045~0.062	0.045~0.067	0.044~0.060	0.066~0.173	0.090~0.191	0.054~0.091	0.036~0.244	0.054~0.228	0.036~0.130
20.0–23.99	0.041~0.054	0.049~0.071	0.050~0.079	0.049~0.069	0.069~0.189	0.106~0.207	0.060~0.107	0.040~0.249	0.060~0.254	0.040~0.146
24.0–27.99	0.045~0.057	0.052~0.083	0.054~0.090	0.054~0.0077	0.076~0.210	0.120~0.221	0.069~0.117	0.048~0.291	0.072~0.295	0.048~0.169
28.0–31.99	0.049~0.062	0.057~0.091	0.059~0.098	0.059~0.085	0.079~0.212	0.140~0.237	0.079~0.134	0.056~0.327	0.084~0.360	0.056~0.194
32.0–40.0	0.052~0.065	0.063~0.098	0.065~0.107	0.063~0.098	0.086~0.228	0.160~0.245	0.085~0.154	0.064~0.380	0.096~0.455	0.064~0.221

● 切削速度和進給量取决于:刀具直徑、刀具長度、切削液、工件材質、機床組件的穩定性和工裝夾緊情况，以上表格中的加工參數爲標準參考值，以現場實際工况爲準。
The cutting speed and feed rate depend on : tool diameter, tool lenath, cutting fluid, vorkpiece material, characterization ofmachine and clamping condition.
The processing parameters in the above table are the standard nornal value for reference.The practical actual working condtions on site are the true value.

SOLID CARBIDE GUN DRILL
整体硬质合金枪钻

Solid carbide gun drill

The solid carbide gun drill is made of drill body(drill tip and drill rod integrated) and the drill handle from two parts by welding as a whole. It can also be made by the whole carbide.(drill tip,drill rod and handle integrated) Its stabil-ity, efficiency and useful life are better than the welding type. This design ensures higher reliability and cutting per-formance, while it compromise higher rigidity and less dis-torted vibration. It is therefore enjoy a longer tool life.

整體硬質合金槍鑽是由鑽身(鑽尖與鑽杆一體)鑽柄兩部分通過焊接成一個整體，也可以爲全部整體硬質合金制做而成(鑽尖、鑽杆、鑽柄一體)，它的穩定性、效率以及壽命均優于焊接式。這種設計能够保證更高的可靠性相切前性能，同時它較高的剛性和較低的扭曲振動可以使刀具壽命更長。

Made it up for maximum 550mm overall length
制作长度~550mm

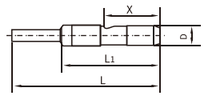
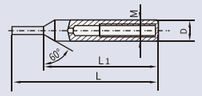
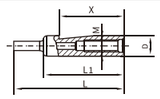
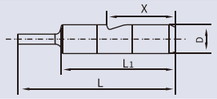
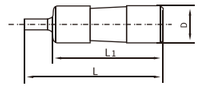
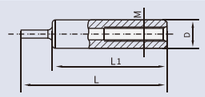
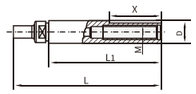
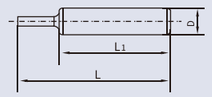
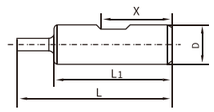
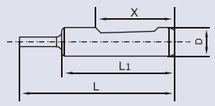
Drilling diameter range:1.00- 12.00
制作范围
ϕ1.0~ϕ12.0

整體硬質合金槍鑽庫存表 Solid carbide gun drill stock table		
Φ1.52*160-10*55	Φ2.0*250-10*135	Φ3.8*185-4*38/50-L
Φ1.80*160-10*55	Φ2.2*170-4*38/50	Φ3.8*240-10*100-L
Φ2.02*160-10*55	Φ2.5*175-4*38/50-L	Φ3.8*275-10*135-L
Φ2.02*180-10*55	Φ2.5*230-10*100-L	Φ4.0*185-4*38/50-L
Φ2.02*180-10*55-L	Φ2.5*265-10* 135-L	Φ4.0*240-10*100-L
Φ2.02*200-10*55	Φ2.6*175-4*38/50-L	Φ4.0*275-10*135-L
Φ2.02*200-10*55-L	Φ2.6*265-10*135-L	Φ4.2*185-4*38/50-L
Φ2.52*180-10*55	Φ2.8*175-4*38/50-L	Φ4.2*240-10*100-L
Φ2.52*180-10*55-L	Φ2.8*265-10*135-L	Φ4.2*275-10*135-L
Φ3.02*180-10*55	Φ3.0*175-4*38/50-L	Φ4.5*285-10*135-L
Φ3.02*200-10*55	Φ3.0*230-10*100-L	Φ4.8*250-10*100-L
Φ3.02*200-10*55-L	Φ3.0*265-10*135-L	Φ5.0*250-10*100-L
Φ2.8*170-2.9*30-L	Φ3.2*180-4*38/50-L	Φ5.0*260-10*100-L
Φ3.0*170-2.9*30-L	Φ3.2*230-10*100-L	Φ6.0*260-10*100-L
Φ3.2*170-3.1*30-L	Φ3.2*265-10*135-L	Φ6.0*295-10*135-L
Φ1.80*200-10*100	Φ3.5*180-4*38/50-L	Φ7.0*280-10*100-L
Φ2.0*170-4*38/50	Φ3.5*230-10*100-L	Φ9.0*280-10*100-L
Φ2.0*220-10*100	Φ3.5*265-10*135-L	Φ10.0*280-10*100-L

● L:TIALN

SOLID CARBIDE GUN DRILL
整体硬质合金枪钻

◎ 整体硬质合金枪钻标准刀柄表 Table of soild carbide gun drill handle

規格 specification	外形尺寸(mm)Φdia. diamete(mm)Φdia.	圖紙 drawing	刀具長度計算 handle length calculation		定位槽 x fix position x	螺紋規格 M screw spec M
			鑽柄夾緊部 D clamping part D	鑽柄過渡部 L transitional part L		
SH6-03	6		30	45	17	
SH10-15	10		55	70		M6*0.5
SH10-37	10		40	55	32.7	M6*0.5
SH10-42	10		40	55	24	
SH12.7-01	12.7		38	48	25.4	
SH12.7-09	12.7		51	65		M6*0.5
SH16-75	16		80	105	37	M10*1
SH4-08	4		34	46		
SH6-12	6		36	50		
SH10-51	10		40	55		
SH12-27	12		45	60		
SH16-86	16		48	63		
SH6-13	6		36	50	20	
SH10-47	10		40	55	23.5	
SH12-30	12		45	60	26.5	
SH16-78	16		48	63	29	
SH6-01	6		36	50	25	
SH10-49	10		40	55	28	
SH12-28	12		45	60	33	
SH16-84	16		48	63	36	

◎ 焊接式單刃槍鑽加工參數表 Machining parameters of the brazed single flute gun drill

工件材質	彈簧鋼 淬硬鋼 耐熱鋼 鑄鋼 冷硬鑄鐵 鈦合金 特殊合金 (鎳基耐熱合金 鎳合金等)	不銹鋼 耐酸不銹鋼 奧氏不銹鋼 18~25%Cr Ni > 8%	馬氏不銹鋼 鐵素體不銹鋼 (普通不銹鋼 不銹鑄鋼) 13~25%Cr 易切削鋼 (硫化鋼)	合金鋼 調質鋼 表面硬化鋼 氮處理鋼 工具鋼 > 900N/mm²	鑄鐵 灰口鑄鐵 <300N/mm² 球墨鑄鐵 < 400N/mm²	鑄鐵灰口鑄鐵 < 300N/mm² 球墨鑄鐵 < 400N/mm² 可鍛鑄鐵 白心可鍛鑄鐵 黑心可鍛鑄鐵	結構鋼 調質鋼 高碳低合金鋼 表面硬化鋼 氮處理鋼 工具鋼 > 900N/mm² 易切削鋼	黃銅 青銅 紫銅 塑料	鋁 鑄鋁 Si> 5% 易加工鋁	鋁 鑄鋁 Si> 5% 非淬硬鋁
切削速度 m/min	25~60	30~60	40~70	60~80	60~90	70~100	70~100	80~150	80~160	100~300

直徑 Φ diameter Φ	進給速度:毫米/轉: mm/rev feed rate: mm/rev									
0.7~0.79	0.0004~0.0012	0.0005~0.0012	0.0007~0.0012	0.0005~0.0012	0.0009~0.0014	0.0007~0.0018	0.0004~0.0018	0.0005~0.0012	0.0007~0.0012	0.0005~0.0009
0.8~0.89	0.0006~0.0016	0.0070~0.0015	0.0011~0.0014	0.0006~0.0015	0.0012~0.0018	0.0010~0.0023	0.0004~0.0022	0.0008~0.0015	0.0012~0.0014	0.0008~0.0012
0.9~0.99	0.0009~0.0020	0.0011~0.0019	0.0014~0.0017	0.0009~0.0019	0.0015~0.0024	0.0014~0.0028	0.0007~0.0026	0.0011~0.0019	0.0017~0.0020	0.0011~0.0017
1.0~1.09	0.0013~0.0024	0.0014~0.0022	0.0019~0.0022	0.0010~0.0023	0.0019~0.0029	0.0018~0.0032	0.0010~0.0032	0.0015~0.0024	0.0020~0.0024	0.0015~0.0024
1.1~1.19	0.0017~0.0028	0.0017~0.0025	0.0022~0.0026	0.0013~0.0029	0.0025~0.0035	0.0022~0.0038	0.0014~0.0038	0.0019~0.0029	0.0022~0.0029	0.0019~0.0034
1.2~1.29	0.0020~0.0033	0.0020~0.0027	0.0024~0.0028	0.0015~0.0035	0.0031~0.0041	0.0030~0.0048	0.0018~0.0041	0.0024~0.0034	0.0024~0.0034	0.0024~0.0041
1.3~1.39	0.0023~0.0036	0.0022~0.0029	0.0031~0.0035	0.0020~0.0041	0.0040~0.0051	0.0039~0.0060	0.0020~0.0050	0.0028~0.0039	0.0026~0.0045	0.0026~0.0044
1.4~1.49	0.0026~0.0038	0.0023~0.0031	0.0034~0.0037	0.0021~0.0047	0.0047~0.0060	0.0049~0.0079	0.0021~0.0054	0.0031~0.0047	0.0028~0.0055	0.0032~0.0048
1.5~1.59	0.0029~0.0042	0.0024~0.0035	0.0035~0.0042	0.0021~0.0051	0.0053~0.0068	0.0056~0.0100	0.0021~0.0067	0.0032~0.0053	0.0035~0.0066	0.0038~0.0059
1.6~1.79	0.0035~0.0054	0.0036~0.0049	0.0040~0.0051	0.0024~0.0066	0.0064~0.0095	0.0064~0.0150	0.0028~0.0075	0.0035~0.0095	0.0040~0.0085	0.0040~0.0075
1.8~1.99	0.0040~0.0065	0.0040~0.0065	0.0050~0.0065	0.0030~0.0075	0.0070~0.0130	0.0070~0.0220	0.0030~0.0095	0.0040~0.0130	0.0050~0.0110	0.0050~0.0110
2.0~2.49	0.0050~0.0075	0.0050~0.0075	0.0050~0.0075	0.0030~0.0095	0.0100~0.0220	0.0090~0.0330	0.0040~0.0120	0.0040~0.0180	0.0050~0.0200	0.0070~0.0130
2.5~2.99	0.0060~0.0095	0.0060~0.0095	0.0060~0.0110	0.0040~0.0110	0.0130~0.0320	0.0110~0.0430	0.0050~0.0160	0.0050~0.0250	0.0060~0.0360	0.0080~0.0170
3.0~3.49	0.0080~0.0110	0.0080~0.0110	0.0080~0.0130	0.0050~0.0140	0.0150~0.0390	0.0140~0.0530	0.0080~0.0180	0.0060~0.0370	0.0080~0.0540	0.0100~0.0200
3.5~3.99	0.0090~0.0125	0.0100~0.0160	0.0090~0.0160	0.0070~0.0160	0.0180~0.0480	0.0180~0.0620	0.0090~0.0230	0.0070~0.0490	0.0110~0.0750	0.0100~0.0250
4.0~4.49	0.0100~0.0135	0.0110~0.0180	0.0100~0.0190	0.0080~0.0190	0.0200~0.0560	0.0200~0.0690	0.0120~0.0260	0.0080~0.0600	0.0120~0.0950	0.0130~0.0300
4.5~4.99	0.0110~0.0160	0.0140~0.0220	0.0110~0.0220	0.0110~0.0210	0.0230~0.0640	0.0230~0.0780	0.0140~0.0280	0.0090~0.0690	0.0140~0.1300	0.0160~0.0360
5.0~5.99	0.0130~0.0220	0.0150~0.0240	0.0130~0.0250	0.0120~0.0250	0.0250~0.0760	0.0250~0.0950	0.0150~0.0380	0.0100~0.0800	0.0150~0.1550	0.0200~0.0470
6.0~7.99	0.0150~0.0300	0.0180~0.0290	0.0150~0.0370	0.0150~0.0330	0.0300~0.1100	0.0300~0.1250	0.0180~0.0490	0.0120~0.0960	0.0180~0.0250	0.0260~0.0660
8.0~12.0	0.0180~0.0380	0.0210~0.0330	0.0170~0.0410	0.0180~0.0380	0.0330~0.1190	0.0350~0.1360	0.0210~0.0570	0.0140~0.1100	0.0210~0.2080	0.0290~0.0780

● 切削速度和進給量取决于:刀具直徑、刀具長度、切削液、工件材質、機床組件的穩定性和工裝夾緊情况，以上表格中的加工參數爲標準參考值，以現場實際工况爲準。
The cutting speed and feed rate depend on : tool diameter, tool lenath, cutting fluid, vorkpiece material, characterization ofmachine and clamping condition.
The processing parameters in the above table are the standard nornal value for reference.The practical actual working condtions on site are the true value.

