

可转位钻头

增加
H型刀片
8D型
刀柄！

WSTAR 钻头

能够始终稳定钻削的 可转位钻头



H 型



U 型

高刚性、长寿命材料

MIRACLE涂层 **VP15TF**

MIRACLE涂层具有高耐粘结性能，能够用于加工各种材料的工件，诸如普通钢、碳钢、合金钢、不锈钢和铸铁。



可转位钻头

WSTAR 钻头

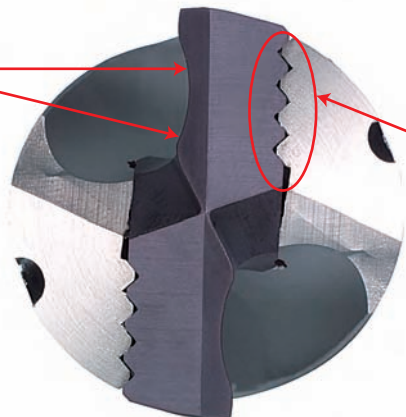
■特点

确保超群锋利性与精度的设计

波形切削刃能够实现切屑的最佳控制

波形切削刃

凹形刃使切削锋利，
凸形刃实现优异的切削刃强度。



切削刃形状

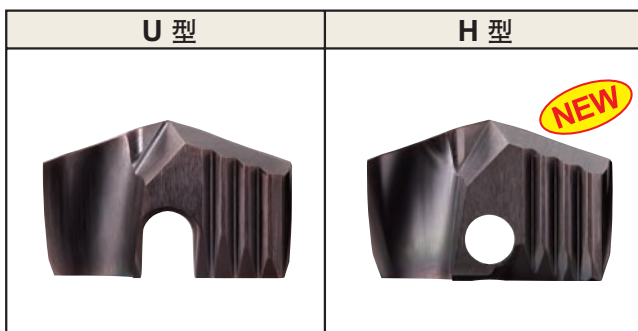
锯齿形状可保持高精度

三菱独特的锯齿形状

三菱独特的锯齿结构能够保持高夹紧精度。

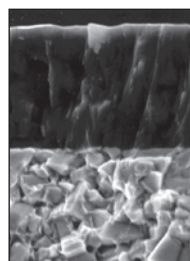
可选择的刀片

- 在容易更换的U型刀片基础上，增加了强固夹紧型H型刀片并标准化。



长寿命刀片

- 使用 **MIRACLE**® 涂层 **VP15TF**，能够实现优异的刀具寿命



MIRACLE®
涂层
(Al,Ti)N

超微粒
硬质合金
TF15

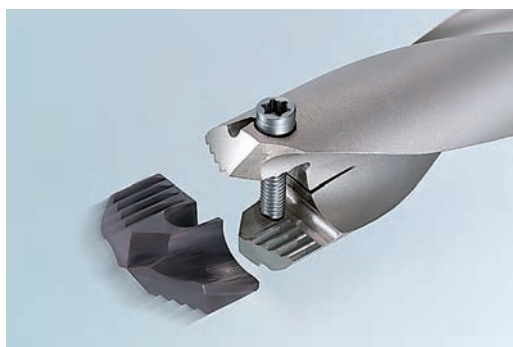
VP15TF 的特点

具有高度耐粘结性的 **MIRACLE**® 涂层的 **VP15TF** 能够用于加工各种材料，诸如普通钢、软钢、碳钢、合金钢、不锈钢和铸铁等。

VP15TF的组织

使用方便(U型刀片)

- 仅松开夹紧螺钉便能够简单地更换刀片。



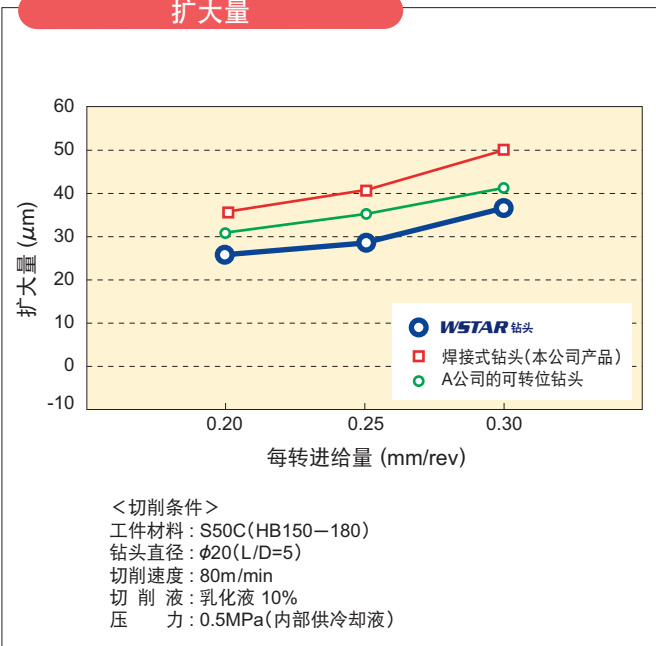
高耐久性刀体

- 刀体采用耐高温的特殊合金钢，并且通过特殊表面处理提高了耐腐蚀性及耐摩擦性。

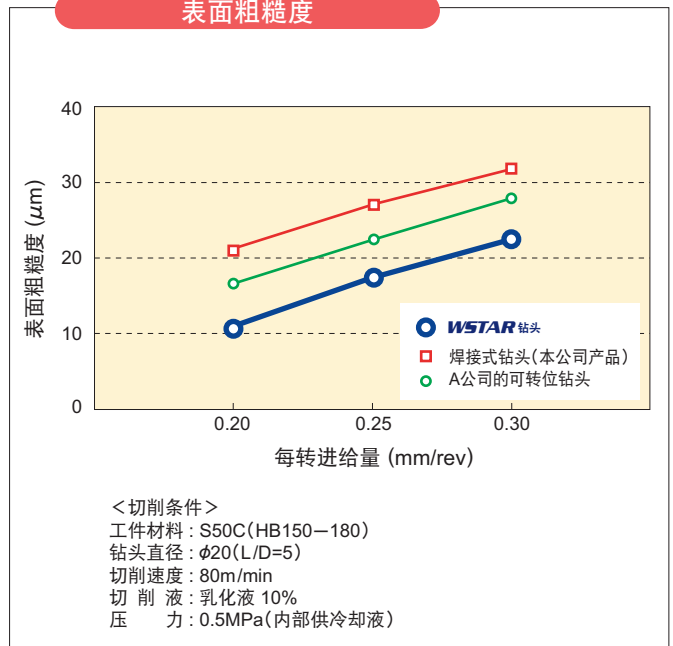


■ 切削性能

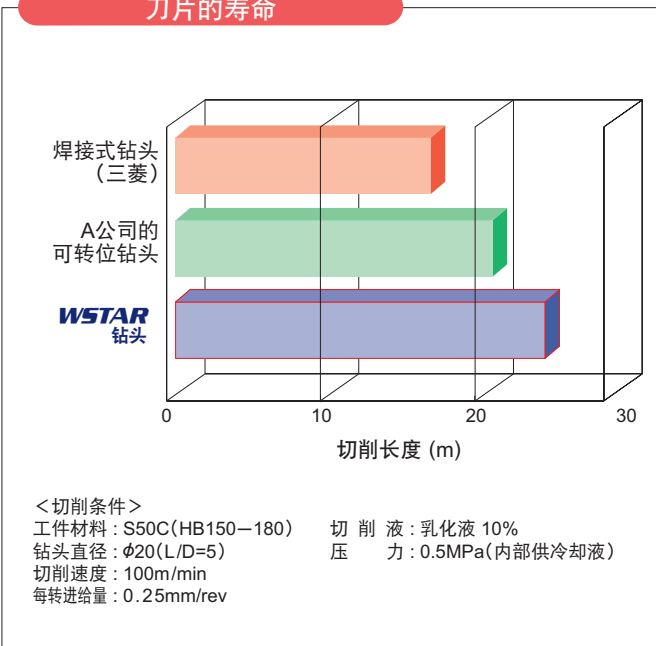
扩大量



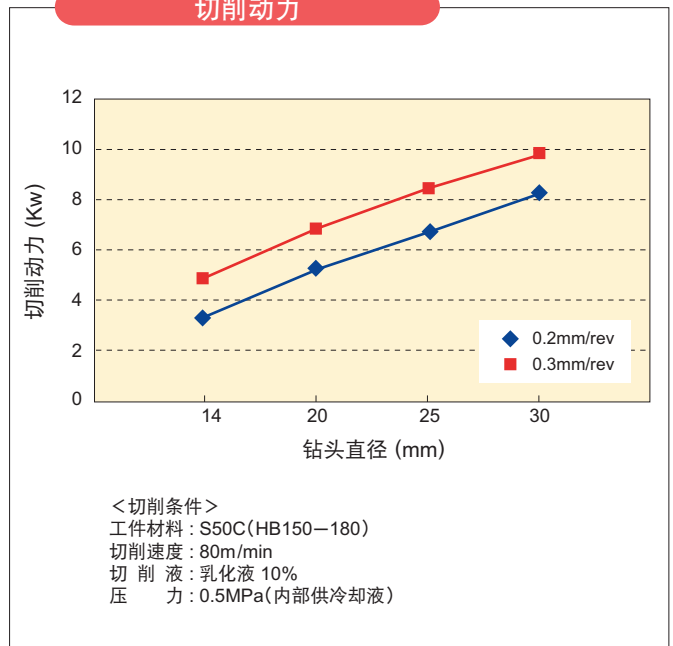
表面粗糙度



刀片的使用寿命



切削动力



切削动力与扭矩、轴向力的计算式(标准值)

$$P_{net} = \alpha_1 \times \frac{2\pi \times n \times M_d}{102 \times 60 \times 100} + \beta_1 \times \frac{fr \times n \times T}{102 \times 60 \times 1000} \text{ (kW)}$$

$$M_d \text{ (扭矩)} = \alpha_2 \times HB \times fr^{\beta_2} \times D^{r_2} \text{ (kg} \cdot \text{cm)}$$

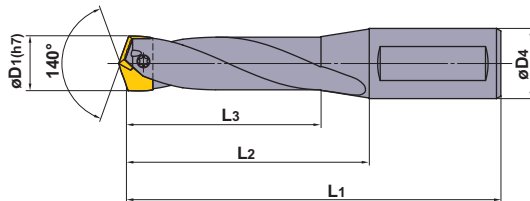
$$T \text{ (轴向力)} = \alpha_3 \times HB \times fr^{\beta_3} \times D^{r_3} \text{ (kg} \cdot \text{f)}$$

(M_d与T的计算式是根据实验数据推出的)

P _{net} (kW)	: 钻孔所需动力	α ