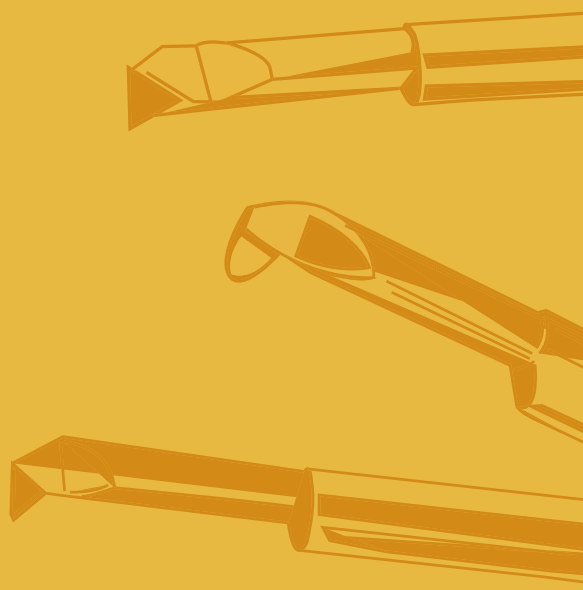
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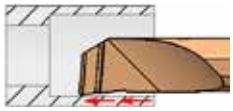
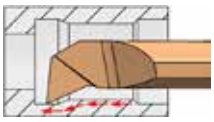
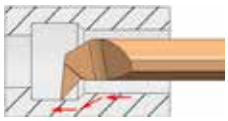
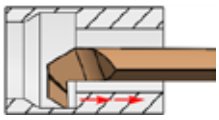
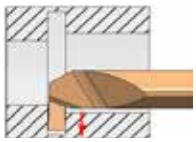
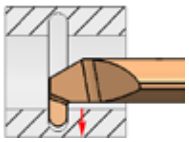
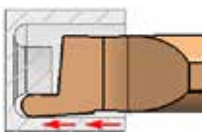
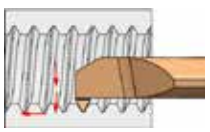




MINI SYSTEM Ultra-small Turning Tool

INDEX索引

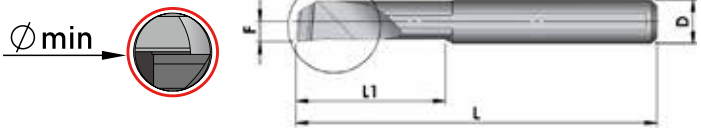
小徑車削工具

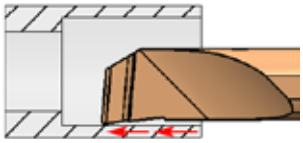
MODE 型號	Type 類型	Item 品名	Min. boring hole diameter 最小加工孔徑	Coating 塗層	Spec. 規格表	Cutting Contition 切削條件
BR		Boring 搪孔	Ø0.5mm~Ø8.0mm	TiSiN	88	192
PF22		Profiling & Boring 仿形 & 搪孔	Ø1.0mm~Ø8.0mm	TiSiN	89	
PF47		Profiling & Boring 仿形 & 搪孔	Ø1.0mm~Ø8.0mm	TiSiN	90	
BT		Back Turning 背車削	Ø4.0mm~Ø8.0mm	TiSiN	91	
IG		Internal Grooving 內徑溝槽	Ø4.0mm~Ø8.0mm	TiSiN	92	
IGR		Internal Grooving Radius 內徑圓溝槽	Ø4.0mm~Ø8.0mm	TiSiN	93	
FG		Face Grooving 端面溝槽	Ø4.0mm~Ø8.0mm	TiSiN	94	
FGR		Face Grooving Radius 端面圓溝槽	Ø4.0mm~Ø6.0mm	TiSiN	95	
TA		Threading 螺紋車削	Ø2.3mm~Ø6.0mm	TiSiN	96	193

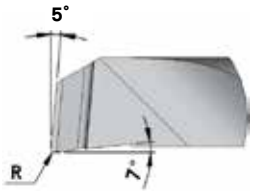
Boring
搪孔

TiSiN 切削條件表 P192 Cutting Condition







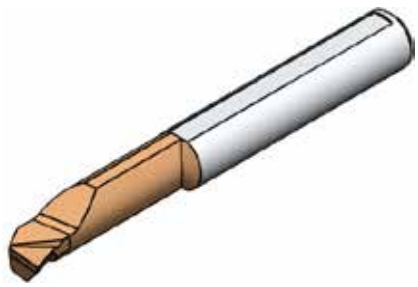


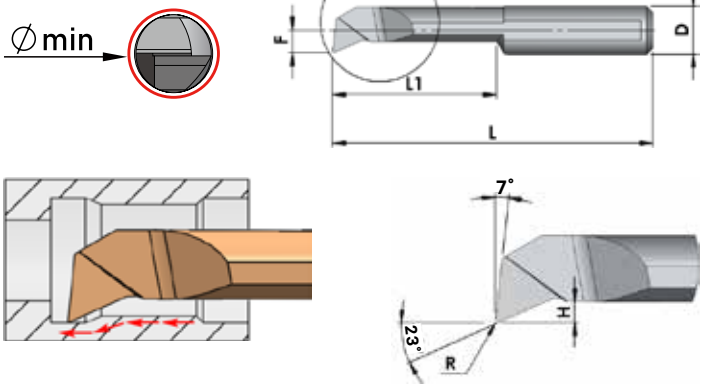
MODE 型號	D	Ø min	F	L	L1	R	List Price 最低售價
BR07-05.003-015 R/L	4	0.5	0.2	50	1.5	0.03	310
BR07-05.003-025 R/L	4	0.5	0.2	50	2.5	0.03	310
BR07-10.005-03 R/L	4	1	0.4	50	3.0	0.05	310
BR07-10.005-05 R/L	4	1	0.4	50	5.0	0.05	310
BR07-20.005-06 R/L	4	2	0.8	50	6.0	0.05	310
BR07-20.005-10 R/L	4	2	0.8	50	10.0	0.05	310
BR07-20.005-14 R/L	4	2	0.8	50	14.0	0.05	350
BR07-30.010-09 R/L	4	3	1.3	50	9.0	0.1	310
BR07-30.010-15 R/L	4	3	1.3	50	15.0	0.1	350
BR07-30.010-21 R/L	4	3	1.3	50	21.0	0.1	390
BR07-40.010-12 R/L	4	4	1.8	50	12.0	0.1	350
BR07-40.010-20 R/L	4	4	1.8	50	20.0	0.1	370
BR07-40.010-28 R/L	4	4	1.8	60	28.0	0.1	420
BR07-50.020-15 R/L	6	5	2.3	50	15.0	0.2	510
BR07-50.020-25 R/L	6	5	2.3	50	25.0	0.2	580
BR07-50.020-35 R/L	6	5	2.3	60	35.0	0.2	640
BR07-60.020-18 R/L	6	6	2.8	50	18.0	0.2	510
BR07-60.020-30 R/L	6	6	2.8	60	30.0	0.2	580
BR07-60.020-42 R/L	6	6	2.8	75	42.0	0.2	640
BR07-70.020-21 R/L	8	7	3.3	60	21.0	0.2	640
BR07-70.020-35 R/L	8	7	3.3	75	35.0	0.2	710
BR07-70.020-49 R/L	8	7	3.3	100	49.0	0.2	770
BR07-80.020-24 R/L	8	8	3.8	60	24.0	0.2	690
BR07-80.020-40 R/L	8	8	3.8	75	40.0	0.2	750
BR07-80.020-56 R/L	8	8	3.8	100	56.0	0.2	820

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Profiling & Boring
仿形&搪孔

TiSiN 切削條件表 P192 Cutting Condition

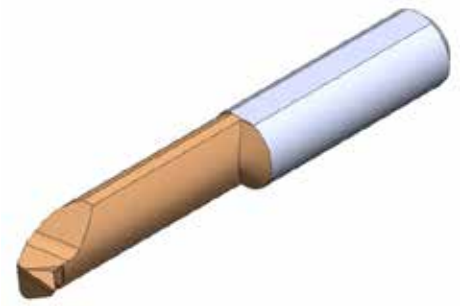


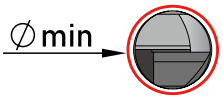


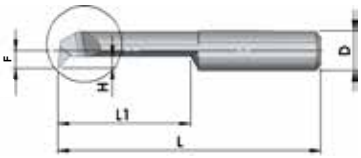
MODE 型號	D	Ø min	F	L	L1	R	H	List Price 最低售價
PF22-10.005-03 R/L	4	1	0.4	50	3	0.05	0.2	500
PF22-10.005-05 R/L	4	1	0.4	50	5	0.05	0.2	500
PF22-20.005-06 R/L	4	2	0.8	50	6	0.05	0.4	500
PF22-20.005-10 R/L	4	2	0.8	50	10	0.05	0.4	530
PF22-20.005-14 R/L	4	2	0.8	50	14	0.05	0.4	570
PF22-30.010-09 R/L	4	3	1.3	50	9	0.1	0.6	530
PF22-30.010-15 R/L	4	3	1.3	50	15	0.1	0.6	570
PF22-30.010-21 R/L	4	3	1.3	50	21	0.1	0.6	610
PF22-40.010-12 R/L	4	4	1.8	50	12	0.1	0.8	530
PF22-40.010-20 R/L	4	4	1.8	50	20	0.1	0.8	570
PF22-40.010-28 R/L	4	4	1.8	60	28	0.1	0.8	610
PF22-50.020-15 R/L	6	5	2.3	50	15	0.2	1	640
PF22-50.020-25 R/L	6	5	2.3	50	25	0.2	1	680
PF22-50.020-30 R/L	6	5	2.3	60	30	0.2	1	720
PF22-60.020-18 R/L	6	6	2.8	50	18	0.2	1.2	640
PF22-60.020-30 R/L	6	6	2.8	60	30	0.2	1.2	690
PF22.60.020-42 R/L	6	6	2.8	75	42	0.2	1.2	730
PF22-70.020-21 R/L	8	7	3.3	60	21	0.2	1.4	810
PF22-70.020-35 R/L	8	7	3.3	75	35	0.2	1.4	850
PF22-70.020-49 R/L	8	7	3.3	100	49	0.2	1.4	970
PF22-80.020-24 R/L	8	8	3.8	60	24	0.2	1.6	860
PF22-80.020-40 R/L	8	8	3.8	75	40	0.2	1.6	910
PF22-80.020-56 R/L	8	8	3.8	100	56	0.2	1.6	990

