

為什麼 選擇鶴峻 鎢鋼鑽頭？

因為鶴峻擁有

- 品質符合國際標準
- 世界先進加工設備
- 歐美進口超微粒碳化鎢
- 獨特研發能力
- 交期迅速

鶴峻

鎢鋼鑽頭，

信賴的品質、性能、精度

鶴峻實業有限公司專業設計及生產全系列鎢鋼鑽頭，以不斷創新的經營理念，達到刀具產品技術、品質與管理的新境界。

我們融合理論與實務經驗，不斷致力於切削技術的鑽研。對於各種材料特性，更擁有獨特的知識背景。

多年來，我們在切削刀具研發，投入了無數的心血，也因此HOL歐樂系列刀具產品鑽頭的品質、性能、精度，已廣泛贏得國內外客戶的肯定。放眼未來，我們將以一步一腳印的步伐，強化企業體質，持續追求公司的成長茁壯。

Why you Should Choose HOLDRILL Tungsten Carbide Drills ?

Here Are the Reasons!

- Quality meet international standards
- World top advanced machining equipment
- Europe imported ultra fine grain tungsten carbide material
- Outstanding R & D team
- Prompt delivery

HOLDRILL

Tungsten Carbide Drills

Maximum Dependability in Quality, Performance And Accuracy

HOLER Cutting Tool Co., Ltd. is a specialist in design and manufacturing of tungsten carbide drills. Under the company's policy of constant breakthrough and innovation, we have dedicated ourselves to pursuing a new level of technology, quality and management. With the combination of theorem and practical experience, we always strive hard in research for cutting technology. In addition, we also have outstanding knowledge in material characteristics.

For over years, we have spent great efforts on the research and development of various cutting tools. These are some of the reasons why HOLDRILL drills have fully satisfied all customers in domestic and overseas in quality, performance and accuracy. Looking forward to the future, we will keep moving steadily in the pursuit of continuous growth, and raise our business structure.

瑞士進口CNC刀具研磨機

Switzerland Imported CNC Tool Grinding Machine



鶴峻引進世界頂級瑞士CNC刀具研磨機。具五軸控制特點。保證每一隻鶴峻刀具都擁有最精密的幾何精度。

HOLDRILL® also introduces world-top CNC tool grinding machine from Switzerland and this machine features 5-axes control. With this machine we can guarantee the best possible geometric accuracy and quality for each cutting tool from HOLDRILL.





全系列精密加工設備 鶴峻刀具就是精密度的保證

鶴峻公司一貫堅持採用，先進精密的加工設備，符合客戶要求生產高精密的刀具，品質達到國際水準。本公司生產線擁有許多精密設備，例如：瑞士進口CNC刀具研磨機、CNC刀具加工中心機、圓筒磨床，以及CNC螺旋磨槽機等。此外，本公司之專業技術人員，經驗豐富，秉持最嚴謹的精神，精心生產每一支刀具。

A Comprehensive Range of Sophisticated Machining Equipment

Guaranteed Dills & End Mills Accrual

At HOLDRILL, we believe that only in utilizing the most sophisticated equipment enables us to produce the highest accuracy of cutting tools, and to achieve international quality standards over customer demand. Our modern production facility is fully equipped with many high precision machining equipment, such as Switzerland imported CNC tool grinding machine, CNC machining centers, cylindrical grinders and CNC helix flute grinding machines etc. In addition, our highly skilled technicians have extensive professional in precision tool manufacturing. Each one at HOLDRILL is fully dedicated to produce the best possible cutting tools.



堅持品質，嚴格檢驗 鶴峻刀具榮獲國際肯定

堅持品質是鶴峻公司經營傳統的核心價值。為了確保HOL系列刀具產品的高品質，公司品管部門擁有相關的高精密刀具檢驗儀器，並實施全面品管制度，確保製程中每一步驟之品質，以期發揮HOL毆樂系列刀具產品之功能，提升顧客滿意度，故創雙贏。

Insisting on Quality Rigorous Quality Inspection

HOLDRILL Tool Are Internationally Recognized

Insisting on quality is a tradition at HOLDRILL To ensure the product excellence, HOLDRILL has set up a total quality system for thoroughly controlling quality at each step throughout the manufacturing process. Our quality control department is equipped with many sophisticated inspection instrument for rigorous inspection on each drill and end mill.

鎢鋼鑽頭 系列

TUNGSTEN CARBIDE DRILLS

鑽頭編號說明

DRILL MODEL NUMBER IDENTIFICATION

CCD - 5 102

鑽頭的種類

Ordering Information

刃長

Length of Flute

刃徑

Length Diameter

CCD	全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL
CFD	銑刀柄全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL With end mill shank size
HOD	內冷式全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL With coolant through hole
HKD	銑刀柄內冷式全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL With end mill shank size and coolant though hole
TXD	焊刃式鎢鋼鑽頭 TUNGSTEN CARBIDE WELDED DRILL
RSD	鎢鋼蝴蝶鑽頭 TUNGSTEN CARBIDE R DRILL
ROD	鎢鋼內冷式蝴蝶鑽頭 TUNGSTEN CARBIDE R DRILL
GSD	鎢鋼四刃點鑽頭 SOLID CARBIDE FOUR POINT CONTACT
GOD	內冷式四刃點全鎢鋼鑽頭 SOLID CARBIDE FOUR POINT CONTACT DRILL With coolant through hole
NSP	NC定點鑽頭 SOLID CARBIDE NC POSITIONING DRILL

3	3倍 3-times
5	5倍 5-times
7	7倍 7 times
8	8倍 8 times

102=10.2 mm

鎢鋼鑽頭應用

鎢鋼鑽頭由於材料本身硬度高、耐磨耗，特別適用於高速加工，以及下列使用條件：

1. 難削材料加工者(例：高硬度材料)。
2. 不鏽鋼材料加工者。
3. 量大、量產化、之生產線加工。
4. 無人化之生產線加工。

Applications of Tungsten Carbide Drill

The tungsten carbide drills feature extra high hardness and maximum wear resistance. They are ideal for high speed machining and following cutting conditions:

1. Difficult to cut materials (such as extra high hardness materials.)
2. Stainless steel.
3. Mass production line.
4. Unmanned production line.

SERIES

HOL DRILL 鎢鋼鑽頭之規格暨特性

	HOD 內冷式全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL WITH COOLANT THROUGH HOLE	P.7~P.8
	HKD 內冷式全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL WITH COOLANT THROUGH HOLE	P.9~P.11
	CCD 全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL	P.12~P.15
	CFD 全鎢鋼鑽頭 TUNGSTEN CARBIDE DRILL	P.16~P.18
	TXD 焊刃式鎢鋼鑽頭 TUNGSTEN CARBIDE WELDED DRILL	P.19~P.21
	RSD 鎢鋼蝴蝶鑽 TUNGSTEN CARBIDE R DRILL	P.22~24
	ROD 內冷式鎢鋼蝴蝶鑽 TUNGSTEN CARBIDE R DRILL WITH COOLANT THROUGH HOLE	P.25~27
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	GOD 內冷式四刃點全鎢鋼鑽頭 SOLID CARBIDE FOUR POINT CONTACT DRILL WITH COOLANT THROUGH HOLE	P.29
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全鎢鋼被覆鑽頭

TUNGSTEN CARBIDE COATED DRILL



適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

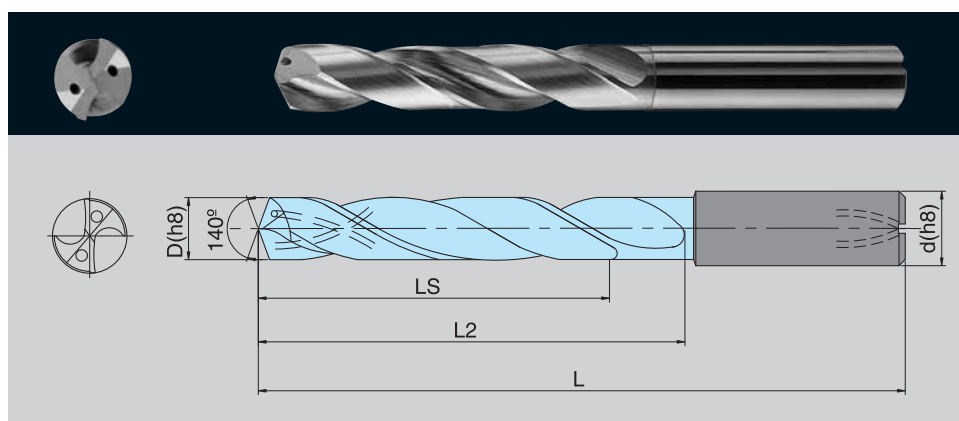
General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut				
HOD-5030	3.0	18	52	3	13				
HOD-5031	3.1	18	52	4	13				
HOD-5032	3.2								
HOD-5033	3.3	20	52	4	15				
HOD-5034	3.4								
HOD-5035	3.5								
HOD-5036	3.6								
HOD-5037	3.7	22	55	4	16				
HOD-5038	3.8								
HOD-5039	3.9								
HOD-5040	4.0	25	66	5	18				
HOD-5041	4.1								
HOD-5042	4.2								
HOD-5043	4.3								
HOD-5044	4.4								
HOD-5045	4.5								
HOD-5046	4.6					28	66	5	20
HOD-5047	4.7								
HOD-5048	4.8								
HOD-5049	4.9								
HOD-5050	5.0	33	75	6	24				
HOD-5051	5.1								
HOD-5052	5.2								
HOD-5053	5.3								
HOD-5054	5.4								
HOD-5055	5.5								
HOD-5056	5.6	35	78	7	25				
HOD-5057	5.7								
HOD-5058	5.8								
HOD-5059	5.9								
HOD-5060	6.0	38	78	7	28				
HOD-5061	6.1								
HOD-5062	6.2								
HOD-5063	6.3								
HOD-5064	6.4								
HOD-5065	6.5								
HOD-5066	6.6								
HOD-5067	6.7								
HOD-5068	6.8								
HOD-5069	6.9								
HOD-5070	7.0	42	85	8	32				
HOD-5071	7.1								
HOD-5072	7.2								
HOD-5073	7.3								
HOD-5074	7.4								
HOD-5075	7.5								

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut				
HOD-5076	7.6	45	90	8	35				
HOD-5077	7.7								
HOD-5078	7.8								
HOD-5079	7.9								
HOD-5080	8.0								
HOD-5081	8.1								
HOD-5082	8.2	47	90	9	37				
HOD-5083	8.3								
HOD-5084	8.4								
HOD-5085	8.5								
HOD-5086	8.6								
HOD-5087	8.7								
HOD-5088	8.8	50	95	9	40				
HOD-5089	8.9								
HOD-5090	9.0								
HOD-5091	9.1								
HOD-5092	9.2	50	95	10	40				
HOD-5093	9.3								
HOD-5094	9.4								
HOD-5095	9.5								
HOD-5096	9.6								
HOD-5097	9.7								
HOD-5098	9.8								
HOD-5099	9.9								
HOD-5100	10.0	55	100	11	43				
HOD-5101	10.1								
HOD-5102	10.2								
HOD-5103	10.3								
HOD-5104	10.4								
HOD-5105	10.5								
HOD-5106	10.6					60	105	11	45
HOD-5107	10.7								
HOD-5108	10.8								
HOD-5109	10.9								
HOD-5110	11.0								
HOD-5111	11.1								
HOD-5112	11.2	62	105	12	45				
HOD-5113	11.3								
HOD-5114	11.4								
HOD-5115	11.5								
HOD-5116	11.6								
HOD-5117	11.7								
HOD-5118	11.8								
HOD-5119	11.9								
HOD-5120	12.0	65	110	12	45				
HOD-5121	12.1								
HOD-5122	12.2	110	65	13	47				
HOD-5123	12.3								
HOD-5124	12.4								
HOD-5125	12.5								
HOD-5126	12.6								
HOD-5127	12.7								
HOD-5128	12.8								
HOD-5129	12.9								
HOD-5130	13.0								
HOD-5131	13.1								
HOD-5132	13.2								
HOD-5133	13.3								
HOD-5134	13.4								
HOD-5135	13.5	70	120	14	50				
HOD-5136	13.6								
HOD-5137	13.7								
HOD-5138	13.8								
HOD-5139	13.9								
HOD-5140	14.0								
HOD-5141	14.1	80	130	15	60				
HOD-5142	14.2								
HOD-5143	14.3								
HOD-5144	14.4								
HOD-5145	14.5								
HOD-5146	14.6								
HOD-5147	14.7								
HOD-5148	14.8								
HOD-5149	14.9								
HOD-5150	15.0								
HOD-5155	15.5	85	135	16	63				
HOD-5160	16.0								
HOD-5165	16.5	90	140	17	66				
HOD-5170	17.0								
HOD-5175	17.5	90	140	18	66				
HOD-5180	18.0								
HOD-5185	18.5								
HOD-5190	19.0	100	155	19	75				
HOD-5195	19.5								
HOD-5200	20.0	100	155	20	75				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HOD-5122	12.2	65	110	13	47
HOD-5123	12.3				
HOD-5124	12.4				
HOD-5125	12.5				
HOD-5126	12.6				
HOD-5127	12.7				
HOD-5128	12.8				
HOD-5129	12.9				
HOD-5130	13.0				
HOD-5131	13.1				
HOD-5132	13.2				
HOD-5133	13.3				
HOD-5134	13.4				
HOD-5135	13.5	70	120	14	50
HOD-5136	13.6				
HOD-5137	13.7				
HOD-5138	13.8				
HOD-5139	13.9				
HOD-5140	14.0				
HOD-5141	14.1	80	130	15	60
HOD-5142	14.2				
HOD-5143	14.3				
HOD-5144	14.4				
HOD-5145	14.5				
HOD-5146	14.6				
HOD-5147	14.7				
HOD-5148	14.8				
HOD-5149	14.9				
HOD-5150	15.0				
HOD-5155	15.5	85	135	16	63
HOD-5160	16.0				
HOD-5165	16.5	90	140	17	66
HOD-5170	17.0				
HOD-5175	17.5	90	140	18	66
HOD-5180	18.0				
HOD-5185	18.5				
HOD-5190	19.0	100	155	19	75
HOD-5195	19.5				
HOD-5200	20.0	100	155	20	75

附内冷却孔
With Coolant
Through Hole



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HOD-7030	3.0	24	62	3	20
HOD-7031	3.1				
HOD-7032	3.2	26	66	4	21
HOD-7033	3.3				
HOD-7034	3.4				
HOD-7035	3.5	28	66	4	23
HOD-7036	3.6				
HOD-7037	3.7				
HOD-7038	3.8	30	72	4	24
HOD-7039	3.9				
HOD-7040	4.0				
HOD-7041	4.1				
HOD-7042	4.2	30	72		24
HOD-7043	4.3				
HOD-7044	4.4				
HOD-7045	4.5	35	78	5	27
HOD-7046	4.6				
HOD-7047	4.7				
HOD-7048	4.8				
HOD-7049	4.9	38	78		30
HOD-7050	5.0				
HOD-7051	5.1				
HOD-7052	5.2				
HOD-7053	5.3	42	82		33
HOD-7054	5.4				
HOD-7055	5.5				
HOD-7056	5.6			6	
HOD-7057	5.7				
HOD-7058	5.8	45	90		35
HOD-7059	5.9				
HOD-7060	6.0				
HOD-7061	6.1				
HOD-7062	6.2				
HOD-7063	6.3	45	90		40
HOD-7064	6.4				
HOD-7065	6.5				
HOD-7066	6.6			7	
HOD-7067	6.7				
HOD-7068	6.8	50	95		43
HOD-7069	6.9				
HOD-7070	7.0				
HOD-7071	7.1				
HOD-7072	7.2				
HOD-7073	7.3	55	100	8	45
HOD-7074	7.4				
HOD-7075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HOD-7076	7.6				
HOD-7077	7.7				
HOD-7078	7.8	60	105	8	50
HOD-7079	7.9				
HOD-7080	8.0				
HOD-7081	8.1				
HOD-7082	8.2				
HOD-7083	8.3	60	105		50
HOD-7084	8.4				
HOD-7085	8.5			9	
HOD-7086	8.6				
HOD-7087	8.7				
HOD-7088	8.8	65	110		55
HOD-7089	8.9				
HOD-7090	9.0				
HOD-7091	9.1				
HOD-7092	9.2				
HOD-7093	9.3	67	110		55
HOD-7094	9.4				
HOD-7095	9.5				
HOD-7096	9.6			10	
HOD-7097	9.7				
HOD-7098	9.8	72	115		58
HOD-7099	9.9				
HOD-7100	10.0				
HOD-7101	10.1				
HOD-7102	10.2				
HOD-7103	10.3	75	120		60
HOD-7104	10.4				
HOD-7105	10.5				
HOD-7106	10.6			11	
HOD-7107	10.7				
HOD-7108	10.8	80	125		63
HOD-7109	10.9				
HOD-7110	11.0				
HOD-7111	11.1				
HOD-7112	11.2				
HOD-7113	11.3	85	130		68
HOD-7114	11.4				
HOD-7115	11.5				
HOD-7116	11.6				
HOD-7117	11.7				
HOD-7118	11.8	90	135		72
HOD-7119	11.9				
HOD-7120	12.0				
HOD-7121	12.1	90	135	13	72

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HOD-7122	12.2				
HOD-7123	12.3	90	135		72
HOD-7124	12.4				
HOD-7125	12.5				
HOD-7126	12.6			13	
HOD-7127	12.7				
HOD-7128	12.8	95	140		75
HOD-7129	12.9				
HOD-7130	13.0				
HOD-7131	13.1				
HOD-7132	13.2				
HOD-7133	13.3				
HOD-7134	13.4				
HOD-7135	13.5				
HOD-7136	13.6	100	150	14	80
HOD-7137	13.7				
HOD-7138	13.8				
HOD-7139	13.9				
HOD-7140	14.0				
HOD-7141	14.1				
HOD-7142	14.2				
HOD-7143	14.3				
HOD-7144	14.4				
HOD-7145	14.5				
HOD-7146	14.6	110	160	15	87
HOD-7147	14.7				
HOD-7148	14.8				
HOD-7149	14.9				
HOD-7150	15.0				
HOD-7155	15.5	115	165	16	91
HOD-7160	16.0				
HOD-7165	16.5	125	180	17	100
HOD-7170	17.0				
HOD-7175	17.5	130	185	18	103
HOD-7180	18.0				
HOD-7185	18.5	140	200	19	111
HOD-7190	19.0				
HOD-7195	19.5				
HOD-7200	20.0	150	210	20	120