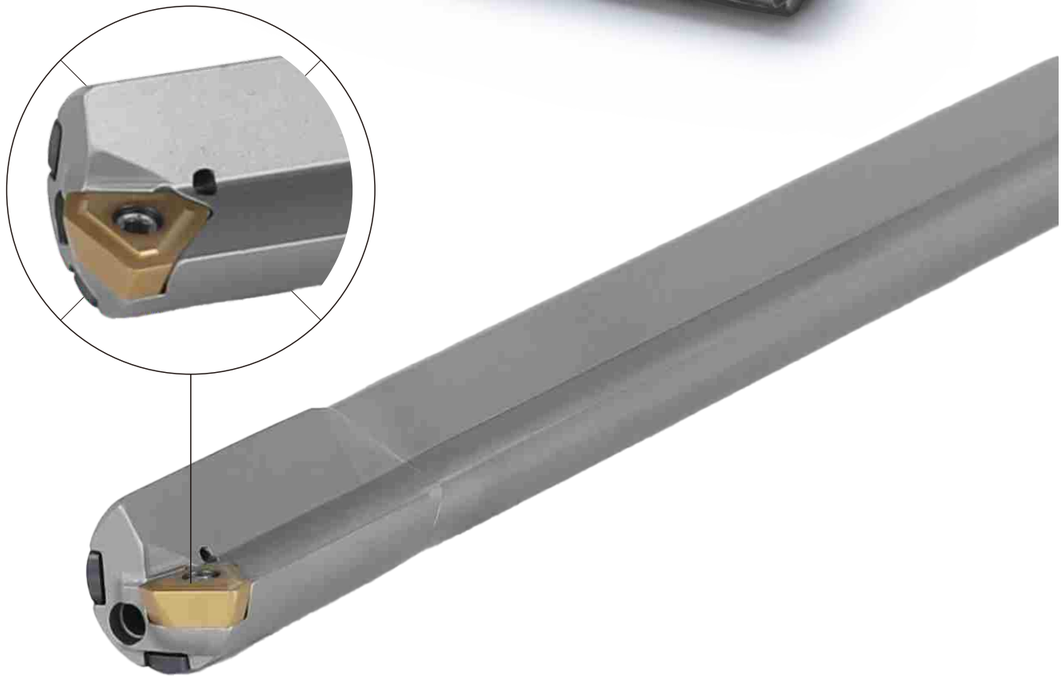
◎ 焊接式单刃枪钻

● 枪钻刃部直径根据客户需要，公称尺寸可细分至0.001mm

◎ 产品特性

● 无需再研磨，易于更换刀片及导向部。

● 采用特殊刃口处理具有较高的切削速度和切削能力。



INDEXABLE INSERT GUN DRILL（TPMX）
机夹式枪钻（TPMX）

◎ 配比表

刀頭直徑	配套刀片編號	螺絲型號	扳手型號
14–17	TPMX0902	M2.5*6	T8
18–21	TPMX1403	M2.5*6	T8
22–25	TPMX1704	M3.5*9	T15
26–29	TPMX2204	M4*10	T15
30–35	TPMX2405	M4*10	T15
36–42	TPMX2807	M5*12	T20

◎ 配比表

刀頭直徑	導條編號	螺絲型號	扳手型號
13.5–15	05–18–060	M2.2*4.5	T7
15.5–17	05–18–075	M2.2*4.5	T7
17.5–19.8	06–20–085	M2.5*6	T8
20.3–23.8	06–20–100	M2.5*6	T8
24.2–28	06–20–120	M2.5*6	T8
30–39	07–20–120	M3*6.5	T8

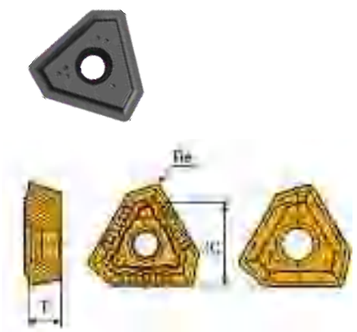
INDEXABLE INSERT GUN DRILL（TOGT）
机夹式枪钻（TOGT）

◎ 配比表

刀頭直徑	刀片型號	螺絲型號	扳手型號	導條型號	螺絲型號	扳手型號
14.00–15.99	TOGT070304	M2.5*5	T8	GPS05–18–060	M2.2*4.5	T7
16.00–18.00	TOGT080305	M2.5*5	T8	GPS05–18–075	M2.2*4.5	T7
18.01–19.99	TOGT090305	M2.5*5	T8	GPS06–20–085	M2.5*5	T8
20.00–20.99	TOGT100305	M3.0*6.5	T8	GPS06–20–085	M2.5*5	T8
21.00–21.99	TOGT100305	M3.0*6.5	T8	GPS06–20–100	M2.5*5	T8
22.00–25.00	TOGT110405	M3.5*9	T15	GPS06–20–100	M2.5*5	T8
25.01–28.99	TOGT120405	M4*10	T15	GPS06–20–120	M2.5*5	T8
29.00–29.99	TOGT130408	M5*11	T20	GPS06–20–120	M2.5*5	T8
30.00–32.02	TOGT140510	M5*11	T20	GPS07–20–120	M3.0*6.4	T8

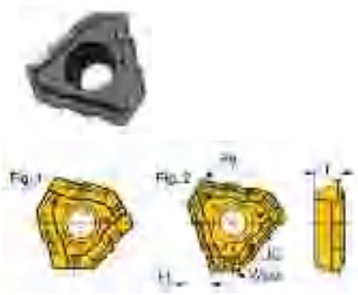
GUN DRILL COMPATIBLE INSERT
枪钻适配刀片选型

◎ TPMX系列刀片選型/TPMX insert



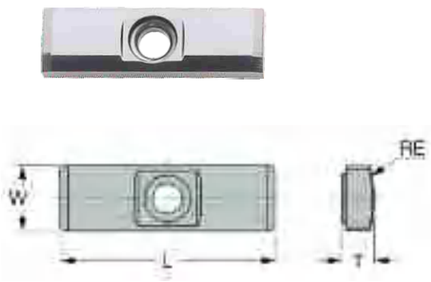
型號 Specification/Item	基本尺寸（mm）		
	IC	T	Re
TPMX0902	7.5	2.3	0.8
TPMX1403	8.45	3.5	0.4
TPMX1403	8.45	3.5	0.8
TPMX1704	10.3	4.0	0.4
TPMX1704	10.3	4.0	0.8
TPMX2204	12.3	4.4	1.0
TPMX2405	14.2	5.5	0.4
TPMX2405	14.2	5.5	1.2
TPMX2807	17	7.5	0.8
TPMX2807	17	7.5	1.6