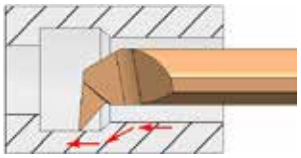
Profiling & Boring
仿形&搪孔

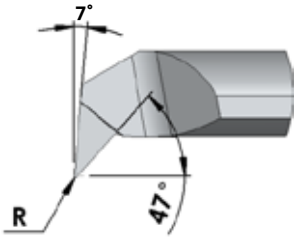
TiSiN 切削條件表 P192 Cutting Condition









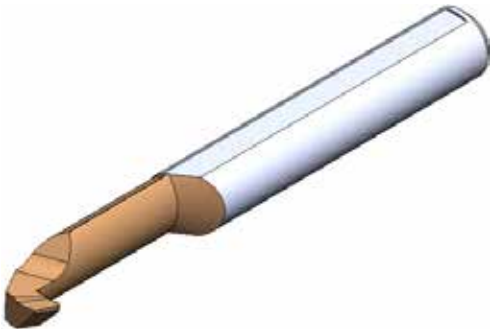


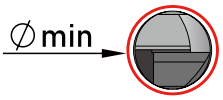
MODE 型號	D	Ø min	F	L	L1	R	H	List Price 最低售價
PF47-10.005-03 R/L	4	1	0.4	50	3	0.05	0.2	500
PF47-10.005-05 R/L	4	1	0.4	50	5	0.05	0.2	500
PF47-20.005-06 R/L	4	2	0.8	50	6	0.05	0.4	500
PF47-20.005-10 R/L	4	2	0.8	50	10	0.05	0.4	530
PF47-20.005-14 R/L	4	2	0.8	50	14	0.05	0.4	570
PF47-30.010-09 R/L	4	3	1.3	50	9	0.1	0.6	530
PF47-30.010-15 R/L	4	3	1.3	50	15	0.1	0.6	570
PF47-30.010-21 R/L	4	3	1.3	50	21	0.1	0.6	610
PF47-40.010-12 R/L	4	4	1.8	50	12	0.1	0.8	530
PF47-40.010-20 R/L	4	4	1.8	50	20	0.1	0.8	570
PF47-40.010-28 R/L	4	4	1.8	60	28	0.1	0.8	610
PF47-50.020-15 R/L	6	5	2.3	50	15	0.2	1	640
PF47-50.020-25 R/L	6	5	2.3	50	25	0.2	1	680
PF47-50.020-35 R/L	6	5	2.3	60	35	0.2	1	720
PF47-60.020-18 R/L	6	6	2.8	50	18	0.2	1.2	640
PF47-60.020-30 R/L	6	6	2.8	60	30	0.2	1.2	690
PF47.60.020-42 R/L	6	6	2.8	75	42	0.2	1.2	730
PF47-70.020-21 R/L	8	7	3.3	60	21	0.2	1.4	810
PF47-70.020-35 R/L	8	7	3.3	75	35	0.2	1.4	850
PF47-70.020-49 R/L	8	7	3.3	100	49	0.2	1.4	970
PF47-80.020-24 R/L	8	8	3.8	60	24	0.2	1.6	860
PF47-80.020-40 R/L	8	8	3.8	75	40	0.2	1.6	910
PF47-80.020-56 R/L	8	8	3.8	100	56	0.2	1.6	990

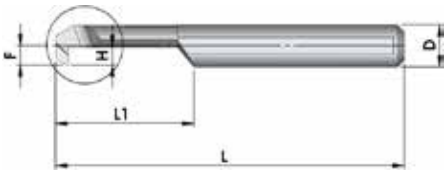
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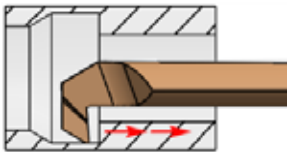
Back Turning
背車削

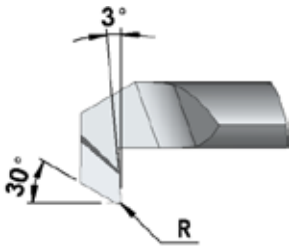
TiSiN 切削條件表 P192 Cutting Condition









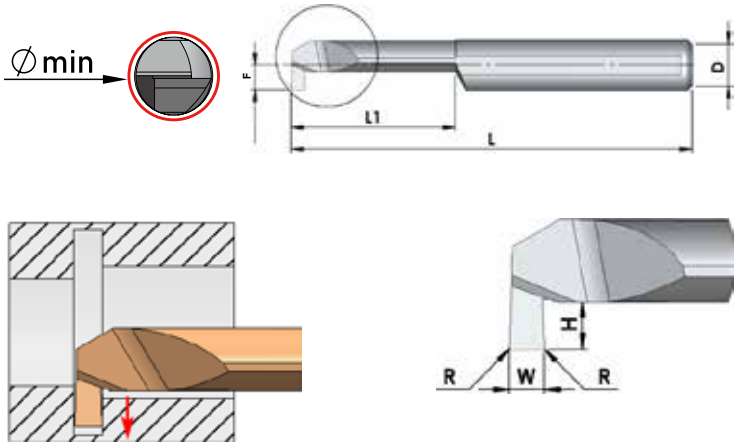


MODE 型號	D	Ø min	F	L	L1	R	H	W	List Price 最低售價
BT30-40.010-12 R/L	4	4	1.8	50	12	0.1	1	1.5	530
BT30-40.010-20 R/L	4	4	1.8	50	20	0.1	1	1.5	600
BT30-60.020-18 R/L	6	6	2.8	50	18	0.2	1.5	2	620
BT30-60.020-30 R/L	6	6	2.8	60	30	0.2	1.5	2.5	690
BT30-80.020-24 R/L	8	8	3.8	60	24	0.2	2	2.5	840
BT30-80.020-40 R/L	8	8	3.8	75	40	0.2	2	2.5	910

Internal Grooving
內徑溝槽

TiSiN 切削條件表 P192 Cutting Condition





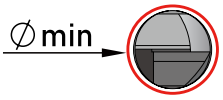
MODE 型號	D	Ø min	F	L	L1	W	R	H	List Price 最低售價
IG05-40.005-10 R/L	4	4	1.8	50	10	0.5	0.05	0.5	580
IG05-40.005-15 R/L	4	4	1.8	50	15	0.5	0.05	0.5	640
IG10-40.010-10 R/L	4	4	1.8	50	10	1.0	0.10	1.0	580
IG10-40.010-15 R/L	4	4	1.8	50	15	1.0	0.10	1.0	640
IG15-40.015-10 R/L	4	4	1.8	50	10	1.5	0.15	1.0	580
IG15-40.015-15 R/L	4	4	1.8	60	15	1.5	0.15	1.0	640
IG10-50.010-15 R/L	6	5	2.3	50	15	1.0	0.10	1.2	690
IG10-50.010-25 R/L	6	5	2.3	50	25	1.0	0.10	1.2	750
IG15-50.015-15 R/L	6	5	2.3	50	15	1.5	0.15	1.2	690
IG15-50.015-25 R/L	6	5	2.3	50	25	1.5	0.15	1.2	750
IG20-50.020-15 R/L	6	5	2.3	50	15	2.0	0.20	1.2	690
IG20-50.020-25 R/L	6	5	2.3	50	25	2.0	0.20	1.2	750
IG10-60.010-15 R/L	6	6	2.8	50	15	1.0	0.10	1.5	690
IG10-60.010-25 R/L	6	6	2.8	50	25	1.0	0.10	1.5	750
IG15-60.015-15 R/L	6	6	2.8	50	15	1.5	0.15	1.5	690
IG15-60.015-25 R/L	6	6	2.8	50	25	1.5	0.15	1.5	750
IG20.60.020-15 R/L	6	6	2.8	50	15	2.0	0.20	1.5	690
IG20.60.020-25 R/L	6	6	2.8	50	25	2.0	0.20	1.5	750
IG10-70.010-20 R/L	8	7	3.3	60	20	1.0	0.10	1.8	770
IG10-70.010-30 R/L	8	7	3.3	75	30	1.0	0.10	1.8	860
IG15-70.015-20 R/L	8	7	3.3	60	20	1.5	0.15	2.0	770
IG15-70.015-30 R/L	8	7	3.3	75	30	1.5	0.15	2.0	860
IG20-70.020-20 R/L	8	7	3.3	60	20	2.0	0.20	2.5	770
IG20-70.020-30 R/L	8	7	3.3	75	30	2.0	0.20	2.5	860
IG10-80.010-20 R/L	8	8	3.8	60	20	1.0	0.10	1.8	770
IG10-80.010-30 R/L	8	8	3.8	75	30	1.0	0.10	1.8	860
IG15-80.015-20 R/L	8	8	3.8	60	20	1.5	0.15	2.0	770
IG15-80.015-30 R/L	8	8	3.8	75	30	1.5	0.15	2.0	860
IG20-80.020-20 R/L	8	8	3.8	60	20	2.0	0.20	2.5	770
IG20-80.020-30 R/L	8	8	3.8	75	30	2.0	0.20	2.5	860

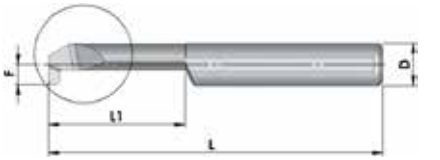
www.speedtiger.com.tw

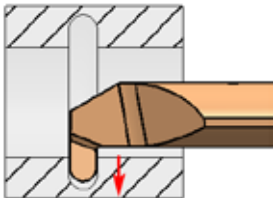
Internal Grooving Radius
內徑圓溝槽

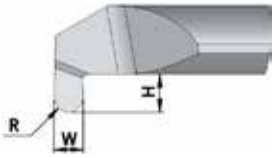
TiSiN 切削條件表 P192 Cutting Condition







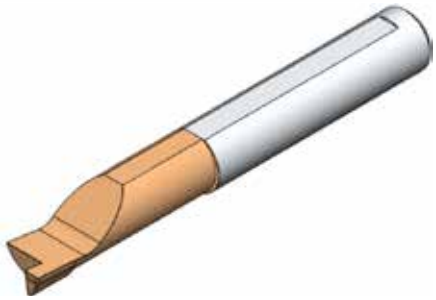


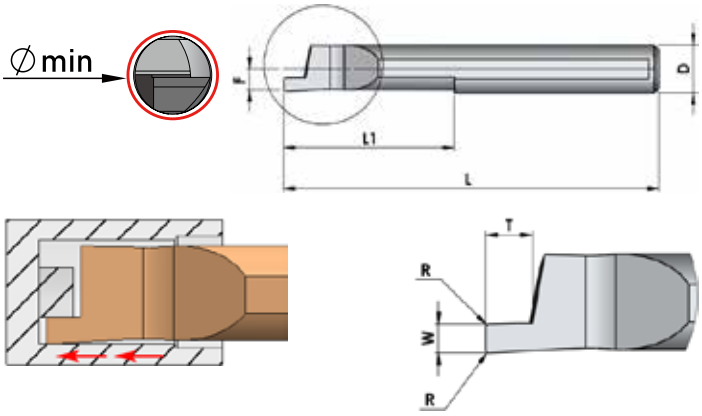


MODE 型號	D	Ø min	F	L	L1	W	R	H	List Price 最低售價
IGR10-40.050-12 R/L	4	4	1.8	50	12	1.0	0.50	1.0	720
IGR15-40.075-12R/L	4	4	1.8	50	12	1.5	0.75	1.0	720
IGR20-40.100-12 R/L	4	4	1.8	50	12	2.0	1.00	1.3	720
IGR10-60.050-18 R/L	6	6	2.8	50	18	1.0	0.50	1.6	860
IGR15-60.075-18 R/L	6	6	2.8	50	18	1.5	0.75	1.6	860
IGR20-60.100-18 R/L	6	6	2.8	50	18	2.0	1.00	1.6	860
IGR10-80.050-24 R/L	8	8	3.8	60	24	1.0	0.50	2.5	1180
IGR15-80.075-24 R/L	8	8	3.8	60	24	1.5	0.75	2.5	1180
IGR20-80.100-24 R/L	8	8	3.8	60	24	2.0	1.00	2.5	1180

Face Grooving
端面溝槽

TiSiN 切削條件表 P192 Cutting Condition



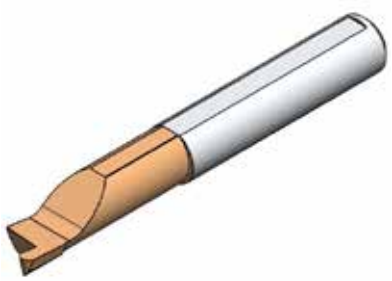


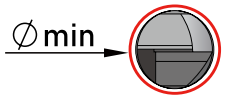
MODE 型號	D	Ø min	F	L	L1	W	R	T	List Price 最低售價
FG075-40.010-15 R/L	4	4	1.8	50	15	0.75	0.1	1.2	610
FG100-40.010-15 R/L	4	4	1.8	50	15	1.00	0.1	1.5	610
FG150-40.010-15 R/L	4	4	1.8	50	15	1.50	0.1	2.6	610
FG075-50.010-22 R/L	6	5	2.3	50	22	0.75	0.1	1.2	720
FG100-50.010-22 R/L	6	5	2.3	50	22	1.00	0.1	1.5	720
FG150-50.010-22 R/L	6	5	2.3	50	22	1.50	0.1	2.5	720
FG200-50.010-22 R/L	6	5	2.3	50	22	2.00	0.1	3.6	720
FG100-60.010-22R/L	6	6	2.8	50	22	1.00	0.1	1.5	720
FG150-60.010-22R/L	6	6	2.8	50	22	1.50	0.1	2.5	720
FG200-60.010-22 R/L	6	6	2.8	50	22	2.00	0.1	3.0	720
FG250-60.010-22 R/L	6	6	2.8	50	22	2.50	0.1	4.6	720
FG250-80.010-22 R/L	8	8	3.8	60	22	2.50	0.1	4.6	920

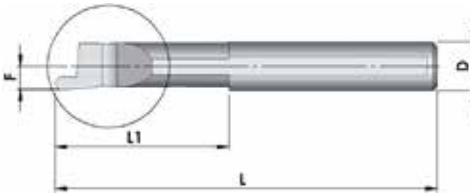
www.speedtiger.com.tw

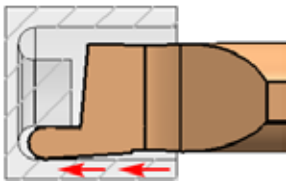
Face Grooving Radius
端面圓溝槽

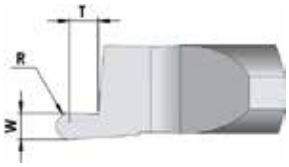
TiSiN 切削條件表 P192 Cutting Condition







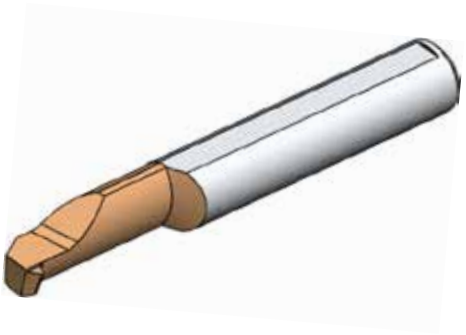


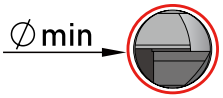


MODE 型號	D	Ø min	F	L	L1	W	R	T	List Price 最低售價
FGR100-40.050-15 R/L	4	4	1.8	50	15	1.0	0.50	1.2	800
FGR150-40.075-15 R/L	4	4	1.8	50	15	1.5	0.75	1.5	800
FGR100-50.050-22 R/L	6	5	2.3	50	22	1.0	0.50	1.2	910
FGR150-50.075-22 R/L	6	5	2.3	50	22	1.5	0.75	1.5	910
FGR200-50.100-22 R/L	6	5	2.3	50	22	2.0	1.00	2.5	910
FGR100-60.050-22 R/L	6	6	2.3	50	22	1.0	0.50	1.2	910
FGR150-60.075-22R/L	6	6	2.8	50	22	1.5	0.75	1.5	910
FGR200-60.100-22R/L	6	6	2.8	50	22	2.0	1.00	2.5	910

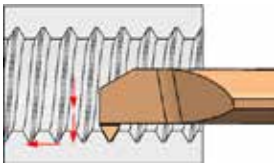
Threading
螺紋車削

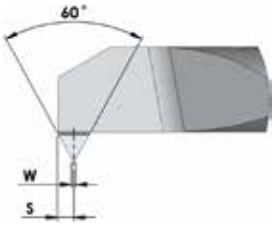
TiSiN 切削條件表 P193
Cutting Condition











MODE 型號	D	Ø min	F	P(mm)	P(TPI)	L	L1	S	W	List Price 最低售價
TA60-23-08 R/L	4	2.3	1.0	0.2-0.5	80-48	50	8	0.45	0.03	580
TA60-30-15 R/L	4	3.0	1.3	0.5-0.75	40-36	50	15	0.75	0.06	620
TA60-40-15 R/L	4	4.0	1.8	0.5-1.0	40-24	50	15	0.75	0.06	620
TA60-60-20 R/L	6	6.0	2.8	0.75-1.5	36-18	50	20	0.80	0.09	730

Internal Turning（Boring & Profiling）內徑車削（搪孔 & 仿形）

產品規格表 P88-90
Specification page

Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給	Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給
低碳鋼，易削鋼 S10C，SUM22等...	50-140	0.01-0.12	碳鋼，合金鋼 S45C，SCM415等...	30-120	0.01-0.1
不鏽鋼 SUS303，SUS430等…	20-100	0.01-0.1	灰鑄鐵，球墨鑄鐵 FC200，FCD400等…	30-100	0.01-0.08
鋁合金 A5052，A6061，A7025等…	50-140	0.01-0.12	鈦合金，耐熱合金 Ti-6Al-4V(TC4)等…	20-80	0.01-0.08
黃銅 C2801，C3604等…	50-150	0.01-0.12			

Internal Cutting 內徑槽切削

產品規格表 P91-93
Specification page

Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給	Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給
低碳鋼，易削鋼 S10C，SUM22等...	50-140	0.01-0.04	碳鋼，合金鋼 S45C，SCM415等...	30-120	0.01-0.04
不鏽鋼 SUS303，SUS430等…	20-100	0.01-0.04	灰鑄鐵，球墨鑄鐵 FC200，FCD400等…	30-100	0.01-0.04
鋁合金 A5052，A6061，A7025等…	50-140	0.01-0.04	鈦合金，耐熱合金 Ti-6Al-4V(TC4)等…	20-80	0.01-0.04
黃銅 C2801，C3604等…	50-150	0.01-0.04			

Face Cutting 端面槽切削

產品規格表 P94-95
Specification page

Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給	Work Materials 被切削材料	Vc(m/min) 切削速度	f(mm/rev) 進給
低碳鋼，易削鋼 S10C，SUM22等...	50-140	0.01-0.06	碳鋼，合金鋼 S45C，SCM415等...	30-120	0.01-0.06
不鏽鋼 SUS303，SUS430等…	20-100	0.01-0.06	灰鑄鐵，球墨鑄鐵 FC200，FCD400等…	30-100	0.01-0.06
鋁合金 A5052，A6061，A7025等…	50-140	0.01-0.06	鈦合金，耐熱合金 Ti-6Al-4V(TC4)等…	20-80	0.01-0.06
黃銅 C2801，C3604等…	50-150	0.01-0.06			

產品規格表 P96
Specification page

Internal Threading 內徑螺紋切削

Work Materials 被切削材料	Vc(m/min) 切削速度	P-0.5mm Number of Passes 進刀次數	P-0.75mm Number of Passes 進刀次數	P-1.0mm Number of Passes 進刀次數	P-1.25mm Number of Passes 進刀次數	P-1.5mm Number of Passes 進刀次數
S10C，SUM22，etc.	50-150	5~7	7~9	9~11	11~14	14~17
S45C，SCM415等...	30-120	6~8	8~10	10~12	12~15	15~18
SUS303，SUS430等…	20-100	8~10	10~12	12~14	15~17	18~20
FC200，FCD400等…	30-100	7~9	9~11	11~13	14~16	17~19
A5052，A6061，A7025等…	50-150	6~8	8~10	10~12	12~14	15~17
C2801，C3604，etc.	50-150	6~8	8~10	10~12	12~14	15~17

產品規格表 P75
Specification page

PVE1T Series
PVE1T 系列

type	PVE1T		
Side Milling 	TITANIUM ALLOYS (DIFFICULT) Ti10Al2Fe3Al, Ti5Al5V5Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti15V3		
Hardness BRINELL	≦ 300		
HRC	≦ 31		
Vc	60		
ae/ap	ae=0.4D ap=1.5D		
MILL DIA (Metric)	RPM	Fz	Feed 4 flutes
4	4,775	0.0159	303.2
5	3,820	0.0238	363.7
6	3,183	0.0318	404.3
8	2,388	0.0397	378.7
10	1,910	0.0429	327.5
12	1,592	0.0582	370.6
16	1,194	0.0642	306.5
20	955	0.0762	291.1

type	PVE1T		
Slot Milling 	TITANIUM ALLOYS (DIFFICULT) Ti10Al2Fe3Al, Ti5Al5V5Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti15V3		
Hardness BRINELL	≦ 300		
HRC	≦ 31		
Vc	50		
ae/ap	ae=1D ap=1.25D		
MILL DIA (Metric)	RPM	Fz	Feed 4 flutes
4	3,980	0.0119	189.5
5	3,184	0.0190	242.5
6	2,653	0.0265	280.8
8	1,990	0.0297	236.7
10	1,592	0.0333	212.3
12	1,327	0.0423	224.6
16	995	0.0494	196.5
20	796	0.0572	182.0