全鎢鋼被覆鑽頭

Shank DIN 6537

TUNGSTEN CARBIDE COATED DRILL

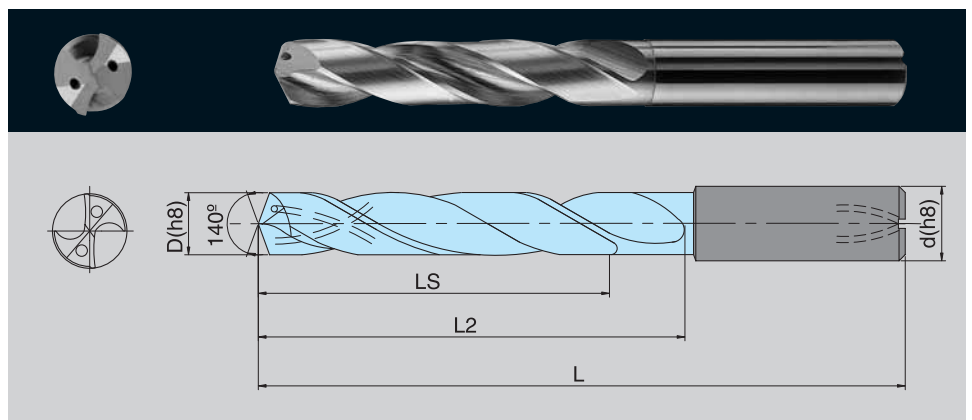


適合材質：
一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:
General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut								
HKD-3030	3.0	20	62	6	14	HKD-3076	7.6	41	79	8	29	HKD-3122	12.2	60	107	14	43								
HKD-3031	3.1					HKD-3077	7.7					HKD-3123	12.3												
HKD-3032	3.2					HKD-3078	7.8					HKD-3124	12.4												
HKD-3033	3.3					HKD-3079	7.9					HKD-3125	12.5												
HKD-3034	3.4					HKD-3080	8.0					HKD-3126	12.6												
HKD-3035	3.5					HKD-3081	8.1	HKD-3127	12.7																
HKD-3036	3.6					HKD-3082	8.2	HKD-3128	12.8																
HKD-3037	3.7					HKD-3083	8.3	HKD-3129	12.9																
HKD-3038	3.8					HKD-3084	8.4	HKD-3130	13.0																
HKD-3039	3.9					HKD-3085	8.5	HKD-3131	13.1																
HKD-3040	4.0	24	66	6	17	HKD-3086	8.6	47	89	10	35	HKD-3132	13.2	60	107	14	43								
HKD-3041	4.1					HKD-3087	8.7					HKD-3133	13.3												
HKD-3042	4.2					HKD-3088	8.8					HKD-3134	13.4												
HKD-3043	4.3					HKD-3089	8.9					HKD-3135	13.5												
HKD-3044	4.4					HKD-3090	9.0					HKD-3136	13.6												
HKD-3045	4.5					HKD-3091	9.1	HKD-3137	13.7																
HKD-3046	4.6					HKD-3092	9.2	HKD-3138	13.8																
HKD-3047	4.7					HKD-3093	9.3	HKD-3139	13.9																
HKD-3048	4.8					HKD-3094	9.4	HKD-3140	14.0																
HKD-3049	4.9					HKD-3095	9.5	HKD-3141	14.1																
HKD-3050	5.0	28	66	6	20	HKD-3096	9.6	47	89	10	35	HKD-3142	14.2	65	115	16	45								
HKD-3051	5.1					HKD-3097	9.7					HKD-3143	14.3												
HKD-3052	5.2					HKD-3098	9.8					HKD-3144	14.4												
HKD-3053	5.3					HKD-3099	9.9					HKD-3145	14.5												
HKD-3054	5.4					HKD-3100	10.0					HKD-3146	14.6												
HKD-3055	5.5					HKD-3101	10.1	HKD-3147	14.7																
HKD-3056	5.6					HKD-3102	10.2	HKD-3148	14.8																
HKD-3057	5.7					HKD-3103	10.3	HKD-3149	14.9																
HKD-3058	5.8					HKD-3104	10.4	HKD-3150	15.0																
HKD-3059	5.9					HKD-3105	10.5	HKD-3152	15.2																
HKD-3060	6.0	34	79	8	24	HKD-3106	10.6	55	102	12	40	HKD-3153	15.3	65	115	16	45								
HKD-3061	6.1					HKD-3107	10.7					HKD-3154	15.4												
HKD-3062	6.2					HKD-3108	10.8					HKD-3155	15.5												
HKD-3063	6.3					HKD-3109	10.9					HKD-3156	15.6												
HKD-3064	6.4					HKD-3110	11.0					HKD-3157	15.7												
HKD-3065	6.5					HKD-3111	11.1	HKD-3158	15.8																
HKD-3066	6.6					HKD-3112	11.2	HKD-3159	15.9																
HKD-3067	6.7					HKD-3113	11.3	HKD-3160	16.0																
HKD-3068	6.8					HKD-3114	11.4	HKD-3165	16.5																
HKD-3069	6.9					HKD-3115	11.5	HKD-3170	17.0																
HKD-3070	7.0	41	79	8	29	HKD-3116	11.6	55	102	12	40	HKD-3175	17.5	73	123	18	51								
HKD-3071	7.1					HKD-3117	11.7					HKD-3180	18.0												
HKD-3072	7.2					HKD-3118	11.8					HKD-3185	18.5												
HKD-3073	7.3					HKD-3119	11.9					HKD-3190	19.0												
HKD-3074	7.4					HKD-3120	12.0					HKD-3195	19.5												
HKD-3075	7.5					HKD-3121	12.1	HKD-3200	20.0																
						60	107	14	43																

附内冷却孔
With Coolant
Through Hole



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HKD-5030	3.0	28	66	6	23
HKD-5031	3.1				
HKD-5032	3.2				
HKD-5033	3.3				
HKD-5034	3.4				
HKD-5035	3.5				
HKD-5036	3.6				
HKD-5037	3.7				
HKD-5038	3.8	36	74	6	29
HKD-5039	3.9				
HKD-5040	4.0				
HKD-5041	4.1				
HKD-5042	4.2				
HKD-5043	4.3				
HKD-5044	4.4				
HKD-5045	4.5				
HKD-5046	4.6				
HKD-5047	4.7				
HKD-5048	4.8	44	82	6	35
HKD-5049	4.9				
HKD-5050	5.0				
HKD-5051	5.1				
HKD-5052	5.2				
HKD-5053	5.3				
HKD-5054	5.4				
HKD-5055	5.5				
HKD-5056	5.6				
HKD-5057	5.7				
HKD-5058	5.8				
HKD-5059	5.9				
HKD-5060	6.0				
HKD-5061	6.1	53	91	8	43
HKD-5062	6.2				
HKD-5063	6.3				
HKD-5064	6.4				
HKD-5065	6.5				
HKD-5066	6.6				
HKD-5067	6.7				
HKD-5068	6.8				
HKD-5069	6.9				
HKD-5070	7.0				
HKD-5071	7.1	53	91	8	43
HKD-5072	7.2				
HKD-5073	7.3				
HKD-5074	7.4				
HKD-5075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HKD-5076	7.6	53	91	8	43
HKD-5077	7.7				
HKD-5078	7.8				
HKD-5079	7.9				
HKD-5080	8.0				
HKD-5081	8.1				
HKD-5082	8.2				
HKD-5083	8.3				
HKD-5084	8.4	61	103	10	49
HKD-5085	8.5				
HKD-5086	8.6				
HKD-5087	8.7				
HKD-5088	8.8				
HKD-5089	8.9				
HKD-5090	9.0				
HKD-5091	9.1				
HKD-5092	9.2				
HKD-5093	9.3				
HKD-5094	9.4	61	103	10	49
HKD-5095	9.5				
HKD-5096	9.6				
HKD-5097	9.7				
HKD-5098	9.8				
HKD-5099	9.9				
HKD-5100	10.0				
HKD-5101	10.1				
HKD-5102	10.2				
HKD-5103	10.3				
HKD-5104	10.4				
HKD-5105	10.5				
HKD-5106	10.6				
HKD-5107	10.7				
HKD-5108	10.8				
HKD-5109	10.9				
HKD-5110	11.0				
HKD-5111	11.1	71	118	12	56
HKD-5112	11.2				
HKD-5113	11.3				
HKD-5114	11.4				
HKD-5115	11.5				
HKD-5116	11.6				
HKD-5117	11.7				
HKD-5118	11.8				
HKD-5119	11.9				
HKD-5120	12.0				
HKD-5121	12.1	77	124	14	60

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HKD-5122	12.2	77	124	14	60
HKD-5123	12.3				
HKD-5124	12.4				
HKD-5125	12.5				
HKD-5126	12.6				
HKD-5127	12.7				
HKD-5128	12.8				
HKD-5129	12.9				
HKD-5130	13.0				
HKD-5131	13.1				
HKD-5132	13.2				
HKD-5133	13.3				
HKD-5134	13.4				
HKD-5135	13.5				
HKD-5136	13.6				
HKD-5137	13.7				
HKD-5138	13.8				
HKD-5139	13.9				
HKD-5140	14.0	83	133	16	63
HKD-5141	14.1				
HKD-5142	14.2				
HKD-5143	14.3				
HKD-5144	14.4				
HKD-5145	14.5				
HKD-5146	14.6				
HKD-5147	14.7				
HKD-5148	14.8				
HKD-5149	14.9				
HKD-5150	15.0	83	133	16	63
HKD-5152	15.2				
HKD-5153	15.3				
HKD-5154	15.4				
HKD-5155	15.5				
HKD-5156	15.6				
HKD-5157	15.7				
HKD-5158	15.8				
HKD-5159	15.9				
HKD-5160	16.0				
HKD-5165	16.5	93	143	18	71
HKD-5170	17.0				
HKD-5175	17.5				
HKD-5180	18.0				
HKD-5185	18.5				
HKD-5190	19.0				
HKD-5195	19.5				
HKD-5200	20.0	101	153	20	77

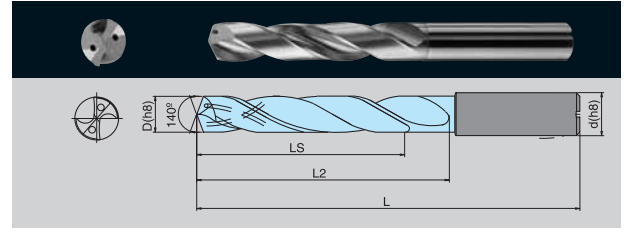
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Shank DIN 6537

TUNGSTEN CARBIDE COATED DRILL



附內冷卻孔
With Coolant
Through Hole



適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
HKD-8030	3.0	34	72	6	29	HKD-8076	7.6	76	114	8	64	HKD-8122	12.2	133	178	112	60
HKD-8031	3.1					HKD-8077	7.7					HKD-8123	12.3				
HKD-8032	3.2					HKD-8078	7.8					HKD-8124	12.4				
HKD-8033	3.3					HKD-8079	7.9					HKD-8125	12.5				
HKD-8034	3.4					HKD-8080	8.0					HKD-8126	12.6				
HKD-8035	3.5					HKD-8081	8.1					HKD-8127	12.7				
HKD-8036	3.6					HKD-8082	8.2					HKD-8128	12.8				
HKD-8037	3.7					HKD-8083	8.3					HKD-8129	12.9				
HKD-8038	3.8					HKD-8084	8.4					HKD-8130	13.0				
HKD-8039	3.9					HKD-8085	8.5					HKD-8131	13.1				
HKD-8040	4.0	43	81	6	36	HKD-8086	8.6	95	142	10	80	HKD-8132	13.2	133	178	112	60
HKD-8041	4.1					HKD-8087	8.7					HKD-8133	13.3				
HKD-8042	4.2					HKD-8088	8.8					HKD-8134	13.4				
HKD-8043	4.3					HKD-8089	8.9					HKD-8135	13.5				
HKD-8044	4.4					HKD-8090	9.0					HKD-8136	13.6				
HKD-8045	4.5					HKD-8091	9.1					HKD-8137	13.7				
HKD-8046	4.6					HKD-8092	9.2					HKD-8138	13.8				
HKD-8047	4.7					HKD-8093	9.3					HKD-8139	13.9				
HKD-8048	4.8					HKD-8094	9.4					HKD-8140	14.0				
HKD-8049	4.9					HKD-8095	9.5					HKD-8141	14.1				
HKD-8050	5.0	57	95	6	48	HKD-8096	9.6	95	142	10	80	HKD-8142	14.2	152	203	16	128
HKD-8051	5.1					HKD-8097	9.7					HKD-8143	14.3				
HKD-8052	5.2					HKD-8098	9.8					HKD-8144	14.4				
HKD-8053	5.3					HKD-8099	9.9					HKD-8145	14.5				
HKD-8054	5.4					HKD-8100	10.0					HKD-8146	14.6				
HKD-8055	5.5					HKD-8101	10.1					HKD-8147	14.7				
HKD-8056	5.6					HKD-8102	10.2					HKD-8148	14.8				
HKD-8057	5.7					HKD-8103	10.3					HKD-8149	14.9				
HKD-8058	5.8					HKD-8104	10.4					HKD-8150	15.0				
HKD-8059	5.9					76	114					8	64				
HKD-8060	6.0	HKD-8106	10.6	HKD-8153	15.3												
HKD-8061	6.1	HKD-8107	10.7	HKD-8154	15.4												
HKD-8062	6.2	HKD-8108	10.8	HKD-8155	15.5												
HKD-8063	6.3	HKD-8109	10.9	HKD-8156	15.6												
HKD-8064	6.4	HKD-8110	11.0	HKD-8157	15.7												
HKD-8065	6.5	HKD-8111	11.1	HKD-8158	15.8												
HKD-8066	6.6	HKD-8112	11.2	HKD-8159	15.9												
HKD-8067	6.7	HKD-8113	11.3	HKD-8160	16.0												
HKD-8068	6.8	HKD-8114	11.4	HKD-8165	16.5												
HKD-8069	6.9	76	114	8	64	HKD-8115	11.5	114	162	12	96	HKD-8170	17.0	171	222	18	144
HKD-8070	7.0					HKD-8116	11.6					HKD-8175	17.5				
HKD-8071	7.1					HKD-8117	11.7					HKD-8180	18.0				
HKD-8072	7.2					HKD-8118	11.8					HKD-8185	18.5				
HKD-8073	7.3					HKD-8119	11.9					HKD-8190	19.0				
HKD-8074	7.4					HKD-8120	12.0					HKD-8195	19.5				
HKD-8075	7.5					HKD-8121	12.1					HKD-8200	20.0				

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TUNGSTEN CARBIDE COATED DRILL

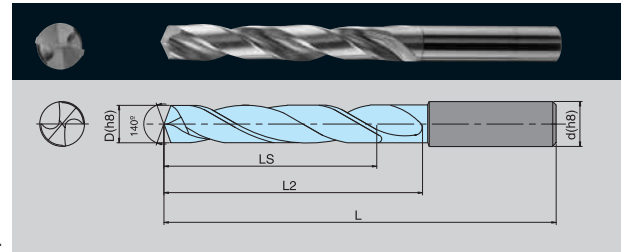


適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-5010	1.0	7	39	1.5	5
CCD-5011	1.1				
CCD-5012	1.2	8	39	1.5	6
CCD-5013	1.3				
CCD-5014	1.4	9	39	1.5	7
CCD-5015	1.5				
CCD-5016	1.6	9	39	2	7
CCD-5017	1.7				
CCD-5018	1.8	11	43	2	8
CCD-5019	1.9				
CCD-5020	2.0	12	43	2	9
CCD-5021	2.1				
CCD-5022	2.2	12	46	3	9
CCD-5023	2.3				
CCD-5024	2.4	14	46	3	10
CCD-5025	2.5				
CCD-5026	2.6				
CCD-5027	2.7				
CCD-5028	2.8	16	49	3	12
CCD-5029	2.9				
CCD-5030	3.0	18	49	3	13
CCD-5031	3.1				
CCD-5032	3.2	18	52	4	13
CCD-5033	3.3				
CCD-5034	3.4	20	52	4	15
CCD-5035	3.5				
CCD-5036	3.6				
CCD-5037	3.7				
CCD-5038	3.8	22	62	4	16
CCD-5039	3.9				
CCD-5040	4.0	25	66	5	18
CCD-5041	4.1				
CCD-5042	4.2				
CCD-5043	4.3				
CCD-5044	4.4	25	66	5	18
CCD-5045	4.5				
CCD-5046	4.6	28	66	5	20
CCD-5047	4.7				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-5048	4.8	28	66	5	20
CCD-5049	4.9				
CCD-5050	5.0	30	75	6	24
CCD-5051	5.1				
CCD-5052	5.2				
CCD-5053	5.3				
CCD-5054	5.4				
CCD-5055	5.5				
CCD-5056	5.6	33	78	6	25
CCD-5057	5.7				
CCD-5058	5.8				
CCD-5059	5.9				
CCD-5060	6.0	35	78	7	25
CCD-5061	6.1				
CCD-5062	6.2				
CCD-5063	6.3				
CCD-5064	6.4				
CCD-5065	6.5				
CCD-5066	6.6	38	78	7	25
CCD-5067	6.7				
CCD-5068	6.8				
CCD-5069	6.9				
CCD-5070	7.0	42	85	8	32
CCD-5071	7.1				
CCD-5072	7.2				
CCD-5073	7.3				
CCD-5074	7.4				
CCD-5075	7.5				
CCD-5076	7.6	45	90	8	35
CCD-5077	7.7				
CCD-5078	7.8				
CCD-5079	7.9				
CCD-5080	8.0	47	90	9	37
CCD-5081	8.1				
CCD-5082	8.2				
CCD-5083	8.3				
CCD-5084	8.4				
CCD-5085	8.5				

全鎢鋼被覆鑽頭

TUNGSTEN CARBIDE COATED DRILL



適合材質：

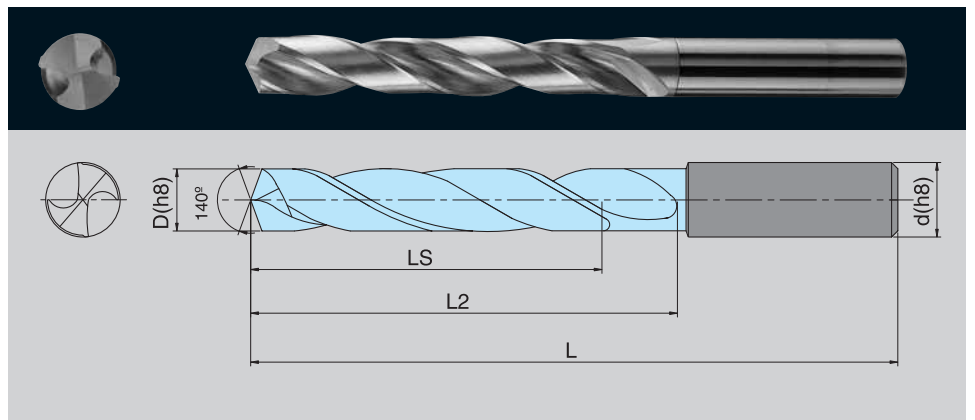
一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-5086	8.6	50	95	9	40
CCD-5087	8.7				
CCD-5088	8.8				
CCD-5089	8.9				
CCD-5090	9.0				
CCD-5091	9.1	50	95	10	40
CCD-5092	9.2				
CCD-5093	9.3				
CCD-5094	9.4				
CCD-5095	9.5				
CCD-5096	9.6	55	100	10	43
CCD-5097	9.7				
CCD-5098	9.8				
CCD-5099	9.9				
CCD-5100	10.0				
CCD-5101	10.1	55	100	11	43
CCD-5102	10.2				
CCD-5103	10.3				
CCD-5104	10.4				
CCD-5105	10.5				
CCD-5106	10.6	60	105	12	45
CCD-5107	10.7				
CCD-5108	10.8				
CCD-5109	10.9				
CCD-5110	11.0				
CCD-5111	11.1	62	105	12	45
CCD-5112	11.2				
CCD-5113	11.3				
CCD-5114	11.4				
CCD-5115	11.5				
CCD-5116	11.6	65	110	12	47
CCD-5117	11.7				
CCD-5118	11.8				
CCD-5119	11.9				
CCD-5120	12.0				
CCD-5121	12.1	65	110	13	47
CCD-5122	12.2				
CCD-5123	12.3				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-5124	12.4	65	110	13	47
CCD-5125	12.5				
CCD-5126	12.6				
CCD-5127	12.7				
CCD-5128	12.8				
CCD-5129	12.9				
CCD-5130	13.0				
CCD-5131	13.1	70	120	14	50
CCD-5132	13.2				
CCD-5133	13.3				
CCD-5134	13.4				
CCD-5135	13.5				
CCD-5136	13.6				
CCD-5137	13.7				
CCD-5138	13.8	80	130	15	60
CCD-5139	13.9				
CCD-5140	14.0				
CCD-5141	14.1				
CCD-5142	14.2				
CCD-5143	14.3				
CCD-5144	14.4				
CCD-5145	14.5	85	135	16	63
CCD-5146	14.6				
CCD-5147	14.7				
CCD-5148	14.8				
CCD-5149	14.9				
CCD-5150	15.0				
CCD-5155	15.5				
CCD-5160	16.0				
CCD-5165	16.5				
CCD-5170	17.0	90	140	18	66
CCD-5175	17.5				
CCD-5180	18.0				
CCD-5185	18.5	100	155	19	75
CCD-5190	19.0				
CCD-5195	19.5				
CCD-5200	20.0	100	155	20	75



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-7010	1.0	9	39	1.5	7
CCD-7011	1.1				
CCD-7012	1.2	11	39	1.5	9
CCD-7013	1.3				
CCD-7014	1.4	12	39	1.5	10
CCD-7015	1.5				
CCD-7016	1.6	14	49	2	11
CCD-7017	1.7				
CCD-7018	1.8	16	49	2	13
CCD-7019	1.9				
CCD-7020	2.0	18	52	3	14
CCD-7021	2.1				
CCD-7022	2.2	20	52	3	16
CCD-7023	2.3				
CCD-7024	2.4	24	62	3	20
CCD-7025	2.5				
CCD-7026	2.6	26	62	4	21
CCD-7027	2.7				
CCD-7028	2.8	28	66	4	23
CCD-7029	2.9				
CCD-7030	3.0	30	66	4	24
CCD-7031	3.1				
CCD-7032	3.2	30	72	4	24
CCD-7033	3.3				
CCD-7034	3.4	35	78	5	27
CCD-7035	3.5				
CCD-7036	3.6	30	66	4	24
CCD-7037	3.7				
CCD-7038	3.8	30	72	4	24
CCD-7039	3.9				
CCD-7040	4.0	35	78	5	27
CCD-7041	4.1				
CCD-7042	4.2	30	72	4	24
CCD-7043	4.3				
CCD-7044	4.4	35	78	5	27
CCD-7045	4.5				
CCD-7046	4.6	30	72	4	24
CCD-7047	4.7				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-7048	4.8	39	78	5	30
CCD-7049	4.9				
CCD-7050	5.0	42	82	6	33
CCD-7051	5.1				
CCD-7052	5.2	45	90	6	35
CCD-7053	5.3				
CCD-7054	5.4	45	90	7	40
CCD-7055	5.5				
CCD-7056	5.6	50	95	7	43
CCD-7057	5.7				
CCD-7058	5.8	55	100	8	45
CCD-7059	5.9				
CCD-7060	6.0	60	105	8	50
CCD-7061	6.1				
CCD-7062	6.2	60	105	9	50
CCD-7063	6.3				
CCD-7064	6.4	60	105	9	50
CCD-7065	6.5				
CCD-7066	6.6	60	105	9	50
CCD-7067	6.7				
CCD-7068	6.8	60	105	9	50
CCD-7069	6.9				
CCD-7070	7.0	60	105	9	50
CCD-7071	7.1				
CCD-7072	7.2	60	105	9	50
CCD-7073	7.3				
CCD-7074	7.4	60	105	9	50
CCD-7075	7.5				
CCD-7076	7.6	60	105	9	50
CCD-7077	7.7				
CCD-7078	7.8	60	105	9	50
CCD-7079	7.9				
CCD-7080	8.0	60	105	9	50
CCD-7081	8.1				
CCD-7082	8.2	60	105	9	50
CCD-7083	8.3				
CCD-7084	8.4	60	105	9	50
CCD-7085	8.5				

全鎢鋼被覆鑽頭

TUNGSTEN CARBIDE COATED DRILL

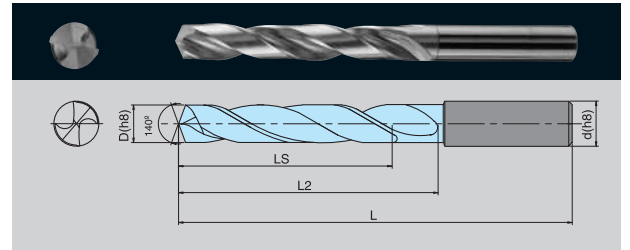


適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-7086	8.6	63	105	9	52
CCD-7087	8.7				
CCD-7088	8.8				
CCD-7089	8.9				
CCD-7090	9.0				
CCD-7091	9.1	67	110	10	55
CCD-7092	9.2				
CCD-7093	9.3				
CCD-7094	9.4				
CCD-7095	9.5				
CCD-7096	9.6	72	115	10	58
CCD-7097	9.7				
CCD-7098	9.8				
CCD-7099	9.9				
CCD-7100	10.0				
CCD-7101	10.1	75	120	11	60
CCD-7102	10.2				
CCD-7103	10.3				
CCD-7104	10.4				
CCD-7105	10.5				
CCD-7106	10.6	80	125	11	63
CCD-7107	10.7				
CCD-7108	10.8				
CCD-7109	10.9				
CCD-7110	11.0				
CCD-7111	11.1	85	130	12	68
CCD-7112	11.2				
CCD-7113	11.3				
CCD-7114	11.4				
CCD-7115	11.5				
CCD-7116	11.6	90	135	12	72
CCD-7117	11.7				
CCD-7118	11.8				
CCD-7119	11.9				
CCD-7120	12.0				
CCD-7121	12.1	90	135	13	72
CCD-7122	12.2				
CCD-7123	12.3				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CCD-7124	12.4	90	135	13	72
CCD-7125	12.5				
CCD-7126	12.6	95	140	13	75
CCD-7127	12.7				
CCD-7128	12.8				
CCD-7129	12.9				
CCD-7130	13.0				
CCD-7131	13.1	100	150	14	80
CCD-7132	13.2				
CCD-7133	13.3				
CCD-7134	13.4				
CCD-7135	13.5				
CCD-5136	13.6				
CCD-7137	13.7				
CCD-7138	13.8				
CCD-7139	13.9				
CCD-7140	14.0				
CCD-7141	14.1	110	160	15	87
CCD-7142	14.2				
CCD-7143	14.3				
CCD-7144	14.4				
CCD-7145	14.5				
CCD-7146	14.6				
CCD-7147	14.7				
CCD-7148	14.8				
CCD-7149	14.9				
CCD-7150	15.0				
CCD-7155	15.5	115	165	16	91
CCD-7160	16.0				
CCD-7165	16.5	125	180	17	100
CCD-7170	17.0				
CCD-7175	17.5	130	185	18	103
CCD-7180	18.0				
CCD-7185	18.5	140	200	19	111
CCD-7190	19.0				
CCD-7195	19.5	150	210	20	120
CCD-7200	20.0				

全鎢鋼被覆鑽頭

Shank DIN 6537

TUNGSTEN CARBIDE COATED DRILL

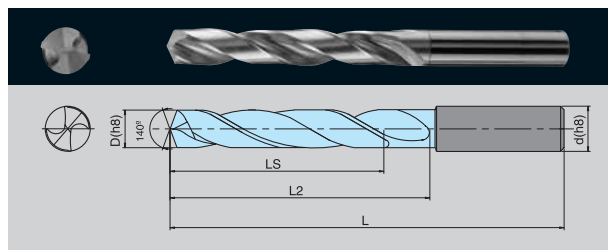


適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-3030	3.0	20	62	6	14
CFD-3031	3.1				
CFD-3032	3.2				
CFD-3033	3.3				
CFD-3034	3.4				
CFD-3035	3.5				
CFD-3036	3.6				
CFD-3037	3.7				
CFD-3038	3.8				
CFD-3039	3.9				
CFD-3040	4.0	24	66	6	17
CFD-3041	4.1				
CFD-3042	4.2				
CFD-3043	4.3				
CFD-3044	4.4				
CFD-3045	4.5				
CFD-3046	4.6				
CFD-3047	4.7				
CFD-3048	4.8				
CFD-3049	4.9				
CFD-3050	5.0	28	66	6	20
CFD-3051	5.1				
CFD-3052	5.2				
CFD-3053	5.3				
CFD-3054	5.4				
CFD-3055	5.5				
CFD-3056	5.6				
CFD-3057	5.7				
CFD-3058	5.8				
CFD-3059	5.9				
CFD-3060	6.0	34	79	8	24
CFD-3061	6.1				
CFD-3062	6.2				
CFD-3063	6.3				
CFD-3064	6.4				
CFD-3065	6.5				
CFD-3066	6.6				
CFD-3067	6.7				
CFD-3068	6.8				
CFD-3069	6.9				
CFD-3070	7.0	41	79	8	29
CFD-3071	7.1				
CFD-3072	7.2				
CFD-3073	7.3				
CFD-3074	7.4				
CFD-3075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-3076	7.6	41	79	8	29
CFD-3077	7.7				
CFD-3078	7.8				
CFD-3079	7.9				
CFD-3080	8.0				
CFD-3081	8.1				
CFD-3082	8.2				
CFD-3083	8.3				
CFD-3084	8.4				
CFD-3085	8.5				
CFD-3086	8.6	47	89	10	35
CFD-3087	8.7				
CFD-3088	8.8				
CFD-3089	8.9				
CFD-3090	9.0				
CFD-3091	9.1				
CFD-3092	9.2				
CFD-3093	9.3				
CFD-3094	9.4				
CFD-3095	9.5				
CFD-3096	9.6	47	89	10	35
CFD-3097	9.7				
CFD-3098	9.8				
CFD-3099	9.9				
CFD-3100	10.0				
CFD-3101	10.1				
CFD-3102	10.2				
CFD-3103	10.3				
CFD-3104	10.4				
CFD-3105	10.5				
CFD-3106	10.6	55	102	12	40
CFD-3107	10.7				
CFD-3108	10.8				
CFD-3109	10.9				
CFD-3110	11.0				
CFD-3111	11.1				
CFD-3112	11.2				
CFD-3113	11.3				
CFD-3114	11.4				
CFD-3115	11.5				
CFD-3116	11.6	55	102	12	40
CFD-3117	11.7				
CFD-3118	11.8				
CFD-3119	11.9				
CFD-3120	12.0				
CFD-3121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut				
CFD-3122	12.2	60	107	14	43				
CFD-3123	12.3								
CFD-3124	12.4								
CFD-3125	12.5								
CFD-3126	12.6								
CFD-3127	12.7								
CFD-3128	12.8								
CFD-3129	12.9								
CFD-3130	13.0								
CFD-3131	13.1					60	107	14	43
CFD-3132	13.2								
CFD-3133	13.3								
CFD-3134	13.4								
CFD-3135	13.5								
CFD-3136	13.6								
CFD-3137	13.7								
CFD-3138	13.8								
CFD-3139	13.9								
CFD-3140	14.0	65	115	16	45				
CFD-3141	14.1								
CFD-3142	14.2								
CFD-3143	14.3								
CFD-3144	14.4								
CFD-3145	14.5								
CFD-3146	14.6								
CFD-3147	14.7								
CFD-3148	14.8								
CFD-3149	14.9								
CFD-3150	15.0	65	115	16	45				
CFD-3152	15.2								
CFD-3153	15.3								
CFD-3154	15.4								
CFD-3155	15.5								
CFD-3156	15.6								
CFD-3157	15.7								
CFD-3158	15.8								
CFD-3159	15.9								
CFD-3160	16.0					73	123	18	51
CFD-3165	16.5								
CFD-3170	17.0								
CFD-3175	17.5								
CFD-3180	18.0								
CFD-3185	18.5	79	131	20	55				
CFD-3190	19.0								
CFD-3195	19.5								
CFD-3200	20.0								

全鎢鋼被覆鑽頭

Shank DIN 6537

TUNGSTEN CARBIDE COATED DRILL



適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

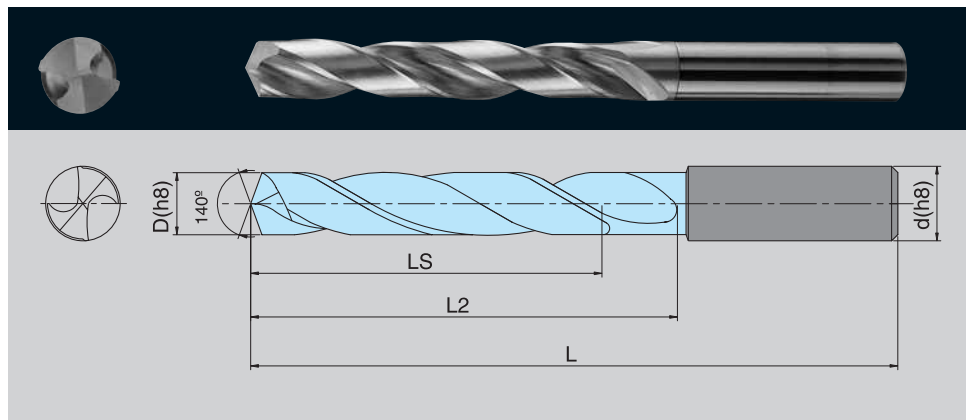
Applicable materials:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-5030	3.0	28	66	6	23
CFD-5031	3.1				
CFD-5032	3.2				
CFD-5033	3.3				
CFD-5034	3.4				
CFD-5035	3.5				
CFD-5036	3.6				
CFD-5037	3.7				
CFD-5038	3.8	36	74	6	29
CFD-5039	3.9				
CFD-5040	4.0				
CFD-5041	4.1				
CFD-5042	4.2				
CFD-5043	4.3				
CFD-5044	4.4				
CFD-5045	4.5				
CFD-5046	4.6	44	82	6	35
CFD-5047	4.7				
CFD-5048	4.8				
CFD-5049	4.9				
CFD-5050	5.0				
CFD-5051	5.1				
CFD-5052	5.2				
CFD-5053	5.3				
CFD-5054	5.4	53	91	8	43
CFD-5055	5.5				
CFD-5056	5.6				
CFD-5057	5.7				
CFD-5058	5.8				
CFD-5059	5.9				
CFD-5060	6.0				
CFD-5061	6.1				
CFD-5062	6.2	53	91	8	43
CFD-5063	6.3				
CFD-5064	6.4				
CFD-5065	6.5				
CFD-5066	6.6				
CFD-5067	6.7				
CFD-5068	6.8				
CFD-5069	6.9				
CFD-5070	7.0	53	91	8	43
CFD-5071	7.1				
CFD-5072	7.2				
CFD-5073	7.3				
CFD-5074	7.4				
CFD-5075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-5076	7.6	53	91	8	43
CFD-5077	7.7				
CFD-5078	7.8				
CFD-5079	7.9				
CFD-5080	8.0				
CFD-5081	8.1				
CFD-5082	8.2				
CFD-5083	8.3				
CFD-5084	8.4	61	103	10	49
CFD-5085	8.5				
CFD-5086	8.6				
CFD-5087	8.7				
CFD-5088	8.8				
CFD-5089	8.9				
CFD-5090	9.0				
CFD-5091	9.1				
CFD-5092	9.2	61	103	10	49
CFD-5093	9.3				
CFD-5094	9.4				
CFD-5095	9.5				
CFD-5096	9.6				
CFD-5097	9.7				
CFD-5098	9.8				
CFD-5099	9.9				
CFD-5100	10.0	71	118	12	56
CFD-5101	10.1				
CFD-5102	10.2				
CFD-5103	10.3				
CFD-5104	10.4				
CFD-5105	10.5				
CFD-5106	10.6				
CFD-5107	10.7				
CFD-5108	10.8	71	118	12	56
CFD-5109	10.9				
CFD-5110	11.0				
CFD-5111	11.1				
CFD-5112	11.2				
CFD-5113	11.3				
CFD-5114	11.4				
CFD-5115	11.5				
CFD-5116	11.6	71	118	12	56
CFD-5117	11.7				
CFD-5118	11.8				
CFD-5119	11.9				
CFD-5120	12.0				
CFD-5121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-5122	12.2	77	124	14	60
CFD-5123	12.3				
CFD-5124	12.4				
CFD-5125	12.5				
CFD-5126	12.6				
CFD-5127	12.7				
CFD-5128	12.8				
CFD-5129	12.9				
CFD-5130	13.0	77	124	14	60
CFD-5131	13.1				
CFD-5132	13.2				
CFD-5133	13.3				
CFD-5134	13.4				
CFD-5135	13.5				
CFD-5136	13.6				
CFD-5137	13.7				
CFD-5138	13.8	83	133	16	63
CFD-5139	13.9				
CFD-5140	14.0				
CFD-5141	14.1				
CFD-5142	14.2				
CFD-5143	14.3				
CFD-5144	14.4				
CFD-5145	14.5				
CFD-5146	14.6	83	133	16	63
CFD-5147	14.7				
CFD-5148	14.8				
CFD-5149	14.9				
CFD-5150	15.0				
CFD-5152	15.2				
CFD-5153	15.3				
CFD-5154	15.4				
CFD-5155	15.5	83	133	16	63
CFD-5156	15.6				
CFD-5157	15.7				
CFD-5158	15.8				
CFD-5159	15.9				
CFD-5160	16.0				
CFD-5165	16.5				
CFD-5170	17.0				
CFD-5175	17.5				
CFD-5180	18.0				
CFD-5185	18.5				
CFD-5190	19.0				
CFD-5195	19.5				
CFD-5200	20.0				



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-8030	3.0	34	72	6	29
CFD-8031	3.1				
CFD-8032	3.2				
CFD-8033	3.3				
CFD-8034	3.4				
CFD-8035	3.5				
CFD-8036	3.6				
CFD-8037	3.7				
CFD-8038	3.8	43	81	6	36
CFD-8039	3.9				
CFD-8040	4.0				
CFD-8041	4.1				
CFD-8042	4.2				
CFD-8043	4.3				
CFD-8044	4.4				
CFD-8045	4.5				
CFD-8046	4.6	57	95	6	48
CFD-8047	4.7				
CFD-8048	4.8				
CFD-8049	4.9				
CFD-8050	5.0				
CFD-8051	5.1				
CFD-8052	5.2				
CFD-8053	5.3				
CFD-8054	5.4	76	114	8	64
CFD-8055	5.5				
CFD-8056	5.6				
CFD-8057	5.7				
CFD-8058	5.8				
CFD-8059	5.9				
CFD-8060	6.0				
CFD-8061	6.1				
CFD-8062	6.2	76	114	8	64
CFD-8063	6.3				
CFD-8064	6.4				
CFD-8065	6.5				
CFD-8066	6.6				
CFD-8067	6.7				
CFD-8068	6.8				
CFD-8069	6.9				
CFD-8070	7.0				
CFD-8071	7.1	76	114	8	64
CFD-8072	7.2				
CFD-8073	7.3				
CFD-8074	7.4				
CFD-8075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-8076	7.6	76	114	8	64
CFD-8077	7.7				
CFD-8078	7.8				
CFD-8079	7.9				
CFD-8080	8.0				
CFD-8081	8.1				
CFD-8082	8.2				
CFD-8083	8.3				
CFD-8084	8.4	95	142	10	80
CFD-8085	8.5				
CFD-8086	8.6				
CFD-8087	8.7				
CFD-8088	8.8				
CFD-8089	8.9				
CFD-8090	9.0				
CFD-8091	9.1				
CFD-8092	9.2	95	142	10	80
CFD-8093	9.3				
CFD-8094	9.4				
CFD-8095	9.5				
CFD-8096	9.6				
CFD-8097	9.7				
CFD-8098	9.8				
CFD-8099	9.9				
CFD-8100	10.0	114	162	12	96
CFD-8101	10.1				
CFD-8102	10.2				
CFD-8103	10.3				
CFD-8104	10.4				
CFD-8105	10.5				
CFD-8106	10.6				
CFD-8107	10.7				
CFD-8108	10.8	114	162	12	96
CFD-8109	10.9				
CFD-8110	11.0				
CFD-8111	11.1				
CFD-8112	11.2				
CFD-8113	11.3				
CFD-8114	11.4				
CFD-8115	11.5				
CFD-8116	11.6				
CFD-8117	11.7	133	178	112	60
CFD-8118	11.8				
CFD-8119	11.9				
CFD-8120	12.0				
CFD-8121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
CFD-8122	12.2	133	178	112	60
CFD-8123	12.3				
CFD-8124	12.4				
CFD-8125	12.5				
CFD-8126	12.6				
CFD-8127	12.7				
CFD-8128	12.8				
CFD-8129	12.9				
CFD-8130	13.0	133	178	112	60
CFD-8131	13.1				
CFD-8132	13.2				
CFD-8133	13.3				
CFD-8134	13.4				
CFD-8135	13.5				
CFD-8136	13.6				
CFD-8137	13.7				
CFD-8138	13.8	152	203	16	128
CFD-8139	13.9				
CFD-8140	14.0				
CFD-8141	14.1				
CFD-8142	14.2				
CFD-8143	14.3				
CFD-8144	14.4				
CFD-8145	14.5				
CFD-8146	14.6	152	203	16	128
CFD-8147	14.7				
CFD-8148	14.8				
CFD-8149	14.9				
CFD-8150	15.0				
CFD-8152	15.2				
CFD-8153	15.3				
CFD-8154	15.4				
CFD-8155	15.5				
CFD-8156	15.6	171	222	18	144
CFD-8157	15.7				
CFD-8158	15.8				
CFD-8159	15.9				
CFD-8160	16.0				
CFD-8165	16.5				
CFD-8170	17.0				
CFD-8175	17.5				
CFD-8180	18.0	190	243	20	160
CFD-8185	18.5				
CFD-8190	19.0				
CFD-8195	19.5				
CFD-8200	20.0				

焊刃式鎢鋼被覆鑽頭

Shank DIN 6535 HE

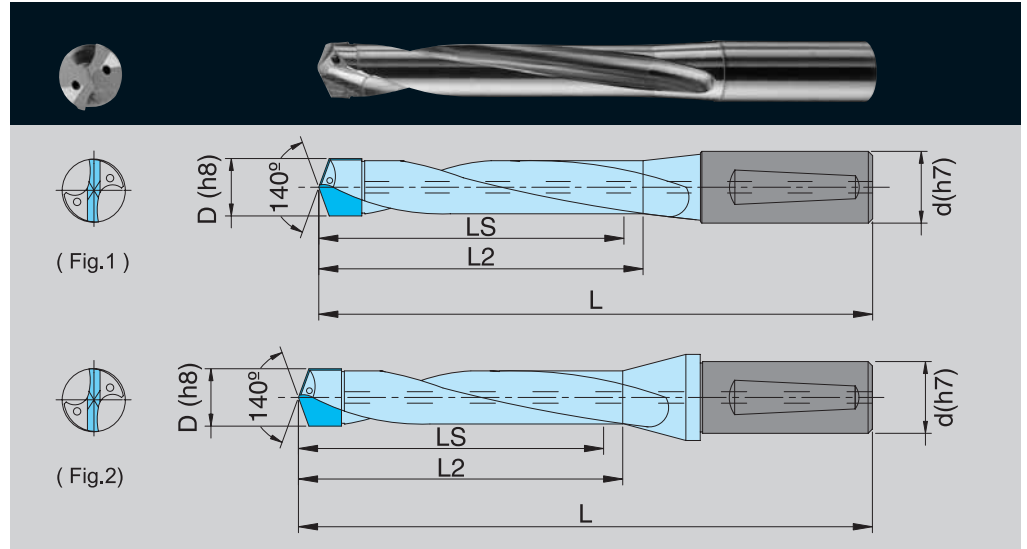
TUNGSTEN CARBIDE WELDED COATED DRILL



- 焊接式
- 附內冷卻孔
- Welded End
- With Coolant Through Hole

適合材質：
一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:
General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-3130	13.0	48	109	16	44	Fig.1
TXD-3131	13.1					
TXD-3132	13.2					
TXD-3135	13.5					
TXD-3137	13.7	55	118	16	50	Fig.1
TXD-3138	13.8					
TXD-3140	14.0					
TXD-3142	14.2					
TXD-3145	14.5	60	126	20	54	Fig.1
TXD-3147	14.7					
TXD-3150	15.0					
TXD-3152	15.2					
TXD-3155	15.5	67	135	20	60	Fig.1
TXD-3157	15.7					
TXD-3159	15.9					
TXD-3160	16.0					
TXD-3162	16.2	72	142	20	65	Fig.1
TXD-3163	16.3					
TXD-3165	16.5					
TXD-3167	16.7					
TXD-3168	16.8	72	142	20	65	Fig.1
TXD-3170	17.0					
TXD-3172	17.2					
TXD-3174	17.4					
TXD-3175	17.5	72	142	20	65	Fig.1
TXD-3176	17.6					
TXD-3177	17.7					
TXD-3180	18.0					
TXD-3182	18.2	72	142	20	65	Fig.1
TXD-3185	18.5					
TXD-3187	18.7					
TXD-3190	19.0					

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-3192	19.2	76	153	25	69	Fig.1
TXD-3195	19.5					
TXD-3197	19.7					
TXD-3200	20.0					
TXD-3202	20.2	85	163	25	77	Fig.1
TXD-3205	20.5					
TXD-3206	20.6					
TXD-3210	21.0					
TXD-3215	21.5	90	172	25	80	Fig.1
TXD-3220	22.0					
TXD-3222	22.2					
TXD-3224	22.4					
TXD-3225	22.5	90	175	32	82	Fig.1
TXD-3230	23.0					
TXD-3235	23.5					
TXD-3240	24.0					
TXD-3245	24.5	100	187	32	90	Fig.1
TXD-3250	25.0					
TXD-3255	25.5					
TXD-3260	26.0					
TXD-3265	26.5	115	205	32	105	Fig.1
TXD-3270	27.0					
TXD-3275	27.5					
TXD-3280	28.0					
TXD-3285	28.5	115	212	32	105	Fig.2
TXD-3290	29.0					
TXD-3295	29.5					
TXD-3300	30.0					
TXD-3305	30.5	115	212	32	105	Fig.2
TXD-3310	31.0					
TXD-3315	31.5					
TXD-3320	32.0					

焊刃式鎢鋼被覆鑽頭

Shank DIN 6535 HE

TUNGSTEN CARBIDE WELDED COATED DRILL



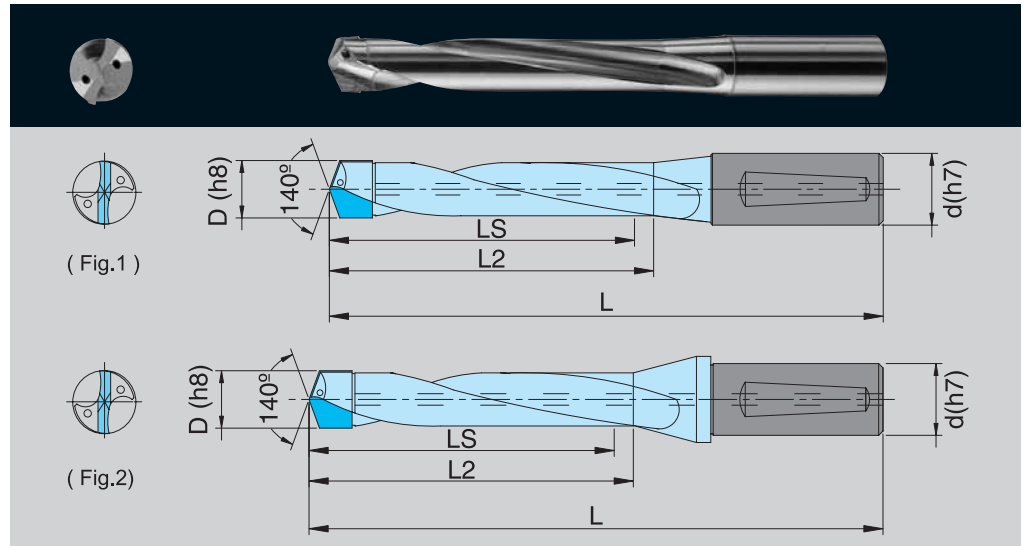
- 焊接式
- 附內冷卻孔
- Welded End
- With Coolant Through Hole

適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel,
stainless steel, copper,
aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-5130	13.0	75	136	16	71	Fig.1
TXD-5131	13.1					
TXD-5132	13.2					
TXD-5135	13.5					
TXD-5137	13.7	83	146	16	78	Fig.1
TXD-5138	13.8					
TXD-5140	14.0					
TXD-5142	14.2					
TXD-5145	14.5	90	156	20	84	Fig.1
TXD-5147	14.7					
TXD-5150	15.0					
TXD-5152	15.2					
TXD-5155	15.5	100	168	20	93	Fig.1
TXD-5157	15.7					
TXD-5159	15.9					
TXD-5160	16.0					
TXD-5162	16.2	108	178	20	100	Fig.1
TXD-5163	16.3					
TXD-5165	16.5					
TXD-5167	16.7					
TXD-5168	16.8	165	262	32	155	Fig.2
TXD-5170	17.0					
TXD-5172	17.2					
TXD-5174	17.4					
TXD-5175	17.5	165	262	32	155	Fig.2
TXD-5176	17.6					
TXD-5177	17.7					
TXD-5180	18.0					
TXD-5182	18.2	165	262	32	155	Fig.2
TXD-5185	18.5					
TXD-5187	18.7					
TXD-5190	19.0					

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-5192	19.2	118	194	25	110	Fig.1
TXD-5195	19.5					
TXD-5197	19.7					
TXD-5200	20.0					
TXD-5202	20.2	127	205	25	118	Fig.1
TXD-5205	20.5					
TXD-5206	20.6					
TXD-5210	21.0					
TXD-5215	21.5	135	215	25	125	Fig.1
TXD-5220	22.0					
TXD-5222	22.2					
TXD-5224	22.4					
TXD-5225	22.5	138	223	32	128	Fig.1
TXD-5230	23.0					
TXD-5235	23.5					
TXD-5240	24.0					
TXD-5245	24.5	152	238	32	142	Fig.1
TXD-5250	25.0					
TXD-5255	25.5					
TXD-5260	26.0					
TXD-5265	26.5	165	255	32	155	Fig.1
TXD-5270	27.0					
TXD-5275	27.5					
TXD-5280	28.0					
TXD-5285	28.5	165	262	32	155	Fig.2
TXD-5290	29.0					
TXD-5295	29.5					
TXD-5300	30.0					
TXD-5305	30.5	165	262	32	155	Fig.2
TXD-5310	31.0					
TXD-5315	31.5					
TXD-5320	32.0					

焊刃式鎢鋼被覆鑽頭

Shank DIN 6535 HE

TUNGSTEN CARBIDE WELDED COATED DRILL



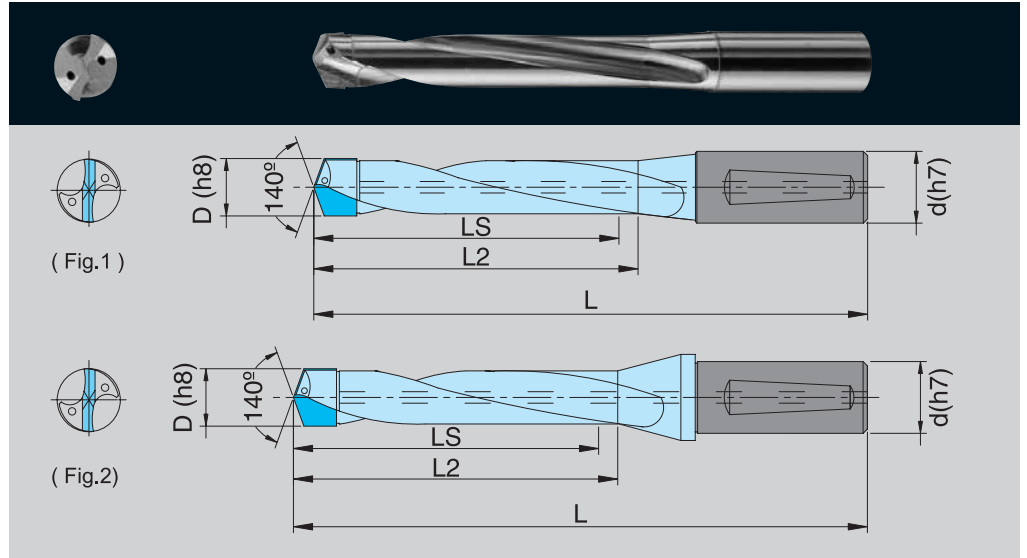
- 焊接式
- 附內冷卻孔
- Welded End
- With Coolant Through Hole

適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel,
stainless steel, copper,
aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-7130	13.0	100	161	16	96	Fig.1
TXD-7131	13.1					
TXD-7132	13.2					
TXD-7135	13.5					
TXD-7137	13.7	113	176	16	108	Fig.1
TXD-7138	13.8					
TXD-7140	14.0					
TXD-7142	14.2					
TXD-7145	14.5	123	189	20	117	Fig.1
TXD-7147	14.7					
TXD-7150	15.0					
TXD-7152	15.2					
TXD-7155	15.5	135	203	20	128	Fig.1
TXD-7157	15.7					
TXD-7159	15.9					
TXD-7160	16.0					
TXD-7162	16.2	146	216	20	138	Fig.1
TXD-7163	16.3					
TXD-7165	16.5					
TXD-7167	16.7					
TXD-7168	16.8	225	315	32	215	Fig.1
TXD-7170	17.0					
TXD-7172	17.2					
TXD-7174	17.4					
TXD-7175	17.5	225	322	32	215	Fig.2
TXD-7176	17.6					
TXD-7177	17.7					
TXD-7180	18.0					
TXD-7182	18.2	32.0				
TXD-7185	18.5					
TXD-7187	18.7					
TXD-7190	19.0					

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	圖式
TXD-7192	19.2	158	235	25	140	Fig.1
TXD-7195	19.5					
TXD-7197	19.7					
TXD-7200	20.0					
TXD-7202	20.2	173	252	25	165	Fig.1
TXD-7205	20.5					
TXD-7206	20.6					
TXD-7210	21.0					
TXD-7215	21.5	185	270	25	175	Fig.1
TXD-7220	22.0					
TXD-7222	22.2					
TXD-7224	22.4					
TXD-7225	22.5	188	273	32	180	Fig.1
TXD-7230	23.0					
TXD-7235	23.5					
TXD-7240	24.0					
TXD-7245	24.5	206	293	32	196	Fig.1
TXD-7250	25.0					
TXD-7255	25.5					
TXD-7260	26.0					
TXD-7265	26.5	225	315	32	215	Fig.1
TXD-7270	27.0					
TXD-7275	27.5					
TXD-7280	28.0					
TXD-7285	28.5	225	322	32	215	Fig.2
TXD-7290	29.0					
TXD-7295	29.5					
TXD-7300	30.0					
TXD-7305	30.5	32.0				
TXD-7310	31.0					
TXD-7315	31.5					
TXD-7320	32.0					

鎢鋼蝴蝶鑽

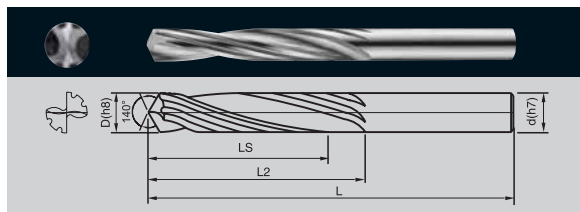
TUNGSTEN CARBIDE R DRILL



- 螺旋槽
- Spiral Flute

適合材質：
一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:
General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-3030	3.0	20	62	6	14
RSD-3031	3.1				
RSD-3032	3.2				
RSD-3033	3.3				
RSD-3034	3.4				
RSD-3035	3.5				
RSD-3036	3.6				
RSD-3037	3.7				
RSD-3038	3.8	24	66	6	17
RSD-3039	3.9				
RSD-3040	4.0				
RSD-3041	4.1				
RSD-3042	4.2				
RSD-3043	4.3				
RSD-3044	4.4				
RSD-3045	4.5				
RSD-3046	4.6				
RSD-3047	4.7				
RSD-3048	4.8	28	66	6	20
RSD-3049	4.9				
RSD-3050	5.0				
RSD-3051	5.1				
RSD-3052	5.2				
RSD-3053	5.3				
RSD-3054	5.4				
RSD-3055	5.5				
RSD-3056	5.6				
RSD-3057	5.7				
RSD-3058	5.8	34	79	8	24
RSD-3059	5.9				
RSD-3060	6.0				
RSD-3061	6.1				
RSD-3062	6.2				
RSD-3063	6.3				
RSD-3064	6.4				
RSD-3065	6.5				
RSD-3066	6.6				
RSD-3067	6.7				
RSD-3068	6.8				
RSD-3069	6.9				
RSD-3070	7.0	41	79	8	29
RSD-3071	7.1				
RSD-3072	7.2				
RSD-3073	7.3				
RSD-3074	7.4				
RSD-3075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-3076	7.6	41	79	8	29
RSD-3077	7.7				
RSD-3078	7.8				
RSD-3079	7.9				
RSD-3080	8.0				
RSD-3081	8.1				
RSD-3082	8.2				
RSD-3083	8.3				
RSD-3084	8.4	47	89	10	35
RSD-3085	8.5				
RSD-3086	8.6				
RSD-3087	8.7				
RSD-3088	8.8				
RSD-3089	8.9				
RSD-3090	9.0				
RSD-3091	9.1				
RSD-3092	9.2				
RSD-3093	9.3				
RSD-3094	9.4	47	89	10	35
RSD-3095	9.5				
RSD-3096	9.6				
RSD-3097	9.7				
RSD-3098	9.8				
RSD-3099	9.9				
RSD-3100	10.0				
RSD-3101	10.1				
RSD-3102	10.2				
RSD-3103	10.3				
RSD-3104	10.4	55	102	12	40
RSD-3105	10.5				
RSD-3106	10.6				
RSD-3107	10.7				
RSD-3108	10.8				
RSD-3109	10.9				
RSD-3110	11.0				
RSD-3111	11.1				
RSD-3112	11.2				
RSD-3113	11.3				
RSD-3114	11.4				
RSD-3115	11.5				
RSD-3116	11.6				
RSD-3117	11.7	55	102	12	40
RSD-3118	11.8				
RSD-3119	11.9				
RSD-3120	12.0				
RSD-3121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-3122	12.2	60	107	14	43
RSD-3123	12.3				
RSD-3124	12.4				
RSD-3125	12.5				
RSD-3126	12.6				
RSD-3127	12.7				
RSD-3128	12.8				
RSD-3129	12.9				
RSD-3130	13.0				
RSD-3131	13.1				
RSD-3132	13.2				
RSD-3133	13.3				
RSD-3134	13.4				
RSD-3135	13.5				
RSD-3136	13.6				
RSD-3137	13.7				
RSD-3138	13.8				
RSD-3139	13.9				
RSD-3140	14.0	65	115	16	45
RSD-3141	14.1				
RSD-3142	14.2				
RSD-3143	14.3				
RSD-3144	14.4				
RSD-3145	14.5				
RSD-3146	14.6				
RSD-3147	14.7				
RSD-3148	14.8				
RSD-3149	14.9				
RSD-3150	15.0	65	115	16	45
RSD-3152	15.2				
RSD-3153	15.3				
RSD-3154	15.4				
RSD-3155	15.5				
RSD-3156	15.6				
RSD-3157	15.7				
RSD-3158	15.8				
RSD-3159	15.9				
RSD-3160	16.0				
RSD-3165	16.5	73	123	18	51
RSD-3170	17.0				
RSD-3175	17.5				
RSD-3180	18.0				
RSD-3185	18.5	79	131	20	55
RSD-3190	19.0				
RSD-3195	19.5				
RSD-3200	20.0				

鎢鋼蝴蝶鑽

TUNGSTEN CARBIDE R DRILL



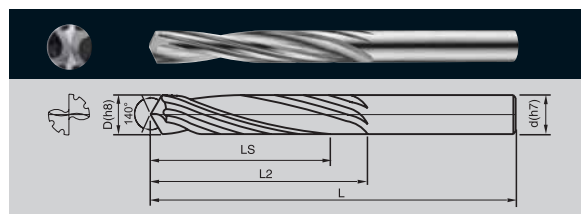
- 螺旋槽
- Spiral Flute

適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-5030	3.0	28	66	6	23
RSD-5031	3.1				
RSD-5032	3.2				
RSD-5033	3.3				
RSD-5034	3.4				
RSD-5035	3.5				
RSD-5036	3.6				
RSD-5037	3.7				
RSD-5038	3.8	36	74	6	29
RSD-5039	3.9				
RSD-5040	4.0				
RSD-5041	4.1				
RSD-5042	4.2				
RSD-5043	4.3				
RSD-5044	4.4				
RSD-5045	4.5				
RSD-5046	4.6				
RSD-5047	4.7				
RSD-5048	4.8	44	82	6	35
RSD-5049	4.9				
RSD-5050	5.0				
RSD-5051	5.1				
RSD-5052	5.2				
RSD-5053	5.3				
RSD-5054	5.4				
RSD-5055	5.5				
RSD-5056	5.6				
RSD-5057	5.7				
RSD-5058	5.8				
RSD-5059	5.9				
RSD-5060	6.0				
RSD-5061	6.1	53	91	8	43
RSD-5062	6.2				
RSD-5063	6.3				
RSD-5064	6.4				
RSD-5065	6.5				
RSD-5066	6.6				
RSD-5067	6.7				
RSD-5068	6.8				
RSD-5069	6.9				
RSD-5070	7.0				
RSD-5071	7.1	53	91	8	43
RSD-5072	7.2				
RSD-5073	7.3				
RSD-5074	7.4				
RSD-5075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-5076	7.6	53	91	8	43
RSD-5077	7.7				
RSD-5078	7.8				
RSD-5079	7.9				
RSD-5080	8.0				
RSD-5081	8.1				
RSD-5082	8.2				
RSD-5083	8.3				
RSD-5084	8.4	61	103	10	49
RSD-5085	8.5				
RSD-5086	8.6				
RSD-5087	8.7				
RSD-5088	8.8				
RSD-5089	8.9				
RSD-5090	9.0				
RSD-5091	9.1				
RSD-5092	9.2				
RSD-5093	9.3				
RSD-5094	9.4	61	103	10	49
RSD-5095	9.5				
RSD-5096	9.6				
RSD-5097	9.7				
RSD-5098	9.8				
RSD-5099	9.9				
RSD-5100	10.0				
RSD-5101	10.1				
RSD-5102	10.2				
RSD-5103	10.3				
RSD-5104	10.4	71	118	12	56
RSD-5105	10.5				
RSD-5106	10.6				
RSD-5107	10.7				
RSD-5108	10.8				
RSD-5109	10.9				
RSD-5110	11.0				
RSD-5111	11.1	71	118	12	56
RSD-5112	11.2				
RSD-5113	11.3				
RSD-5114	11.4				
RSD-5115	11.5				
RSD-5116	11.6				
RSD-5117	11.7				
RSD-5118	11.8				
RSD-5119	11.9				
RSD-5120	12.0				
RSD-5121	12.1	77	124	14	60

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-5122	12.2	77	124	14	60
RSD-5123	12.3				
RSD-5124	12.4				
RSD-5125	12.5				
RSD-5126	12.6				
RSD-5127	12.7				
RSD-5128	12.8				
RSD-5129	12.9				
RSD-5130	13.0				
RSD-5131	13.1				
RSD-5132	13.2				
RSD-5133	13.3				
RSD-5134	13.4				
RSD-5135	13.5				
RSD-5136	13.6				
RSD-5137	13.7				
RSD-5138	13.8				
RSD-5139	13.9				
RSD-5140	14.0	83	133	16	63
RSD-5141	14.1				
RSD-5142	14.2				
RSD-5143	14.3				
RSD-5144	14.4				
RSD-5145	14.5				
RSD-5146	14.6				
RSD-5147	14.7				
RSD-5148	14.8				
RSD-5149	14.9				
RSD-5150	15.0	83	133	16	63
RSD-5152	15.2				
RSD-5153	15.3				
RSD-5154	15.4				
RSD-5155	15.5				
RSD-5156	15.6				
RSD-5157	15.7				
RSD-5158	15.8				
RSD-5159	15.9				
RSD-5160	16.0				
RSD-5165	16.5	93	143	18	71
RSD-5170	17.0				
RSD-5175	17.5				
RSD-5180	18.0				
RSD-5185	18.5	101	153	20	77
RSD-5190	19.0				
RSD-5195	19.5				
RSD-5200	20.0				

鎢鋼蝴蝶鑽

TUNGSTEN CARBIDE R DRILL



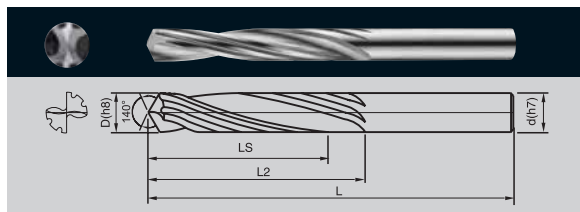
- 螺旋槽
- Spiral Flute

適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-8030	3.0	34	72	6	29
RSD-8031	3.1				
RSD-8032	3.2				
RSD-8033	3.3				
RSD-8034	3.4				
RSD-8035	3.5				
RSD-8036	3.6				
RSD-8037	3.7				
RSD-8038	3.8	43	81	6	36
RSD-8039	3.9				
RSD-8040	4.0				
RSD-8041	4.1				
RSD-8042	4.2				
RSD-8043	4.3				
RSD-8044	4.4				
RSD-8045	4.5				
RSD-8046	4.6				
RSD-8047	4.7				
RSD-8048	4.8	57	95	6	48
RSD-8049	4.9				
RSD-8050	5.0				
RSD-8051	5.1				
RSD-8052	5.2				
RSD-8053	5.3				
RSD-8054	5.4				
RSD-8055	5.5				
RSD-8056	5.6				
RSD-8057	5.7				
RSD-8058	5.8				
RSD-8059	5.9				
RSD-8060	6.0				
RSD-8061	6.1	76	114	8	64
RSD-8062	6.2				
RSD-8063	6.3				
RSD-8064	6.4				
RSD-8065	6.5				
RSD-8066	6.6				
RSD-8067	6.7				
RSD-8068	6.8				
RSD-8069	6.9				
RSD-8070	7.0				
RSD-8071	7.1	76	114	8	64
RSD-8072	7.2				
RSD-8073	7.3				
RSD-8074	7.4				
RSD-8075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
RSD-8076	7.6	76	114	8	64
RSD-8077	7.7				
RSD-8078	7.8				
RSD-8079	7.9				
RSD-8080	8.0				
RSD-8081	8.1				
RSD-8082	8.2				
RSD-8083	8.3				
RSD-8084	8.4	95	142	10	80
RSD-8085	8.5				
RSD-8086	8.6				
RSD-8087	8.7				
RSD-8088	8.8				
RSD-8089	8.9				
RSD-8090	9.0				
RSD-8091	9.1				
RSD-8092	9.2				
RSD-8093	9.3				
RSD-8094	9.4	95	142	10	80
RSD-8095	9.5				
RSD-8096	9.6				
RSD-8097	9.7				
RSD-8098	9.8				
RSD-8099	9.9				
RSD-8100	10.0				
RSD-8101	10.1				
RSD-8102	10.2				
RSD-8103	10.3				
RSD-8104	10.4				
RSD-8105	10.5				
RSD-8106	10.6				
RSD-8107	10.7	114	162	12	96
RSD-8108	10.8				
RSD-8109	10.9				
RSD-8110	11.0				
RSD-8111	11.1				
RSD-8112	11.2				
RSD-8113	11.3				
RSD-8114	11.4				
RSD-8115	11.5				
RSD-8116	11.6				
RSD-8117	11.7	114	162	12	96
RSD-8118	11.8				
RSD-8119	11.9				
RSD-8120	12.0				
RSD-8121	12.1				

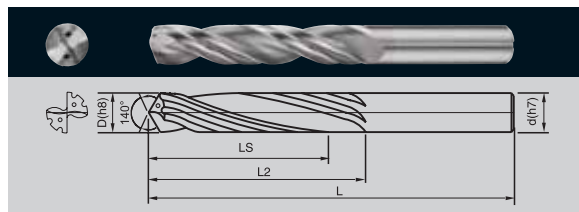
EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut				
RSD-8122	12.2	133	178	112	60				
RSD-8123	12.3								
RSD-8124	12.4								
RSD-8125	12.5								
RSD-8126	12.6								
RSD-8127	12.7								
RSD-8128	12.8								
RSD-8129	12.9								
RSD-8130	13.0								
RSD-8131	13.1					133	178	112	60
RSD-8132	13.2								
RSD-8133	13.3								
RSD-8134	13.4								
RSD-8135	13.5								
RSD-8136	13.6								
RSD-8137	13.7								
RSD-8138	13.8								
RSD-8139	13.9								
RSD-8140	14.0								
RSD-8141	14.1	152	203	16	128				
RSD-8142	14.2								
RSD-8143	14.3								
RSD-8144	14.4								
RSD-8145	14.5								
RSD-8146	14.6								
RSD-8147	14.7								
RSD-8148	14.8								
RSD-8149	14.9								
RSD-8150	15.0								
RSD-8152	15.2	152	203	16	128				
RSD-8153	15.3								
RSD-8154	15.4								
RSD-8155	15.5								
RSD-8156	15.6								
RSD-8157	15.7								
RSD-8158	15.8								
RSD-8159	15.9								
RSD-8160	16.0								
RSD-8165	16.5					171	222	18	144
RSD-8170	17.0								
RSD-8175	17.5								
RSD-8180	18.0								
RSD-8185	18.5	190	243	20	160				
RSD-8190	19.0								
RSD-8195	19.5								
RSD-8200	20.0								

鎢鋼蝴蝶鑽

TUNGSTEN CARBIDE R DRILL



- 螺旋槽
- 附內冷卻孔
- Spiral Flute
- With Coolant Through Hole



適合材質：

一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:

General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut	EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-3030	3.0	20	62	6	14	ROD-3076	7.6	41	79	8	29	ROD-3122	12.2	60	107	14	43
ROD-3031	3.1					ROD-3077	7.7					ROD-3123	12.3				
ROD-3032	3.2					ROD-3078	7.8					ROD-3124	12.4				
ROD-3033	3.3					ROD-3079	7.9					ROD-3125	12.5				
ROD-3034	3.4					ROD-3080	8.0					ROD-3126	12.6				
ROD-3035	3.5					ROD-3081	8.1					ROD-3127	12.7				
ROD-3036	3.6					ROD-3082	8.2					ROD-3128	12.8				
ROD-3037	3.7	24	66	6	17	ROD-3083	8.3	47	89	10	35	ROD-3129	12.9	60	107	14	43
ROD-3038	3.8					ROD-3084	8.4					ROD-3130	13.0				
ROD-3039	3.9					ROD-3085	8.5					ROD-3131	13.1				
ROD-3040	4.0					ROD-3086	8.6					ROD-3132	13.2				
ROD-3041	4.1					ROD-3087	8.7					ROD-3133	13.3				
ROD-3042	4.2					ROD-3088	8.8					ROD-3134	13.4				
ROD-3043	4.3					ROD-3089	8.9					ROD-3135	13.5				
ROD-3044	4.4	28	66	6	20	ROD-3090	9.0	47	89	10	35	ROD-3136	13.6	60	107	14	43
ROD-3045	4.5					ROD-3091	9.1					ROD-3137	13.7				
ROD-3046	4.6					ROD-3092	9.2					ROD-3138	13.8				
ROD-3047	4.7					ROD-3093	9.3					ROD-3139	13.9				
ROD-3048	4.8					ROD-3094	9.4					ROD-3140	14.0				
ROD-3049	4.9					ROD-3095	9.5					ROD-3141	14.1				
ROD-3050	5.0					ROD-3096	9.6					ROD-3142	14.2				
ROD-3051	5.1	34	79	8	24	ROD-3097	9.7	55	102	12	40	ROD-3143	14.3	65	115	16	45
ROD-3052	5.2					ROD-3098	9.8					ROD-3144	14.4				
ROD-3053	5.3					ROD-3099	9.9					ROD-3145	14.5				
ROD-3054	5.4					ROD-3100	10.0					ROD-3146	14.6				
ROD-3055	5.5					ROD-3101	10.1					ROD-3147	14.7				
ROD-3056	5.6					ROD-3102	10.2					ROD-3148	14.8				
ROD-3057	5.7					ROD-3103	10.3					ROD-3149	14.9				
ROD-3058	5.8	34	79	8	24	ROD-3104	10.4	55	102	12	40	ROD-3150	15.0	65	115	16	45
ROD-3059	5.9					ROD-3105	10.5					ROD-3151	15.1				
ROD-3060	6.0					ROD-3106	10.6					ROD-3152	15.2				
ROD-3061	6.1					ROD-3107	10.7					ROD-3153	15.3				
ROD-3062	6.2					ROD-3108	10.8					ROD-3154	15.4				
ROD-3063	6.3					ROD-3109	10.9					ROD-3155	15.5				
ROD-3064	6.4					ROD-3110	11.0					ROD-3156	15.6				
ROD-3065	6.5	41	79	8	29	ROD-3111	11.1	55	102	12	40	ROD-3157	15.7	73	123	18	51
ROD-3066	6.6					ROD-3112	11.2					ROD-3158	15.8				
ROD-3067	6.7					ROD-3113	11.3					ROD-3159	15.9				
ROD-3068	6.8					ROD-3114	11.4					ROD-3160	16.0				
ROD-3069	6.9					ROD-3115	11.5					ROD-3165	16.5				
ROD-3070	7.0					ROD-3116	11.6					ROD-3170	17.0				
ROD-3071	7.1					ROD-3117	11.7					ROD-3175	17.5				
ROD-3072	7.2	ROD-3118	11.8	ROD-3180	18.0												
ROD-3073	7.3	ROD-3119	11.9	ROD-3185	18.5												
ROD-3074	7.4	ROD-3120	12.0	ROD-3190	19.0												
ROD-3075	7.5	ROD-3121	12.1	ROD-3195	19.5												
						ROD-3200	20.0	ROD-3195	19.5	ROD-3200	20.0						

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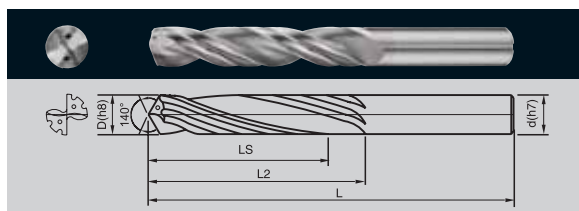
TUNGSTEN CARBIDE R DRILL



- 螺旋槽
- 附內冷卻孔
- Spiral Flute
- With Coolant Through Hole

適合材質：
一般鋼料、合金鋼、模具鋼、
不鏽鋼、銅、鋁、鑄鐵。

Applicable materials:
General steel, alloy steel, mold steel,
stainless steel, copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-5030	3.0	28	66	6	23
ROD-5031	3.1				
ROD-5032	3.2				
ROD-5033	3.3				
ROD-5034	3.4				
ROD-5035	3.5				
ROD-5036	3.6				
ROD-5037	3.7				
ROD-5038	3.8	36	74	6	29
ROD-5039	3.9				
ROD-5040	4.0				
ROD-5041	4.1				
ROD-5042	4.2				
ROD-5043	4.3				
ROD-5044	4.4				
ROD-5045	4.5				
ROD-5046	4.6				
ROD-5047	4.7				
ROD-5048	4.8	44	82	6	35
ROD-5049	4.9				
ROD-5050	5.0				
ROD-5051	5.1				
ROD-5052	5.2				
ROD-5053	5.3				
ROD-5054	5.4				
ROD-5055	5.5				
ROD-5056	5.6				
ROD-5057	5.7				
ROD-5058	5.8				
ROD-5059	5.9				
ROD-5060	6.0	53	91	8	43
ROD-5061	6.1				
ROD-5062	6.2				
ROD-5063	6.3				
ROD-5064	6.4				
ROD-5065	6.5				
ROD-5066	6.6				
ROD-5067	6.7				
ROD-5068	6.8				
ROD-5069	6.9				
ROD-5070	7.0	53	91	8	43
ROD-5071	7.1				
ROD-5072	7.2				
ROD-5073	7.3				
ROD-5074	7.4				
ROD-5075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-5076	7.6	53	91	8	43
ROD-5077	7.7				
ROD-5078	7.8				
ROD-5079	7.9				
ROD-5080	8.0				
ROD-5081	8.1				
ROD-5082	8.2	61	103	10	49
ROD-5083	8.3				
ROD-5084	8.4				
ROD-5085	8.5				
ROD-5086	8.6				
ROD-5087	8.7				
ROD-5088	8.8				
ROD-5089	8.9				
ROD-5090	9.0				
ROD-5091	9.1				
ROD-5092	9.2	61	103	10	49
ROD-5093	9.3				
ROD-5094	9.4				
ROD-5095	9.5				
ROD-5096	9.6				
ROD-5097	9.7				
ROD-5098	9.8				
ROD-5099	9.9				
ROD-5100	10.0				
ROD-5101	10.1				
ROD-5102	10.2	71	118	12	56
ROD-5103	10.3				
ROD-5104	10.4				
ROD-5105	10.5				
ROD-5106	10.6				
ROD-5107	10.7				
ROD-5108	10.8				
ROD-5109	10.9				
ROD-5110	11.0				
ROD-5111	11.1				
ROD-5112	11.2	71	118	12	56
ROD-5113	11.3				
ROD-5114	11.4				
ROD-5115	11.5				
ROD-5116	11.6				
ROD-5117	11.7				
ROD-5118	11.8				
ROD-5119	11.9				
ROD-5120	12.0				
ROD-5121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-5122	12.2	77	124	14	60
ROD-5123	12.3				
ROD-5124	12.4				
ROD-5125	12.5				
ROD-5126	12.6				
ROD-5127	12.7				
ROD-5128	12.8				
ROD-5129	12.9				
ROD-5130	13.0				
ROD-5131	13.1				
ROD-5132	13.2	77	124	14	60
ROD-5133	13.3				
ROD-5134	13.4				
ROD-5135	13.5				
ROD-5136	13.6				
ROD-5137	13.7				
ROD-5138	13.8				
ROD-5139	13.9				
ROD-5140	14.0				
ROD-5141	14.1				
ROD-5142	14.2	83	133	16	63
ROD-5143	14.3				
ROD-5144	14.4				
ROD-5145	14.5				
ROD-5146	14.6				
ROD-5147	14.7				
ROD-5148	14.8				
ROD-5149	14.9				
ROD-5150	15.0				
ROD-5152	15.2				
ROD-5153	15.3	83	133	16	63
ROD-5154	15.4				
ROD-5155	15.5				
ROD-5156	15.6				
ROD-5157	15.7				
ROD-5158	15.8				
ROD-5159	15.9				
ROD-5160	16.0				
ROD-5165	16.5				
ROD-5170	17.0				
ROD-5175	17.5				
ROD-5180	18.0	93	143	18	71
ROD-5185	18.5				
ROD-5190	19.0				
ROD-5195	19.5				
ROD-5200	20.0	101	153	20	77
ROD-5195	19.5				

鎢鋼蝴蝶鑽

TUNGSTEN CARBIDE R DRILL



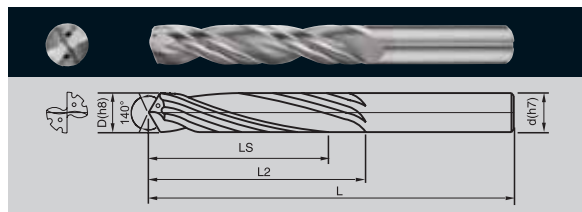
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- 附內冷卻孔
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適合材質：

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EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-8030	3.0	34	72	6	29
ROD-8031	3.1				
ROD-8032	3.2				
ROD-8033	3.3				
ROD-8034	3.4				
ROD-8035	3.5				
ROD-8036	3.6				
ROD-8037	3.7	43	81	6	36
ROD-8038	3.8				
ROD-8039	3.9				
ROD-8040	4.0				
ROD-8041	4.1				
ROD-8042	4.2				
ROD-8043	4.3				
ROD-8044	4.4				
ROD-8045	4.5				
ROD-8046	4.6				
ROD-8047	4.7	57	95	6	48
ROD-8048	4.8				
ROD-8049	4.9				
ROD-8050	5.0				
ROD-8051	5.1				
ROD-8052	5.2				
ROD-8053	5.3				
ROD-8054	5.4				
ROD-8055	5.5				
ROD-8056	5.6				
ROD-8057	5.7				
ROD-8058	5.8				
ROD-8059	5.9				
ROD-8060	6.0	76	114	8	64
ROD-8061	6.1				
ROD-8062	6.2				
ROD-8063	6.3				
ROD-8064	6.4				
ROD-8065	6.5				
ROD-8066	6.6				
ROD-8067	6.7				
ROD-8068	6.8				
ROD-8069	6.9				
ROD-8070	7.0	76	114	8	64
ROD-8071	7.1				
ROD-8072	7.2				
ROD-8073	7.3				
ROD-8074	7.4				
ROD-8075	7.5				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
ROD-8076	7.6	76	114	8	64
ROD-8077	7.7				
ROD-8078	7.8				
ROD-8079	7.9				
ROD-8080	8.0				
ROD-8081	8.1				
ROD-8082	8.2				
ROD-8083	8.3	95	142	10	80
ROD-8084	8.4				
ROD-8085	8.5				
ROD-8086	8.6				
ROD-8087	8.7				
ROD-8088	8.8				
ROD-8089	8.9				
ROD-8090	9.0	95	142	10	80
ROD-8091	9.1				
ROD-8092	9.2				
ROD-8093	9.3				
ROD-8094	9.4				
ROD-8095	9.5				
ROD-8096	9.6				
ROD-8097	9.7				
ROD-8098	9.8				
ROD-8099	9.9				
ROD-8100	10.0				
ROD-8101	10.1				
ROD-8102	10.2				
ROD-8103	10.3				
ROD-8104	10.4				
ROD-8105	10.5				
ROD-8106	10.6				
ROD-8107	10.7				
ROD-8108	10.8				
ROD-8109	10.9				
ROD-8110	11.0	114	162	12	96
ROD-8111	11.1				
ROD-8112	11.2				
ROD-8113	11.3				
ROD-8114	11.4				
ROD-8115	11.5				
ROD-8116	11.6				
ROD-8117	11.7				
ROD-8118	11.8				
ROD-8119	11.9				
ROD-8120	12.0				
ROD-8121	12.1				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut				
ROD-8122	12.2	133	178	112	60				
ROD-8123	12.3								
ROD-8124	12.4								
ROD-8125	12.5								
ROD-8126	12.6								
ROD-8127	12.7								
ROD-8128	12.8								
ROD-8129	12.9								
ROD-8130	13.0								
ROD-8131	13.1					133	178	112	60
ROD-8132	13.2								
ROD-8133	13.3								
ROD-8134	13.4								
ROD-8135	13.5								
ROD-8136	13.6								
ROD-8137	13.7								
ROD-8138	13.8								
ROD-8139	13.9								
ROD-8140	14.0	152	203	16	128				
ROD-8141	14.1								
ROD-8142	14.2								
ROD-8143	14.3								
ROD-8144	14.4								
ROD-8145	14.5								
ROD-8146	14.6								
ROD-8147	14.7	152	203	16	128				
ROD-8148	14.8								
ROD-8149	14.9								
ROD-8150	15.0								
ROD-8152	15.2								
ROD-8153	15.3								
ROD-8154	15.4								
ROD-8155	15.5								
ROD-8156	15.6								
ROD-8157	15.7					171	222	18	144
ROD-8158	15.8								
ROD-8159	15.9								
ROD-8160	16.0								
ROD-8165	16.5	190	243	20	160				
ROD-8170	17.0								
ROD-8175	17.5								
ROD-8180	18.0								
ROD-8185	18.5								
ROD-8190	19.0								
ROD-8195	19.5								
ROD-8200	20.0								

鎢鋼四刃點鑽頭

SOLID CARBIDE FOUR POINT CONTACT



- 螺旋槽
- Spiral Flute

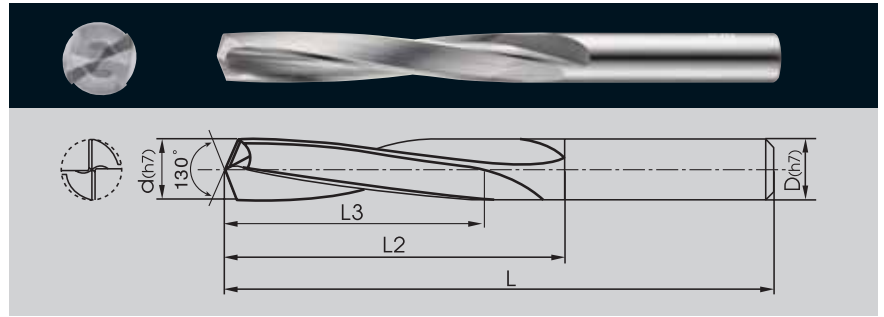
略帶鑽絞功能之鎢鋼鑽頭(非鉸刀)。
A tungsten carbide drill also featuring
slight reaming function (not reamer)

適用材質：

銅、鋁、鑄鐵等之非鐵金屬。

Applicable materials:

Copper, aluminum, cast iron.



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
GSD-7040	4.0	30	72	4	24
GSD-7041	4.1	30	72	4	24
GSD-7042	4.2				
GSD-7043	4.3				
GSD-7044	4.4				
GSD-7045	4.5	35	78	5	27
GSD-7046	4.6				
GSD-7047	4.7				
GSD-7048	4.8				
GSD-7049	4.9	38	78	5	30
GSD-7050	5.0				
GSD-7051	5.1	42	82	6	33
GSD-7052	5.2				
GSD-7053	5.3				
GSD-7054	5.4				
GSD-7055	5.5				
GSD-7056	5.6				
GSD-7057	5.7				
GSD-7058	5.8				
GSD-7059	5.9				
GSD-7060	6.0	45	90	7	40
GSD-7061	6.1				
GSD-7062	6.2				
GSD-7063	6.3				
GSD-7064	6.4				
GSD-7065	6.5				
GSD-7066	6.6				
GSD-7067	6.7				
GSD-7068	6.8				
GSD-7069	6.9				
GSD-7070	7.0	50	95	8	43
GSD-7071	7.1				
GSD-7072	7.2				
GSD-7073	7.3				
GSD-7074	7.4				
GSD-7075	7.5				
GSD-7076	7.6				
GSD-7077	7.7				
GSD-7078	7.8				
GSD-7079	7.9				
GSD-7080	8.0				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
GSD-7081	8.1	60	105	9	50
GSD-7082	8.2				
GSD-7083	8.3				
GSD-7084	8.4				
GSD-7085	8.5	63	105	9	52
GSD-7086	8.6				
GSD-7087	8.7				
GSD-7088	8.8				
GSD-7089	8.9	67	110	10	55
GSD-7090	9.0				
GSD-7091	9.1				
GSD-7092	9.2				
GSD-7093	9.3				
GSD-7094	9.4				
GSD-7095	9.5	72	115	11	58
GSD-7096	9.6				
GSD-7097	9.7				
GSD-7098	9.8				
GSD-7099	9.9	75	120	12	60
GSD-7100	10.0				
GSD-7101	10.1				
GSD-7102	10.2				
GSD-7103	10.3				
GSD-7104	10.4				
GSD-7105	10.5	80	125	12	63
GSD-7106	10.6				
GSD-7107	10.7				
GSD-7108	10.8				
GSD-7109	10.9	85	130	12	68
GSD-7110	11.0				
GSD-7111	11.1				
GSD-7112	11.2				
GSD-7113	11.3				
GSD-7114	11.4				
GSD-7115	11.5	90	135	12	72
GSD-7116	11.6				
GSD-7117	11.7				
GSD-7118	11.8				
GSD-7119	11.9	90	135	12	72
GSD-7120	12.0				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
GSD-7121	12.1	90	135	13	72
GSD-7122	12.2				
GSD-7123	12.3				
GSD-7124	12.4				
GSD-7125	12.5	95	140	13	75
GSD-7126	12.6				
GSD-7127	12.7				
GSD-7128	12.8				
GSD-7129	12.9	100	150	14	80
GSD-7130	13.0				
GSD-7131	13.1				
GSD-7132	13.2				
GSD-7133	13.3				
GSD-7134	13.4				
GSD-7135	13.5	100	150	14	80
GSD-7136	13.6				
GSD-7137	13.7				
GSD-7138	13.8				
GSD-7139	13.9	110	160	15	87
GSD-7140	14.0				
GSD-7141	14.1				
GSD-7142	14.2				
GSD-7143	14.3				
GSD-7144	14.4				
GSD-7145	14.5	110	160	15	87
GSD-7146	14.6				
GSD-7147	14.7				
GSD-7148	14.8				
GSD-7149	14.9	115	165	16	91
GSD-7150	15.0				
GSD-7155	15.5				
GSD-7160	16.0				
GSD-7165	16.5	125	180	17	100
GSD-7170	17.0				
GSD-7175	17.5				
GSD-7180	18.0				
GSD-7185	18.5	130	185	18	103
GSD-7190	19.0				
GSD-7195	19.5				
GSD-7200	20.0				

鎢鋼四刃點鑽頭

SOLOD CARBIDE FOUR POINT CONTACT DRILL



略帶鑽絞功能之鎢鋼鑽頭(非絞刀)。
A tungsten carbide drill also featuring
slight reaming function (not reamer)

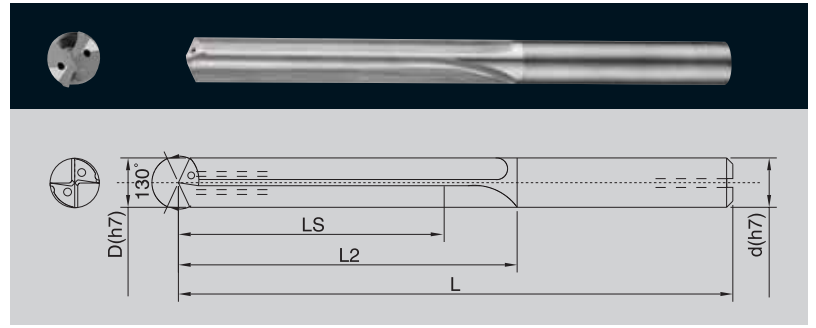
適用材質：

銅、鋁、鑄鐵等之非鐵金屬。

Applicable materials:

Copper, aluminum, cast iron.

- 直槽
- 附內冷卻孔
- Straight Flute
- With Coolant Through Hole



EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
GOD-7040	4.0	30	72	4	24
GOD-7041	4.1	30	72	5	24
GOD-7042	4.2				
GOD-7043	4.3				
GOD-7044	4.4				
GOD-7045	4.5				
GOD-7046	4.6	35	78	30	
GOD-7047	4.7				
GOD-7048	4.8				
GOD-7049	4.9	38	78	6	35
GOD-7050	5.0				
GOD-7051	5.1				
GOD-7052	5.2				
GOD-7053	5.3	42	82		
GOD-7054	5.4				
GOD-7055	5.5				
GOD-7056	5.6				
GOD-7057	5.7				
GOD-7058	5.8	45	90		
GOD-7059	5.9				
GOD-7060	6.0				
GOD-7061	6.1				
GOD-7062	6.2				
GOD-7063	6.3	45	90		
GOD-7064	6.4				
GOD-7065	6.5				
GOD-7066	6.6				
GOD-7067	6.7				
GOD-7068	6.8	50	95	8	50
GOD-7069	6.9				
GOD-7070	7.0				
GOD-7071	7.1				
GOD-7072	7.2				
GOD-7073	7.3	55	100		
GOD-7074	7.4				
GOD-7075	7.5				
GOD-7076	7.6				
GOD-7077	7.7				
GOD-7078	7.8	60	105		
GOD-7079	7.9				
GOD-7080	8.0				

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut		
GOD-7081	8.1	60	105	9	50		
GOD-7082	8.2						
GOD-7083	8.3						
GOD-7084	8.4						
GOD-7085	8.5						
GOD-7086	8.6	63	105	52			
GOD-7087	8.7						
GOD-7088	8.8						
GOD-7089	8.9						
GOD-7090	9.0	67	110	55			
GOD-7091	9.1						
GOD-7092	9.2						
GOD-7093	9.3						
GOD-7094	9.4						
GOD-7095	9.5						
GOD-7096	9.6						
GOD-7097	9.7				72	115	58
GOD-7098	9.8						
GOD-7099	9.9						
GOD-7100	10.0	75	120	60			
GOD-7101	10.1						
GOD-7102	10.2						
GOD-7103	10.3						
GOD-7104	10.4						
GOD-7105	10.5						
GOD-7106	10.6						
GOD-7107	10.7				80	125	63
GOD-7108	10.8						
GOD-7109	10.9						
GOD-7110	11.0						
GOD-7111	11.1	85	130	68			
GOD-7112	11.2						
GOD-7113	11.3						
GOD-7114	11.4						
GOD-7115	11.5						
GOD-7116	11.6						
GOD-7117	11.7				90	135	72
GOD-7118	11.8						
GOD-7119	11.9						
GOD-7120	12.0						

EDP NO.	D Diameter	L2 Flute Length	L Overall Length	d Shank Diameter	LS Length of Cut
GOD-7121	12.1	90	135	13	72
GOD-7122	12.2				
GOD-7123	12.3				
GOD-7124	12.4				
GOD-7125	12.5				
GOD-7126	12.6	95	140	75	
GOD-7127	12.7				
GOD-7128	12.8				
GOD-7129	12.9				
GOD-7130	13.0	100	150	14	80
GOD-7131	13.1				
GOD-7132	13.2				
GOD-7133	13.3				
GOD-7134	13.4				
GOD-7135	13.5				
GOD-7136	13.6				
GOD-7137	13.7				
GOD-7138	13.8				
GOD-7139	13.9				
GOD-7140	14.0	110	160	15	87
GOD-7141	14.1				
GOD-7142	14.2				
GOD-7143	14.3				
GOD-7144	14.4				
GOD-7145	14.5				
GOD-7146	14.6				
GOD-7147	14.7				
GOD-7148	14.8				
GOD-7149	14.9				
GOD-7150	15.0	115	165	16	91
GOD-7155	15.5				
GOD-7160	16.0				
GOD-7165	16.5				
GOD-7170	17.0				
GOD-7175	17.5	130	185	18	103
GOD-7180	18.0				
GOD-7185	18.5				
GOD-7190	19.0				
GOD-7195	19.5	150	210	20	120
GOD-7200	20.0				

全鎢鋼單頭NC定位鑽頭

SOLID CARBIDE NC POSITIONING DRILL



鎢鋼材質 高硬度、耐摩耗，鑽頂角90°、120°。

Tungsten Carbide material, high hardness, high wear resistance, point angle 90° or 120°

適用材質：

銅一般鋼料、合金鋼、不鏽鋼、銅、鋁、鑄鐵。

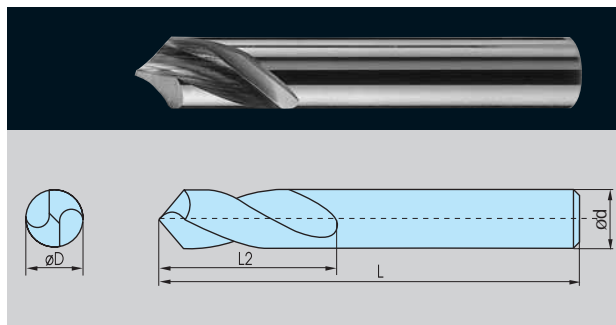
Applicable materials:

General steel, alloy steel, stainless steel, copper, aluminum, cast iron.

全鎢鋼單頭NC 定位鑽頭

SOLID TUNGSTEN SINGLE END NC POSITIONING DRILL

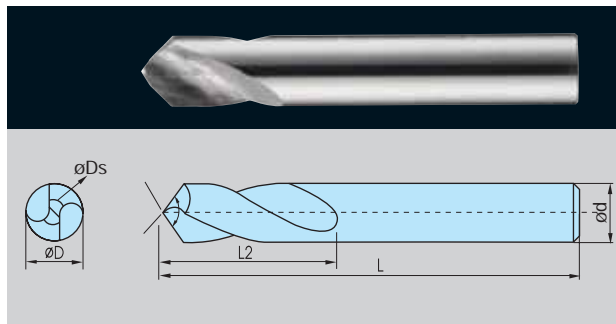
型號 EDP NO.	β°	直徑 $\varnothing D$	刃長 L_2	全長 L	柄徑 $\varnothing d$
NSP-9003	90°	3.0	8	38	3.0
NSP-9004	90°	4.0	10	40	4.0
NSP-9005	90°	5.0	15	50	5.0
NSP-9006	90°	6.0	20	60	6.0
NSP-9008	90°	8.0	25	60	8.0
NSP-9010	90°	10.0	25	75	10.0
NSP-9012	90°	12.0	30	75	12.0
NSP-12005	120°	5.0	15	50	5.0
NSP-12006	120°	6.0	20	60	6.0
NSP-12008	120°	8.0	25	60	8.0
NSP-12010	120°	10.0	25	75	10.0
NSP-12012	120°	12.0	30	75	12.0



全鎢鋼單頭NC 定位鑽頭

SOLID TUNGSTEN SINGLE END NC POSITIONING DRILL

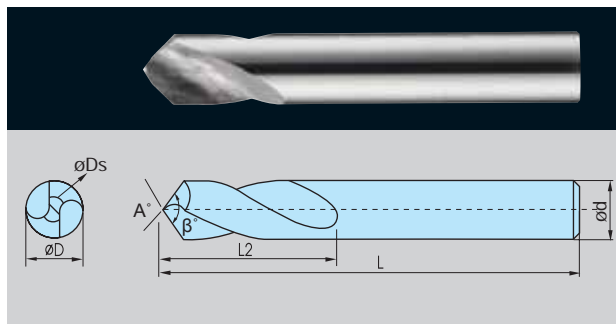
型號 EDP NO.	β°	A°	直徑 $\varnothing D$	刃徑 $\varnothing D_s$	刃長 L_2	全長 L	柄徑 $\varnothing d$
PNSP-03	90°	118°	3.0	1.5	8	38	3.0
PNSP-04	90°	118°	4.0	2.0	10	40	4.0
PNSP-05	90°	118°	5.0	2.5	12	45	5.0
PNSP-06	90°	118°	6.0	3.0	15	50	6.0
PNSP-08	90°	118°	8.0	4.0	20	60	8.0
PNSP-10	90°	118°	10.0	5.0	22	75	10.0
PNSP-12	90°	118°	12.0	6.0	25	75	12.0
PNSP-16	90°	118°	16.0	8.0	40	100	16.0
PNSPS-08	90°	118°	8.0	4.0	20	50	8.0
PNSPS-10	90°	118°	10.0	5.0	20	50	10.0
PNSPS-12	90°	118°	12.0	6.0	20	50	10.0



全鎢鋼單頭NC 定位鑽頭

SOLID TUNGSTEN SINGLE END NC POSITIONING DRILL

型號 EDP NO.	β°	A°	直徑 $\varnothing D$	刃徑 $\varnothing D_s$	刃長 L_2	全長 L	柄徑 $\varnothing d$
HNSP-03	90°	140°	3.0	1.5	8	38	3.0
HNSP-04	90°	140°	4.0	2.0	10	40	4.0
HNSP-05	90°	140°	5.0	2.5	12	45	5.0
HNSP-06	90°	140°	6.0	3.0	15	50	6.0
HNSP-08	90°	140°	8.0	4.0	20	60	8.0
HNSP-10	90°	140°	10.0	5.0	22	75	10.0
HNSP-12	90°	140°	12.0	6.0	25	75	12.0
HNSP-16	90°	140°	16.0	8.0	40	100	16.0
HNSPS-08	90°	140°	8.0	4.0	20	50	8.0
HNSPS-10	90°	140°	10.0	5.0	20	50	10.0
HNSPS-12	90°	140°	12.0	6.0	20	50	10.0



全鎢鋼鉸刀

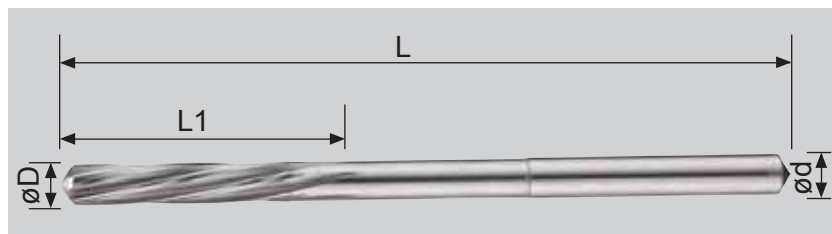
TUNGSTEN CARBIDE REAMERS

適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



單位:Unit: mm 公差 $+0.003$
 $+0$

型號 EDP NO.	刃徑 D Flute Dia.	刃長 L1 Length of Cut	全長 L Overall Length	柄徑 d Shank Diameter	刃數 Flute Number	AK45
NCRM478-D1.97	1.97	11.0	50	2.0	4	
NCRM478-D1.98	1.98	11.0	50	2.0	4	
NCRM478-D1.99	1.99	11.0	50	2.0	4	
NCRM478-D2.00	2.00	11.0	50	2.0	4	
NCRM478-D2.01	2.01	11.0	50	2.0	4	
NCRM478-D2.02	2.02	11.0	50	2.0	4	
NCRM478-D2.03	2.03	11.0	50	2.0	4	
NCRM478-D2.10	2.10	15.0	50	3.0	4	
NCRM478-D2.20	2.20	15.0	50	3.0	4	
NCRM478-D2.30	2.30	15.0	50	3.0	4	
NCRM478-D2.40	2.40	15.0	50	3.0	4	
NCRM478-D2.50	2.50	15.0	50	3.0	4	
NCRM478-D2.60	2.60	20.0	60	3.0	4	
NCRM478-D2.70	2.70	20.0	60	3.0	4	
NCRM478-D2.80	2.80	20.0	60	3.0	4	
NCRM478-D2.90	2.90	20.0	60	3.0	4	
NCRM478-D2.97	2.97	20.0	60	3.0	4	
NCRM478-D2.98	2.98	20.0	60	3.0	4	
NCRM478-D3.00	3.00	20.0	60	3.0	4	
NCRM478-D3.01	3.01	20.0	60	3.0	4	
NCRM478-D3.02	3.02	20.0	60	3.0	4	
NCRM478-D3.03	3.03	20.0	60	3.0	4	
NCRM478-D3.10	3.10	20.0	60	3.0	4	
NCRM478-D3.20	3.20	20.0	60	4.0	4	
NCRM478-D3.30	3.30	20.0	60	4.0	4	
NCRM478-D3.40	3.40	20.0	60	4.0	4	
NCRM478-D3.50	3.50	20.0	60	4.0	4	
NCRM478-D3.60	3.60	20.0	60	4.0	4	
NCRM478-D3.70	3.70	20.0	60	4.0	4	
NCRM478-D3.80	3.80	20.0	60	4.0	4	
NCRM478-D3.90	3.90	20.0	60	4.0	4	
NCRM478-D3.97	3.97	20.0	60	4.0	4	
NCRM478-D3.98	3.98	20.0	60	4.0	4	
NCRM478-D3.99	3.99	20.0	60	4.0	4	
NCRM478-D4.00	4.00	20.0	60	4.0	4	
NCRM478-D4.01	4.01	20.0	60	4.0	4	
NCRM478-D4.02	4.02	20.0	60	4.0	4	
NCRM478-D4.03	4.03	20.0	60	4.0	4	
NCRM478-D4.10	4.10	20.0	60	4.0	4	
NCRM478-D4.20	4.20	20.0	60	5.0	4	
NCRM478-D4.30	4.30	20.0	60	5.0	4	
NCRM478-D4.40	4.40	20.0	60	5.0	4	
NCRM478-D4.50	4.50	20.0	60	5.0	4	
NCRM478-D4.60	4.60	20.0	60	5.0	4	
NCRM478-D4.70	4.70	25.0	75	5.0	4	
NCRM478-D4.80	4.80	25.0	75	5.0	6	
NCRM478-D4.90	4.90	25.0	75	5.0	6	
NCRM478-D4.97	4.97	25.0	75	5.0	6	
NCRM478-D4.98	4.98	25.0	75	5.0	6	
NCRM478-D4.99	4.99	25.0	75	5.0	6	
NCRM478-D5.00	5.00	25.0	75	5.0	6	
NCRM478-D5.01	5.01	25.0	75	5.0	6	
NCRM478-D5.02	5.02	25.0	75	5.0	6	
NCRM478-D5.03	5.03	25.0	75	5.0	6	

註:有 者表示有庫存 NOTE: means items in stock

全鎢鋼鉸刀

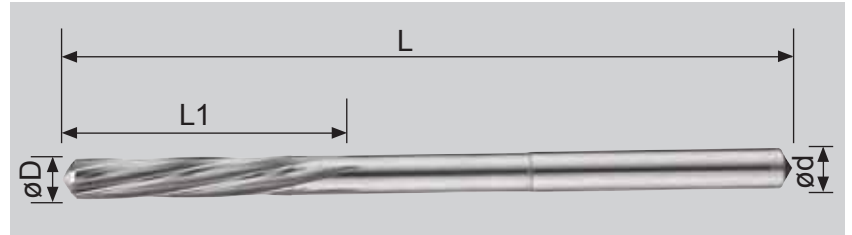
TUNGSTEN CARBIDE REAMERS

適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



單位: Unit: mm 公差 $+0.003$
 $+0$

型號 EDP NO.	刃徑 D Flute Dia.	刃長 L1 Length of Cut	全長 L Overall Length	柄徑 d Shank Diameter	刃數 Flute Number	AK45
NCRM678-D5.10	5.10	25.0	75	6.0	6	
NCRM678-D5.20	5.20	25.0	75	6.0	6	
NCRM678-D5.30	5.30	25.0	75	6.0	6	
NCRM678-D5.40	5.40	25.0	75	6.0	6	
NCRM678-D5.50	5.50	25.0	75	6.0	6	
NCRM678-D5.60	5.60	25.0	75	6.0	6	
NCRM678-D5.70	5.70	25.0	75	6.0	6	
NCRM678-D5.80	5.80	25.0	75	6.0	6	
NCRM678-D5.90	5.90	25.0	75	6.0	6	
NCRM678-D5.97	5.97	25.0	75	6.0	6	
NCRM678-D5.98	5.98	25.0	75	6.0	6	
NCRM678-D5.99	5.99	25.0	75	6.0	6	
NCRM678-D6.00	6.00	25.0	75	6.0	6	
NCRM678-D6.01	6.01	25.0	75	6.0	6	
NCRM678-D6.02	6.02	25.0	75	6.0	6	
NCRM678-D6.03	6.03	25.0	75	8.0	6	
NCRM678-D6.10	6.10	25.0	75	8.0	6	
NCRM678-D6.20	6.20	25.0	75	8.0	6	
NCRM678-D6.30	6.30	25.0	75	8.0	6	
NCRM678-D6.40	6.40	25.0	75	8.0	6	
NCRM678-D6.50	6.50	25.0	75	8.0	6	
NCRM678-D6.60	6.60	25.0	75	8.0	6	
NCRM678-D6.70	6.70	25.0	75	8.0	6	
NCRM678-D6.80	6.80	25.0	75	8.0	6	
NCRM678-D6.90	6.90	25.0	75	8.0	6	
NCRM678-D6.97	6.97	30.0	75	8.0	6	
NCRM678-D6.98	6.98	30.0	75	8.0	6	
NCRM678-D6.99	6.99	30.0	100	8.0	6	
NCRM678-D7.00	7.00	30.0	100	8.0	6	
NCRM678-D7.01	7.01	30.0	100	8.0	6	
NCRM678-D7.02	7.02	30.0	100	8.0	6	
NCRM678-D7.03	7.03	30.0	100	8.0	6	
NCRM678-D7.10	7.10	30.0	100	8.0	6	
NCRM678-D7.20	7.20	30.0	100	8.0	6	
NCRM678-D7.30	7.30	30.0	100	8.0	6	
NCRM678-D7.40	7.40	30.0	100	8.0	6	
NCRM678-D7.50	7.50	30.0	100	8.0	6	
NCRM678-D7.60	7.60	30.0	100	8.0	6	
NCRM678-D7.70	7.70	30.0	100	8.0	6	
NCRM678-D7.80	7.80	30.0	100	8.0	6	
NCRM678-D7.90	7.90	30.0	100	8.0	6	
NCRM678-D7.97	7.97	30.0	100	8.0	6	
NCRM678-D7.98	7.98	30.0	100	8.0	6	
NCRM678-D7.99	7.99	30.0	100	8.0	6	
NCRM678-D8.00	8.00	30.0	100	8.0	6	
NCRM678-D8.01	8.01	30.0	100	8.0	6	
NCRM678-D8.02	8.02	30.0	100	8.0	6	
NCRM678-D8.03	8.03	30.0	100	8.0	6	
NCRM678-D8.10	8.10	30.0	100	10.0	6	
NCRM678-D8.20	8.20	30.0	100	10.0	6	
NCRM678-D8.30	8.30	30.0	100	10.0	6	
NCRM678-D8.40	8.40	30.0	100	10.0	6	
NCRM678-D8.50	8.50	30.0	100	10.0	6	
NCRM678-D8.60	8.60	30.0	100	10.0	6	

註: 有 者表示有庫存 NOTE: means items in stock

全鎢鋼鉸刀

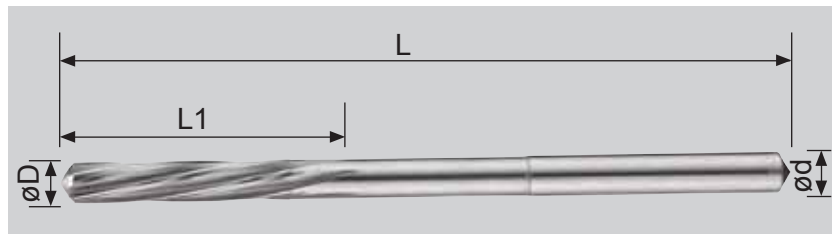
TUNGSTEN CARBIDE REAMERS

適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



單位: Unit: mm 公差 $+0.003$
 $+0$

型號 EDP NO.	刃徑 D Flute Dia.	刃長 L1 Length of Cut	全長 L Overall Length	柄徑 d Shank Diameter	刃數 Flute Number	AK45
NCRM678-D8.60	8.60	30.0	100	10.0	6	
NCRM678-D8.70	8.70	30.0	100	10.0	6	
NCRM678-D8.80	8.80	30.0	100	10.0	6	
NCRM678-D8.90	8.90	30.0	100	10.0	6	
NCRM678-D8.97	8.97	30.0	100	10.0	6	
NCRM678-D8.98	8.98	30.0	100	10.0	6	
NCRM678-D8.99	8.99	30.0	100	10.0	6	
NCRM678-D9.00	9.00	30.0	100	10.0	6	
NCRM678-D9.01	9.01	30.0	100	10.0	6	
NCRM678-D9.02	9.02	30.0	100	10.0	6	
NCRM678-D9.03	9.03	30.0	100	10.0	6	
NCRM678-D9.10	9.10	30.0	100	10.0	6	
NCRM678-D9.20	9.20	30.0	100	10.0	6	
NCRM678-D9.30	9.30	30.0	100	10.0	6	
NCRM678-D9.40	9.40	30.0	100	10.0	6	
NCRM678-D9.50	9.50	30.0	100	10.0	6	
NCRM678-D9.60	9.60	30.0	100	10.0	6	
NCRM678-D9.70	9.70	30.0	100	10.0	6	
NCRM678-D9.80	9.80	30.0	100	10.0	6	
NCRM678-D9.90	9.90	30.0	100	10.0	6	
NCRM678-D9.97	9.97	30.0	100	10.0	6	
NCRM678-D9.98	9.98	30.0	100	10.0	6	
NCRM678-D9.99	9.99	30.0	100	10.0	6	
NCRM678-D10.00	10.00	30.0	100	10.0	6	
NCRM678-D10.01	10.01	30.0	100	10.0	6	
NCRM678-D10.02	10.02	30.0	100	10.0	6	
NCRM678-D10.03	10.03	30.0	100	10.0	6	
NCRM678-D10.04	10.04	30.0	100	12.0	6	
NCRM678-D10.05	10.05	30.0	100	12.0	6	
NCRM678-D10.10	10.10	30.0	100	12.0	6	
NCRM678-D10.20	10.20	30.0	100	12.0	6	
NCRM678-D10.30	10.30	30.0	100	12.0	6	
NCRM678-D10.40	10.40	30.0	100	12.0	6	
NCRM678-D10.50	10.50	30.0	100	12.0	6	
NCRM678-D10.60	10.60	30.0	100	12.0	6	
NCRM678-D10.70	10.70	30.0	100	12.0	6	
NCRM678-D10.80	10.80	30.0	100	12.0	6	
NCRM678-D10.90	10.90	30.0	100	12.0	6	
NCRM678-D10.97	10.97	30.0	100	12.0	6	
NCRM678-D10.98	10.98	30.0	100	12.0	6	
NCRM678-D10.99	10.99	30.0	100	12.0	6	
NCRM678-D11.00	11.00	30.0	100	12.0	6	
NCRM678-D11.01	11.01	30.0	100	12.0	6	
NCRM678-D11.02	11.02	30.0	100	12.0	6	
NCRM678-D11.03	11.03	30.0	100	12.0	6	
NCRM678-D11.10	11.10	30.0	100	12.0	6	
NCRM678-D11.20	11.20	30.0	100	12.0	6	
NCRM678-D11.30	11.30	30.0	100	12.0	6	
NCRM678-D11.40	11.40	30.0	100	12.0	6	
NCRM678-D11.50	11.50	30.0	100	12.0	6	
NCRM678-D11.60	11.60	30.0	100	12.0	6	
NCRM678-D11.70	11.70	30.0	100	12.0	6	
NCRM678-D11.80	11.80	30.0	100	12.0	6	
NCRM678-D11.90	11.90	30.0	100	12.0	6	

註: 有 者表示有庫存 NOTE: means items in stock

全鎢鋼鉸刀

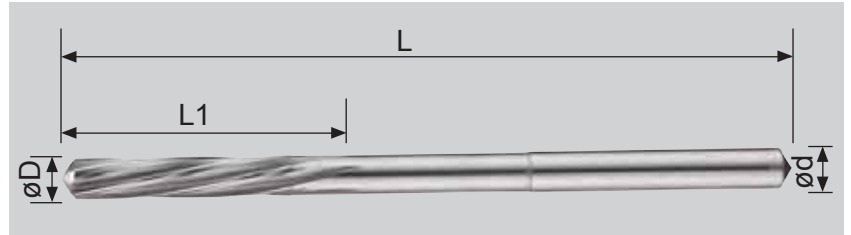
TUNGSTEN CARBIDE REAMERS

適合材質：

一般鋼料、合金鋼、模具鋼、不鏽鋼、銅、鋁、鑄鐵。

Applicable material:

General steel, alloy steel, mold steel, stainless steel, copper, aluminum, cast iron.



單位:Unit: mm 公差 $+0.003$
 $+0$

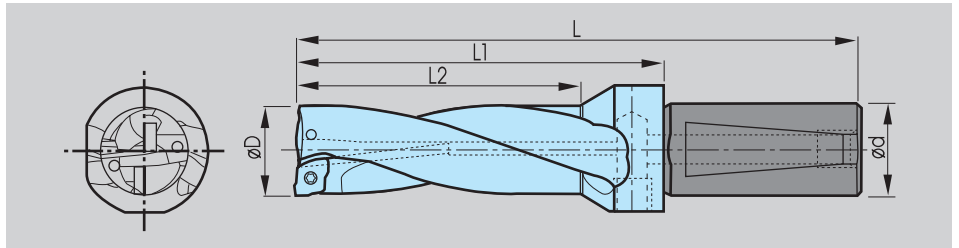
型號 EDP NO.	刃徑 D Flute Dia.	刃長 L1 Length of Cut	全長 L Overall Length	柄徑 d Shank Diameter	刃數 Flute Number	AK45
NCRM678-D11.97	11.97	30.0	100	12.0	6	
NCRM678-D11.98	11.98	30.0	100	12.0	6	
NCRM678-D11.99	11.99	30.0	100	12.0	6	
NCRM678-D12.00	12.00	30.0	100	12.0	6	
NCRM678-D12.01	12.01	30.0	100	12.0	6	
NCRM678-D12.02	12.02	30.0	100	12.0	6	
NCRM678-D12.03	12.03	30.0	100	12.0	6	
NCRM678-D12.04	12.04	30.0	100	12.0	6	
NCRM678-D12.05	12.05	30.0	100	12.0	6	

單位:Unit: mm 公差 H7

型號 EDP NO.	刃徑 D Flute Dia.	刃長 L1 Length of Cut	全長 L Overall Length	柄徑 d Shank Diameter	刃數 Flute Number	AK45
NCRM478-D2.00	2.00	11.0	50	2.0	4	
NCRM478-D2.50	2.50	15.0	50	3.0	4	
NCRM478-D3.00	3.00	20.0	60	3.0	4	
NCRM478-D3.50	3.50	20.0	60	4.0	4	
NCRM478-D4.00	4.00	20.0	60	4.0	4	
NCRM478-D4.50	4.50	20.0	60	5.0	4	
NCRM478-D5.00	5.00	25.0	75	5.0	6	
NCRM478-D5.50	5.50	25.0	75	6.0	6	
NCRM478-D6.00	6.00	25.0	75	6.0	6	
NCRM478-D6.50	6.50	25.0	75	8.0	6	
NCRM478-D7.00	7.00	30.0	100	8.0	6	
NCRM478-D7.50	7.50	30.0	100	8.0	6	
NCRM478-D8.00	8.00	30.0	100	8.0	6	
NCRM478-D8.50	8.50	30.0	100	10.0	6	
NCRM478-D9.00	9.00	30.0	100	10.0	6	
NCRM478-D9.50	9.50	30.0	100	10.0	6	
NCRM478-D10.00	10.00	30.0	100	10.0	6	
NCRM478-D10.50	10.50	30.0	100	12.0	6	
NCRM478-D11.00	11.00	30.0	100	12.0	6	
NCRM478-D10.50	11.50	30.0	100	12.0	6	
NCRM478-D12.00	12.00	30.0	100	12.0	6	

螺旋槽快速鑽頭

SPIRAL FLUTE HIGH SPEED DRILL



型號規格 EDP NO.	刀徑 Dia	尺寸 Dimension(mm)				適用刀片 Insert	螺絲 Screw	板手 Wrench
		d Shank Diameter	L Overall Length	L1 Flute Length	L2 Length of Cut			
JR25-DRZ18 3D-06	18	25	136	82	54	ZCMT06T2	CS2260	T-7
JR25-DRZ19 3D-06	19	25	139	85	57			
JR25-DRZ 20 3D-06	20	25	143	89	60			
JR25-DRZ 21 3D-06	21	25	146	89	63			
JR25-DRZ 22 3D-08	22	25	147	93	66	ZCMT0803	CS2565	T-8
JR25-DRZ 23 3D-08	23	25	150	96	69			
JR25-DRZ 24 3D-08	24	25	152	98	72			
JR25-DRZ 25 3D-08	25	25	155	101	75			
JR25-DRZ 26 3D-08	26	25	158	104	78	ZCMT10T3	CS4090	T-15
JR32-DRZ 27 3D-10	27	32	173	114	81			
JR32-DRZ 28 3D-10	28	32	176	117	84			
JR32-DRZ 29 3D-10	29	32	179	120	87			
JR32-DRZ 30 3D-10	30	32	181	122	90	ZCMT12T3	CS5090	T-20
JR32-DRZ 31 3D-10	31	32	183	124	93			
JR32-DRZ 32 3D-10	32	32	187	128	96			
JR32-DRZ 33 3D-12	33	32	193	134	99			
JR32-DRZ 34 3D-12	34	32	197	138	102	ZCMT1504	CS5090	T-20
JR32-DRZ 35 3D-12	35	32	199	140	105			
JR32-DRZ 36 3D-12	36	32	203	144	108			
JR32-DRZ 37 3D-12	37	32	205	146	111			
JR32-DRZ 38 3D-12	38	32	208	149	114	ZCMT1504	CS5090	T-20
JR32-DRZ 39 3D-12	39	32	211	152	117			
JR32-DRZ 40 3D-12	40	32	212	153	120			
JR40-DRZ 41 3D-15	41	40	224	155	123			
JR40-DRZ 42 3D-15	42	40	227	158	126	ZCMT1504	CS5090	T-20
JR40-DRZ 43 3D-15	43	40	230	161	129			
JR40-DRZ 44 3D-15	44	40	233	164	132			
JR40-DRZ 45 3D-15	45	40	234	165	135			
JR40-DRZ 46 3D-15	46	40	241	172	138	ZCMT1504	CS5090	T-20
JR40-DRZ 47 3D-15	47	40	245	176	141			
JR40-DRZ 48 3D-15	48	40	248	179	144			
JR40-DRZ 49 3D-15	49	40	250	181	147			
JR40-DRZ 50 3D-15	50	40	250	182	150	ZCMT1504	CS5090	T-20

切削數據參考表

CUTTING DATA CHART

型式 MODEL: HOD.CCD

被削材 WORKPIECE	硬度 HARDNESS	Ø4~Ø7		Ø7~Ø10		Ø10~Ø15		Ø15~Ø20	
		V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev
低碳鋼 LOW CARBON STEEL	~200HB	40~70	0.08~0.2	50~100	0.1~0.3	50~100	0.15~0.4	60~120	0.2~0.5
中碳鋼 MEDIUM CARBON STEEL	~300HB	40~60	0.08~0.15	50~100	0.1~0.25	50~100	0.15~0.4	50~120	0.2~0.5
模具鋼 MOLD STEEL	~300HB	30~60	0.05~0.15	30~60	0.1~0.25	40~80	0.1~0.3	40~100	0.15~0.4
不鏽鋼 STAINLESS STEEL	~200HB	20~40	0.06~0.15	30~60	0.08~0.25	30~70	0.1~0.3	30~70	0.1~0.4
高硬度材 TOUGH MATERIAL	HRC40~50	10~40	0.03~0.1	10~40	0.05~0.15	15~40	0.08~0.2	20~50	0.1~0.25
球墨鑄鐵 DUCTILE IRON	170~240HB	40~80	0.08~0.15	50~100	0.1~0.3	50~100	0.15~0.4	50~100	0.2~0.5

型式 MODEL: TXD.WHCD

被削材 WORKPIECE	硬度 HARDNESS	Ø10~Ø15		Ø15~Ø20		Ø20~Ø25		Ø25~Ø30	
		V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev
低碳鋼 LOW CARBON STEEL	~200HB	50~80	0.1~0.25	50~100	0.1~0.3	50~100	0.15~0.35	50~120	0.2~0.4
中碳鋼 MEDIUM CARBON STEEL	~300HB	50~80	0.1~0.25	50~100	0.1~0.3	50~100	0.15~0.35	50~120	0.2~0.4
模具鋼 MOLD STEEL	~300HB	40~80	0.08~0.2	40~80	0.1~0.25	40~80	0.15~0.35	40~100	0.2~0.35
不鏽鋼 STAINLESS STEEL	~200HB	30~70	0.08~0.2	30~70	0.1~0.25	30~70	0.1~0.3	30~70	0.15~0.35
高硬度材 TOUGH MATERIAL	HRC40~50	10~40	0.06~0.15	20~50	0.08~0.2	20~50	0.1~0.25	20~50	0.1~0.25
球墨鑄鐵 DUCTILE IRON	170~240HB	50~80	0.1~0.25	50~100	0.1~0.3	50~100	0.15~0.35	50~120	0.2~0.4

型式 MODEL: GSD.GOD

被削材 WORKPIECE	硬度 HARDNESS	Ø4~Ø7		Ø7~Ø10		Ø10~Ø15		Ø15~Ø20	
		V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev	V m/min	f m/rev
鋁合金 ALUMIN ALLOY		40~100	0.08~0.2	50~120	0.1~0.25	60~140	0.1~0.4	60~160	0.2~0.5
鑄鐵 CAST IRON	FC250	40~80	0.1~0.2	50~100	0.1~0.25	50~100	0.1~0.3	60~120	0.15~0.4
球墨鑄鐵 DUCTILE IRON	FCD450	40~80	0.08~0.5	50~100	0.1~0.2	50~100	0.1~0.3	50~120	0.15~0.35

鑽頭切削實例

DRILL CUTTING TEST REPORT

鑽頭型號 DRILL	工件材質 WORKPIECE MATERIAL	切削條件 CUTTING CONDITIONS	使用機械 MACHINE	加工數量 QUANTITY
CD-5059	S45C	回轉速R.P.M :2100 進刀量mm/Rev :0.14 鑽孔深mm :30	CNC車床 CNC LATHE	約3000 Pcs
WHCD-6135	快削S45C	回轉速R.P.M :1200 切削速度M/Min :70 進刀量mm/Rev :0.2 鑽孔深mm :35	CNC車床 42型 CNC LATHE Mod. 42	約12000 Pcs
HOD-7130	SCM435	回轉速R.P.M :1500 切削速度M/Min :60 進刀量mm/Rev :0.15 鑽孔深mm :50	CNC車床 CNC LATHE	約6000 Pcs
CCD-5048	SKD11	回轉速R.P.M :3000 進刀量mm/Rev :0.06 鑽孔深mm :10	CNC車床 CNC LATHE	約10000 Pcs
HOD-5089	SUS316	回轉速R.P.M :1800 切削速度M/Min :50 進刀量mm/Rev :0.15 鑽孔深mm :12	CNC車床 CNC LATHE	約11000 Pcs
HOD-7079	SUS304	回轉速R.P.M :2400 切削速度M/Min :60 進刀量mm/Rev :0.12 鑽孔深mm :15	CNC車床 42型 CNC LATHE Mod. 42	約6000 Pcs
CCD-5048	SK2	回轉速R.P.M :1800 進刀量mm/Rev :0.08 鑽孔深mm :10	CNC車床走心式 CNC LATHE Traveling Spindle	約2000 Pcs
CCD-5068	FC25	回轉速R.P.M :2400 切削速度M/Min :51 進刀量mm/Rev :420 鑽孔深mm :30	CNC銑床 CNC Milling Machine	約12000 Pcs
CCD-5089	SUS316	回轉速R.P.M :1800 切削速度M/Min :50 進刀量mm/Rev :0.15 鑽孔深mm :12	CNC車床 CNC LATHE	約1400 Pcs
TXD-6220	S45C	回轉速R.P.M :1200 切削速度M/Min :83 床台進給mm/Min :350 鑽孔深mm :30	CNC 銑床中心出水 CNC Milling Machine Coolant Through Spindle	約1100 Pcs

鑽頭切削實例

DRILL CUTTING TEST REPORT

鑽頭型號 DRILL	工件材質 WORKPIECE MATERIAL	切削條件 CUTTING CONDITIONS	使用機械 MACHINE	加工數量 QUANTITY
HOD-7130	CCM415	回轉速R.P.M :1500 切削速度M/Min :61 進刀量mm/Rev :0.15 鑽孔深mm :50	CNC車床 CNC LATHE	約6000 Pcs
HOD-5175	SCM21	回轉速R.P.M :1467 切削速度M/Min :80 進刀量mm/Rev :0.3 鑽孔深mm :75	CNC車床 CNC LATHE	約1250 Pcs
CCD-5127	S45C	回轉速R.P.M :2000 切削速度M/Min :80 進刀量mm/Rev :600 鑽孔深mm :30	CNC加工中心機 MACHINE CENTER	約2200 Pcs
GSD-7080	鋁合金	回轉速R.P.M :2400 切削速度M/Min :60 進刀量mm/Rev :0.15 鑽孔深mm :30	CNC車床 CNC LATHE	約3300 Pcs
GSD-7130	FC25	回轉速R.P.M :1700 切削速度M/Min :70 進刀量mm/Rev :0.2 床台進給mm/Min :340 鑽孔深mm :30	CNC銑刀 CNC Milling Machine	約1430 Pcs
CCD-5130	SS41	回轉速R.P.M :1500 切削速度M/Min :60 進刀量mm/Rev :0.16 鑽孔深mm :19	CNC車床 CNC LATHE	約6000 Pcs
CCD-5110	SCM21 HRC22	回轉速R.P.M :1800 床台進給mm/Min :140 鑽孔深mm :18	CNC車床 CNC LATHE	約900 Pcs
CCD-5097	快削鉛	回轉速R.P.M :2200 進刀量mm/Rev :0.25 鑽孔深mm :18	CNC車床 CNC LATHE	約10000 Pcs
HOD-5130	SUS303	回轉速R.P.M :1500 進刀量mm/Rev :0.15 鑽孔深mm :50	CNC車床 CNC LATHE	約11000 Pcs

鎢鋼材質表

TUNGSTEN CARBIDE MATERIAL PROPERTIES

Konrad Carbide

鎢鋼等級 Tungsten Grade	WC%	Co%	TiC/ Ta(Nb)C % or Cr ₃ C ₂ +VC	密度 Density, ISO 3369 [g/cm ³]	硬度 Hardness		磁飽和 Magnetic saturation [$\frac{\mu Tm^3}{kg}$]	矯頑磁場 強度 Coercive field strength HC, ISO 3326 [kA/m]	橫向斷裂 強度 Transverse rupture strength ISO 3327 [N/mm ²]	多孔性 Porosity ISO 4505			平均晶 粒度 Average Grain Size	ISO等級 Classification ISO 513
					HRA, ISO 3738	HV,30 ISO 3738				A	B	C		
KF K 20 F	90,5	8	1,5	14,6	92,2	1710	15	23	3200	02	00	00	0.7 μm	K10-K30
KF K 40 UF	89,5	10	0,5	14,5	91,7	1610	16	21	3600	02	00	00	0.65 μm	K30-K40
KF K 44 UF	86,7	12	1,3	14,1	92,1	1680	19	26	3800	02	00	00	0.5 μm	K40-K50
KF K 55 SF	89,8	9	1,2	14,3	93,2	2000	14	39	4000	02	00	00	0.2 μm	-
KF G 20	87	11,5	1,5	14,2	89,1	1300	21	12	2500	02	00	00	3 μm	-
WF 25	88	12-1	1,5	14,2	92,2	1300	21	12	2500	02	00	00	0.6 μm 0.4 μm 0.7 μm	-

鑽頭公差

DRILL TOLERANCE

D(h8)	D 3.0	3.0 < D 6.0	6.0 < D 10.0	10.0 < D 18.0	18.0 < D 30.0
容許公差 Allowable Tolerance	0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.033

D(h7)	D 3.0	3.0 < D 6.0	6.0 < D 10.0	10.0 < D 18.0	18.0 < D 30.0
容許公差 Allowable Tolerance	0 -0.010	0 -0.012	0 -0.015	0 -0.018	0 -0.021

技術資料 TECHNICAL INFORMATION

計算式 FORMULAS

床台進給量與每一刃的進給量 FEED RATE PER FLUTE

$$fz = \frac{F}{Z \times N}$$

fz:每一刃的進給量[mm/刃] fz:Feed rate per flute (mm/flute)
F:床台進給量[mm/min] F:Machine feed rate (mm/min)
Z:刀具刃數 Z:Cutter flute numbers
N:主軸迴轉數[r.p.m] N:Spindle speed (r.p.m)

所需動力 POWER REQUIRED

$$P_{KW} = \frac{Ks \times Q}{6120 \times \eta} = \frac{Ks \times W \times F \times d}{6120000 \times \eta}$$

$$= \frac{Ks \times W \times fz \times Z \times N \times d}{6120000 \times \eta}$$

$$P_{HP} = \frac{6120}{4500} \times P_{KW}$$

PKW:所需動力[KW] PKW:Feed rate per flute
PHP:所需動力(馬力)[HP] Power required(KW)
W:切屑寬[mm] PHP:Horsepower require (HP)
F:床台進給量[mm/min] F:Machine feed rate (mm/min)
fz:進給量[mm/rev] fz:Feed rate (mm/res)
Z:主軸迴轉數[枚] Z:Tool flute numbers
d:切深[mm] N:Spindle speed (r.p.m)
Ks:比切削抵抗值[kgf/mm²] d:Cutting depth(mm)
:機械效率(0.7~0.8) Ks:Specific cutting resistant value
: Machine efficiency (0.7~0.8)

ks的概略值 APPROX KS VALUE		
軟鋼	Soft Steel	190
中炭素鋼	Medium Carbon Steel	210
高炭素鋼	High Carbon Steel	240
低合金鋼	Low Alloy Steel	190
高合金鋼	High Alloy Steel	245
鑄鐵	Cast Iron	93
可鍛鑄鐵	Forging Cast Iron	120
青銅黃銅	Brass . Copper	70

切屑排出量 CHIP REMOVAL RATE

$$Q = V \times F \times d = V \times fz \times Z \times d$$

Q:切屑排出量[cm³/min] Q:Chip removal rate (cm³/min)
V:切屑速度[m/min] V:Cutting speed (m/min)
F:床台進給量[mm/min] F:Machine feed rate (mm/min)
fz:每一刃的進給量[mm/刃] fz:Feed rate per flute (mm/flute)
Z:刀具數量 Z:Tool flute numbers
d:切深[mm] d:Cutting depth (mm)

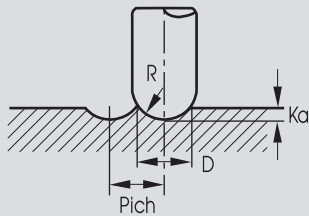
技術資料 TECHNICAL INFORMATION

計算式 FORMULAS

球型立銑刀的切削速度與迴轉速 BALL END MILL CUTTING SPEED AND RUNNING SPEED

$$N = \frac{500 \times V_c}{\pi \times \sqrt{ka} \times (D-ka)}$$

$$V_c = \frac{\pi \times N \times \sqrt{ka} \times (D-ka)}{500}$$



N:迴轉數[r.p.m]
D:球頭立銑刀的外徑
[mm]
π:圓周率 3.1416
Vc:實際切削速度
Ka:立銑刀的切深

N:Speed (r.p.m)
D:Ball end mill diameter (mm)
:3.1416
Vc:Actual cutting speed
Ka: Cutting depth

切削速度 CUTTING SPEED

$$V = \frac{\pi \times D \times N}{1000}$$

銑削加工の場合 MILLING APPLICATION

$$F = fz \times Z \times N$$

V:切削速度[m/min]
Ds:加工徑[mm]
N:主軸迴轉數[r.p.m]

V:Cutting speed(m/min)
Ds:Machining diameter (mm)
N:Spindle speed (r.p.m)

F:床台進給量[mm/min]
fz:每一刃的進給量[mm/
刃]
Z: 刀數 (以刃數=1計算
之)
N: 主軸迴轉數[r.p.m]

F:Machine feed rate (mm/min)
fz:Feed rate per flute (mm/
flute)
Z:Flute numbers (1)
N:Spindle speed (r.p.m)

切削時間 CUTTING TIME

$$T = \frac{60 \times L}{f \times N} = \frac{60 \times L}{1000 \times V \times f}$$

T:切削秒數[秒]
L:加工長度[mm]
f:每一回轉的進給量
[mm/rev]
N:主軸迴轉數[r.p.m]
V:切削速度[m/min]
Ds:加工徑[mm]

T:Cutting time (sec.)
L:Cutting length (mm)
f:Feed rate per revolution
(mm/rev)
N:Spindle speed (r.p.m)
V:Cutting speed
Ds:Cutting diameter (mm)

切削刀具使用上注意事項

對象製品	危險性	對策
全系列切削工具	刀刃銳利，直接用手接觸十分危險	特別從箱子取出或裝置機械時，請使用保護手套等護具。
	使用方法或使用條件不適當的話，會導致刀具破損或飛散而有受傷的危險。	使用安全護蓋與防護眼鏡等護具。 請在推薦條件範圍內使用，請參照使用說明書與目錄。
	由於衝擊的負荷與過度的磨耗致使切削抵抗急速增加，產生刀具破損飛散的危險而導致受傷。	使用安全護蓋與防護眼鏡等護具。 及早進行刀具交換。
	高溫切屑飛散或試過長的切屑排出，而有受傷與燙傷的危險。	使用安全護蓋與防護眼鏡等護具。 去除切屑時，停止機械，戴上保護手套並使用鍋子、夾鉗等工具。
	切削時，刀具與被削材溫度極高，加工後直接用手接觸的話有受傷燙傷的危險。	使用保護手套等護具。
	切削中發生火花與破損而引起的高熱，切屑引火、導致火災危險。	請勿在有引火、爆發危險的地方使用。 使用非水溶性切削油劑的場合，請務必準備好防火對策。
	高速回轉使用之際，工作機械若不能保持平衡，由於振動的緣故，將導致刀具破損而有受傷的危險。	使用安全護蓋與防護眼鏡等護具。 務必實施試運轉，並確認無任何振動等異常聲音。
	加工物的毛邊若直接用手接觸會有受傷的危險。	請勿用手接觸。
捨棄式 (刀片交換式) 所有刀具	刀片與零件若未確定夾緊，在切削中會有脫落、飛散的危險發生。	安裝座面與固定用零件上不得有異物附著，須清理乾淨後再安裝刀片。 安裝時，使用附屬扳手，確實地將刀片與零件夾緊。又，除了規定的刀片與零件以外絕對不可以使用。
	使用管材等輔助工具過度栓緊則刀片與刀具會產生破損，脫落飛散的危險。	不要使用管材輔助工具，請使用附屬扳手。
	刀具在高速回轉的使用場合，由於離心力的緣故，刀片的零件會有飛出去的情形發生，十分危險，使用之際，安全方面請補充注意。	請在推薦條件範圍內使用請參照使用說明書與目錄。
各種銼刀與其他回轉使用的刀具	銼刀類有銳利的切刃，直接用手接觸會受傷。 刀具在偏心回轉或平衡不良時會產生振動，發生破損，飛散而導致受傷。	請使用保護手套等護具。 請使用推薦條件範圍內的回轉速度。 由於軸承受等磨耗而產生偏心回轉與振動。請定期調整回轉部的經度與平衡度。
鑽頭	利用加工物回轉，進行穴貫通加工時，切剩的部份因高速而飛出，該圓盤十分銳利非常危險。 銼刀類有銳利的切刃，直接用手接觸會受傷。 極子徑鑽頭先端尖而銳利，指尖直接接觸就會導致刺傷，又折斷而飛散的情形也會發生。	請使用安全護罩與防護眼鏡的護具。又夾頭部請安裝護罩。 使用時，請充分注意安全面請使用保護手套、防護眼鏡。

最後

本手冊之內容，乃記載有關安全上之基本項目，其他詳細事項，請參照各種刀具之使用說明書，目錄等資料，或向本公司詢問。

又，本公司不了解之情況下，進行改造等仕樣更而發生事故，本公司不負任何責任。

對應鋼的韋氏之近似換算值

維氏硬度	勃氏硬度 10mm球 荷重3000kgf		洛氏硬度			蕭氏硬度	拉抗強度 (近似值) Mpa(1)
	標準球	碳化球	A量規 荷重60kgf 鑽石 圓錐壓子	B量規 荷重100kgf 徑1.6mm (1/16in)球	C量規 荷重150kgf 鑽石 圓錐壓子		
940	—	—	85.6	—	68.0	97	
920	—	—	85.3	—	67.5	96	
900	—	—	85.0	—	67.0	95	
880	—	(767)	84.7	—	66.4	93	
860	—	(757)	84.4	—	65.9	92	
840	—	(745)	84.1	—	65.3	91	
820	—	(733)	83.8	—	64.7	90	
800	—	(722)	83.4	—	64.0	88	
780	—	(710)	83.0	—	63.3	87	
760	—	(698)	82.6	—	62.5	86	
740	—	(684)	82.2	—	61.8	84	
720	—	(670)	81.8	—	61.0	83	
700	—	(656)	81.3	—	60.1	81	
690	—	(647)	81.1	—	59.7	—	2055
680	—	(638)	80.8	—	59.2	80	2020
670	—	630	80.6	—	58.8	—	1985
660	—	620	80.3	—	58.3	79	1950
650	—	611	80.0	—	57.8	—	1905
640	—	601	79.8	—	57.3	77	1860
630	—	591	79.5	—	56.8	—	1825
620	—	582	79.2	—	56.3	75	1795
610	—	573	78.9	—	55.7	—	1750
600	—	564	78.6	—	55.2	74	1705
590	—	554	78.4	—	54.7	—	1660
580	—	545	78.0	—	54.1	72	1620
570	—	535	77.8	—	53.6	—	1570
560	—	525	77.4	—	53.0	71	1530
550	505	517	77.0	—	52.3	—	1495
540	496	507	76.7	—	51.7	69	1460
530	488	497	76.4	—	51.1	—	1410
520	480	488	76.1	—	50.5	67	1370
510	473	479	75.7	—	49.8	—	1330
500	465	471	75.3	—	49.1	66	1290
490	456	460	74.9	—	48.4	—	1240
480	448	452	74.5	—	47.7	64	1205
470	441	442	74.1	—	46.9	—	1170
460	433	433	73.6	—	46.1	62	1130
450	425	425	73.3	—	45.3	—	1095
440	415	415	72.8	—	44.5	59	1070
430	405	405	72.3	—	43.6	—	1035
420	397	397	71.8	—	42.7	57	1005
410	388	388	71.4	—	41.8	—	980
400	379	379	70.8	—	40.8	55	950
390	369	369	70.3	—	39.8	—	935
380	360	360	69.8	(110.0)	38.8	52	915
370	350	350	69.2	—	37.7	—	905
360	341	341	68.7	(109.0)	36.6	50	890
350	331	331	68.1	—	35.5	—	875
340	322	322	67.6	(108.0)	34.4	47	855
330	313	313	67.0	—	33.3	—	840

維氏硬度	勃氏硬度 10mm球 荷重3000kgf		洛氏硬度			蕭氏硬度	拉抗強度 (近似值) Mpa(1)
	標準球	碳化球	A量規 荷重60kgf 鑽石 圓錐壓子	B量規 荷重100kgf 徑1.6mm (1/16in)球	C量規 荷重150kgf 鑽石 圓錐壓子		
320	303	303	66.4	(107.0)	32.2	45	1005
310	294	294	65.8	—	31.0	—	980
300	284	284	65.2	(105.5)	29.8	42	950
295	280	280	64.8	—	29.2	—	935
290	275	275	64.5	(104.5)	28.5	41	915
285	270	270	64.2	—	27.8	—	905
280	265	265	63.8	(103.5)	27.1	40	890
275	261	261	63.5	—	26.4	—	875
270	256	256	63.1	(102.0)	25.6	38	855
265	252	252	62.7	—	24.8	—	840
260	247	247	62.4	(101.0)	24.0	37	825
255	243	243	62.0	—	23.1	—	805
250	238	238	61.6	99.5	22.2	36	795
245	233	233	61.2	—	21.3	—	780
240	228	228	60.7	98.1	20.3	34	765
230	219	219	—	96.7	(18.0)	33	730
220	209	209	—	95.0	(15.7)	32	695
210	200	200	—	93.4	(13.4)	30	670
200	190	190	—	91.5	(11.0)	29	635
190	181	181	—	89.5	(8.5)	28	605
180	171	171	—	87.1	(6.0)	26	580
170	162	162	—	85.0	(3.0)	25	545
160	152	152	—	81.7	(0.0)	24	515
150	143	143	—	78.7	—	22	490
140	133	133	—	75.0	—	21	455
130	124	124	—	71.2	—	20	425
120	114	114	—	66.7	—	—	390
110	105	105	—	62.3	—	—	—
100	95	95	—	56.2	—	—	—
95	90	90	—	52.0	—	—	—
90	86	86	—	48.0	—	—	—
85	81	81	—	41.0	—	—	—

·本摘錄自JIS鐵鋼手冊(SAEH417)

注 1)1MPa=1N/mm²

注 2)中()內的數值,包括不常用範圍的項目僅供參考。