◎ TOGT系列刀片選型/TOGT insert



型號 Specification/Item	基本尺寸（mm）				
	IC	Re	RL	T	Fig
TOGT070304	7.69	0.4	1.95	2.3	1
TOGT080305	8.55	0.5	2.2	2.8	1
TOGT090305	8.32	0.5	3.0	3.0	2
TOGT100305	9.23	0.5	3.2	3.3	2
TOGT110405	10.4	0.5	3.4	3.8	2
TOGT120405	11.59	0.5	3.6	4.3	2
TOGT130408	12.85	0.8	4.57	4.76	2
TOGT140510	16.85	1.0	5.43	5.26	2

◎ 槍鑽配飾導條選型/Gun drill Compatible guide



型號 Specification/Item	基本尺寸（mm）			
	W	T	L	Re
GPS04–16–045	4.0	1.8	16.0	4.5
GPS04–16–050	4.0	1.8	16.0	5.5
GPS04–16–055	4.0	2.0	16.0	5.5
GPS05–18–060	5.0	2.5	18.0	6.0
GPS05–18–075	5.0	2.5	18.0	7.5
GPS06–20–075	6.0	3.0	20.0	7.5
GPS06–20–085	6.0	3.0	20.0	8.5
GPS06–20–100	6.0	3.0	20.0	10.0
GPS06–20–120	6.0	3.0	20.0	12.0
GPS07–20–120	7.0	3.5	20.0	12.0
GPS08–25–155	8.0	4.5	25.0	15.5
GPS10–30–200	10.0	4.5	30.0	20.0
GPS10–35–200	10.0	6.0	35.0	20.0

CUTTING CONDITION
加工参数

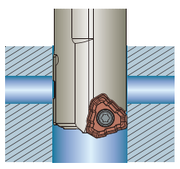
◎ 標準加工参數

工件材料	切綫速度Vc (m/min)	進給			
		Φ12–Φ13.99	Φ14–Φ18	Φ18.01–Φ28	Φ28.01–Φ50
低碳鋼(C<0.3) SS400/St42–1,SM/St52–3, S25C/C25,等	50–100	–	0.03–0.1	0.03–0.1	–
	80–140	0.05–0.1	0.05–0.1	0.05–0.1	0.1–0.2
碳鋼(C>0.3) S45C/C45,S55C/C55etc.	50–100	–	0.03–0.1	0.03–0.12	–
	80–140	0.05–0.1	0.05–0.16	0.05–0.2	0.1–0.2
低合金鋼(C<0.3) SCM415,18CrMo4,etc.	50–100	–	0.03–0.1	0.03–0.1	–
	80–140	0.05-0.16	0.05–0.1	0.05–0.1	0.1–0.2
合金鋼(C>0.3) SCM440/42CrMo4,etc.	50–100	–	0.03–0.1	0.03–0.2	–
	80–120	0.05–0.1	0.05–0.16	0.05–0.2	0.1–0.2
不銹鋼(奧氏體) SUS304/x5CrNi18–9.SUS316/ X5CrNiMo17–12–3,etc.	50–100	–	0.03–0.06	0.03–0.06	–
	60–100	0.05–0.1	0.05–0.1	0.05–0.1	0.1–0.15
不銹鋼(馬氏體,鐵素體) SUS430/X6Cr17,SUS416/ X12CrS13,等	50–100	–	0.03–0.06	0.03–0.06	–
	60–100	0.05–0.1	0.05–0.1	0.05–0.1	0.1–0.15
不銹鋼(沉澱硬化) SUS630/X5CrNiCuNb16–4,etc.	50–100	–	0.03–0.06	0.03–0.06	–
	60–100	0.05–0.1	0.05–0.1	0.05–0.1	0.1–0.3
灰鑄鐵 FC250/250–2,etc.	50–100	–	0.03–0.15	0.05–0.18	–
	80–140	0.05–0.25	0.05–0.25	0.05–0.3	0.1–0.3
球墨鑄鐵 FCD700/700–2,etc.	50–100	–	0.03–0.15	0.05–0.18	–
	80–140	0.05–0.25	0.05–0.25	0.05–0.3	0.1–0.3
鋁合金	80–160	–	0.03–0.15	0.03–0.15	–
	100–200	0.05–0.2	0.05–0.2	0.05–0.2	0.1–0.25
耐熱合金 Inconel 718, etc.	20–50	–	0.03–0.06	0.03–0.08	–
	20–50	0.04–0.08	0.04–0.08	0.04–0.1	0.06-0.13
鈦合金 TI–6AL–4V, etc.	30–160	–	0.03–0.1	0.03–0.12	–
	30–60	0.05–0.13	0.05–0.13	0.05–0.15	0.1–0.18
淬火鋼 ≥40HRC	40–100	–	0.03–0.08	0.03–0.08	–
	50–100	0.04–0.08	0.04–0.08	0.04–0.1	0.06-0.13

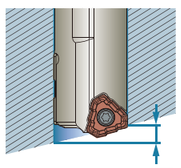
進給量 f（mm/rec）	0.03–0.05	0.03–0.05	0.1–0.5

應用

鑽孔叉孔

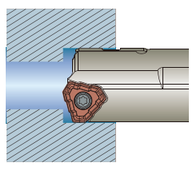


斜出口



16mm或更小
(用于標準孔加工)

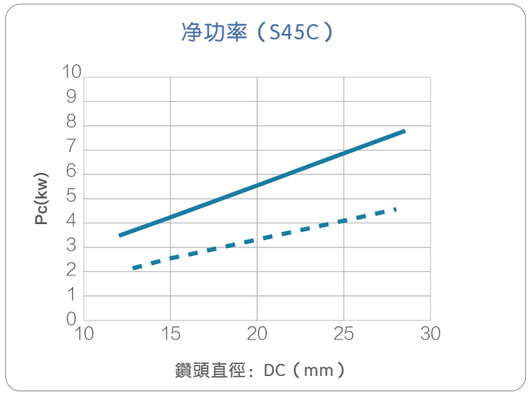
鏜 孔

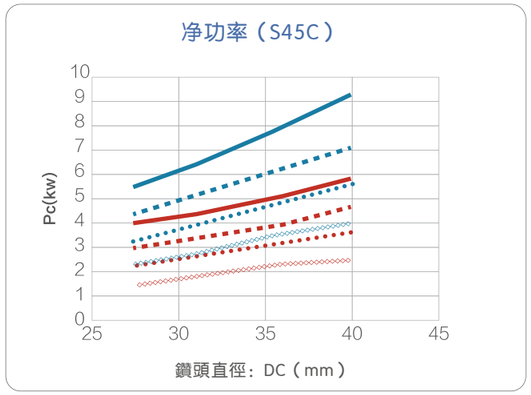


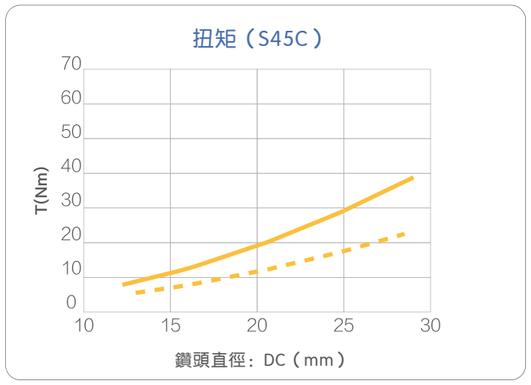
- 當加工交叉孔或者斜出孔時，請確保導條與工件內壁貼合
- 在鏜孔加工前要先鑽一個引導孔。

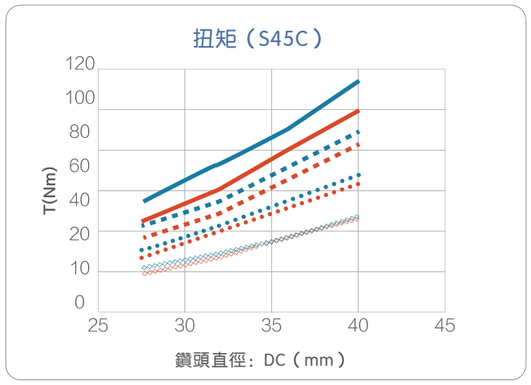
CUTTING CONDITION
加工参数

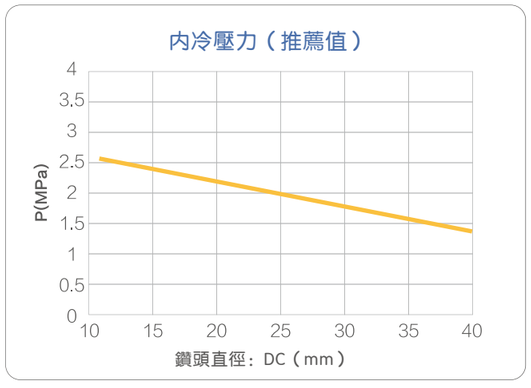
◎ 所需的主軸功率和內冷壓力

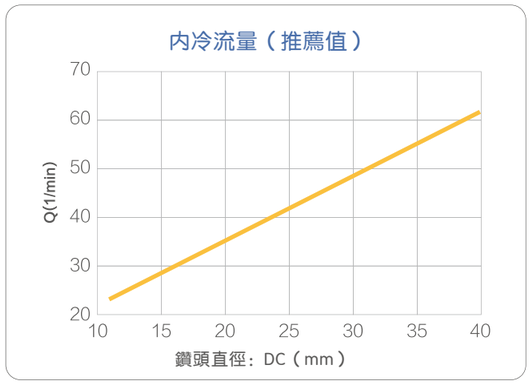






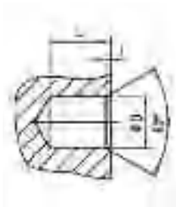




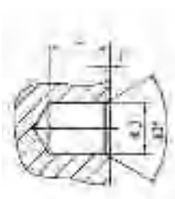


- Vc = 120 m/min fn = 0.1 mm/rev
- Vc = 120 m/min fn = 0.05 mm/rev
- Vc = 80 m/min fn = 0.1 mm/rev
- Vc = 80 m/min fn = 0.05 mm/rev
- Vc = 40 m/min fn = 0.1 mm/rev
- Vc = 40 m/min fn = 0.05 mm/rev
- Vc = 100 m/min fn = 0.25 mm/rev
- Vc = 100 m/min fn = 0.2 mm/rev
- Vc = 100 m/min fn = 0.15 mm/rev
- Vc = 100 m/min fn = 0.1 mm/rev
- Vc = 60 m/min fn = 0.25 mm/rev
- Vc = 60 m/min fn = 0.2 mm/rev
- Vc = 60 m/min fn = 0.15 mm/rev
- Vc = 60 m/min fn = 0.1 mm/rev

◎ 焊接式槍鑽引導孔的尺寸

直徑範圍	鑽頭直徑	引導孔直徑	引導孔孔深與道具長度對應表							
			LxD 鑽深	引導孔孔深						
				Φ1.805 -4.000	Φ4.001 -8.500	Φ8.501 -12.000	Φ12.001 -20.999	Φ21.000 -30.999	Φ31.000 -40.999	Φ41.000 -55.000
	1.85mm - 4.00mm	+0.005 to +0.010	ap.10×D	2.0×D	1.0×D	1.0×D	1.0×D	1×D	1×D	1×D
	4.01mm - 12.00mm	+0.010 to +0.020	ap.20×D	3.0×D	1.5×D	1.5×D	1.5×D			
	12.01mm - 50.00mm	+0.015 to +0.040	ap.25×D	4.0×D	2.0×D	2.0×D	1.5×D			
			ap.30×D	6.0×D	3.0×D	3.0×D	1.5×D			
			ap.35×D	30mm	35mm	3.0×D	1.5×D			
			ap.40×D	30mm	35mm	3.0×D	1.5×D			

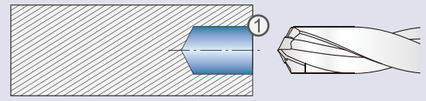
◎ 整體硬質合金槍鑽引導孔的尺寸

直徑範圍	鑽頭直徑	引導孔直徑	引導孔孔深與道具長度對應表				
			LxD 鑽深	引導孔孔深			
				Φ0.500-1.599	Φ1.600-3.999	Φ4.000-6.999	Φ7.000-12.000
	0.500mm - 4.000mm	+0.005 to +0.010	ap.20×D	2.0×D	2.0×D	2.0×D	2.5×D
	4.001mm - 12.000mm	+0.010 to +0.020	ap.30×D		3.0×D	3.0×D	3.5×D
			ap.40×D		4.0×D	4.0×D	40mm
			ap.50×D	6.0×D	6.0×D	35mm	
			ap.60×D		30mm		
			＞40×D				

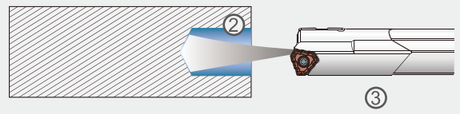
GUN DRILL APPLY ON CNC MACHINERY
枪钻在加工中心的使用

◎ 機夾式槍鑽在加工中心和車床上的鑽削工藝

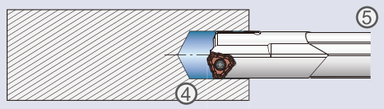
● 爲了保證發揮刀具的最大性能請按照下面的指示操作



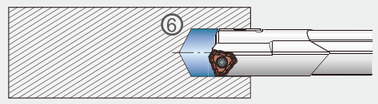
① 加工引導孔
孔徑公差：+0.01–+0.1mm
孔深：H=15mm



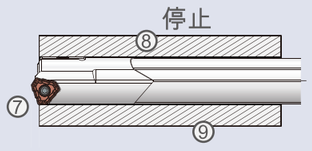
② 打開内冷
③ 刀片慢慢進入引導孔
轉速：n=50–100min–1
進給速度：Vf=100–300mm/min
注意：不要以高速旋轉的方式進入引導孔



④ 在進入孔内10mm處停止
⑤ 開始用正常速度旋轉



⑥ 開始軸向進給
入口處（H=10–20mm）
→進給速度：f=編程進給速度的80%
孔深：
孔深；H≥20mm→進給速度：f=100%

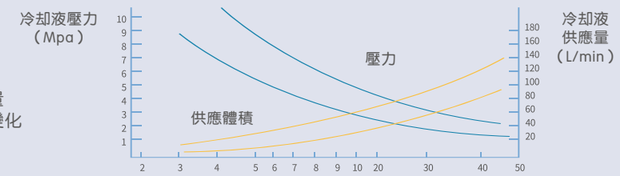


⑦ 鑽通孔
連續加工直到鑽尖超出工件5mm
⑧ 主軸停轉并關閉内冷
⑨ 退回鑽頭

TECHNICAL PARAMETERS
技术参数

1

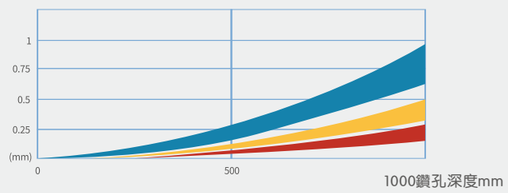
冷却油壓力、冷却油流量
隨刀具直徑（橫軸）的變化



2

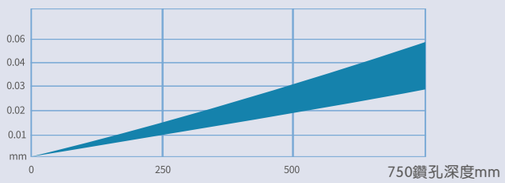
鑽孔偏差（縱軸）隨鑽孔
深度（橫軸）的變化

- 刀具旋轉，工件不旋轉
- 刀具旋轉，工件不旋轉
- 刀具旋轉，工件反向旋轉



3

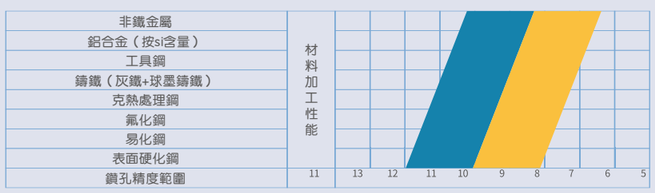
直綫度（縱軸）隨鑽孔
深度（橫軸）的變化



4

單刃槍鑽可以達到的公差

- 在一般工況下
- 良好工況下



推薦值

5

表面質量

- 在一般工況下
- 良好工況下

圓度等級		N8	N7	N6	N5	N4	N3
質量區域							
表面粗糙度值	R1μm	21	11.5	6.2	3.4	1.9	1.0
	Raμm	3.2	1.6	0.8	0.4	0.2	0.1
	Rzμm	14	7.6	4.5	2.2	1.2	0.65

推薦值

PROBLEM AND SOLUTION
故障分析与对策

折損事故

刃部切入時	機械原因： 檢查進給機構，被削材料是否夾緊防振套筒的設定是否適當 鑽具原因： 再研磨是否有問題 套筒端面不限： 是否有漏油出，切削是否順暢排除
中期加工時	機械原因： 進給速度是否均勻 刀尖損傷大： 參照刀具壽命項
貫通寸前	進給速度： 在出刀時，大抗力進給速度突然加速此時放慢進給速度
撤出時	被削材料形狀： 斜出刀是否造成彎孔 進給速度： 放慢速度

刀具壽命短

切削條件不適合	切削速度是否過快： 檢查進給速度是否過快、過慢
機械原因	主軸的擺動是否過大： 檢查主軸與導套的同心度導套與鑽具的間隙是否過大 適當設定防振套筒
刀具原因	選定合適的刀尖角度 導向面鑽是否過長 再次研磨是否合適
切削油	選定合適的切削油 (耐高壓添加劑、粘度)充分過濾切削油油温太高時， 使用油冷却器，增加容器容量
被切削	材質是否均勻

加工精度

加工表面光潔度不良	切削條件不適合： 放慢进给速度 機械原因： 檢查主軸的振摆、进给速度是否均匀导套的精度、被切削材料是否夹紧 鑽具原因： 钻具是否未夹紧 切削油原因： 选定合适的切削油、充分过滤切削油
正圓度 圓筒度 擴大範圍	切削條件不適合： 选定适当的进给速度 機械原因： 提高导套精度，导套与主轴的同心度 鑽具原因： 选定合适的刀尖形状、角度 切削油原因： 选定合适的切削油
彎 曲	機械原因： 提高导套精度，导套与主轴的同心度稳固安装被切削材料 鑽具原因： 选定合适的刀尖形状、角度以及凸状导向面 切削油原因： 是否厚度不均匀，存在气孔是否没有倾斜接触

刀具壽命短

切削堵塞	油壓低： 正確選定油壓 油量少： 正確選定油量，油的粘度是否過高 切削形狀不理想： 切硬削時，放慢進給速度正確選定鑽尖形狀、角度 機械原因： 加大切削排流箱
切削纏卷現象	絲狀切割： 加快進給速度，鑽頭外角的磨損是否過大，鑽頭外角或外鑽刃上是否有缺口，重磨時使用粒度細的砥石在中心孔加工時出現絲狀切削的情況下提高油壓，放慢進給速度 折皺狀切割： 在頂端或接近頂端的鑽刃上是否有缺口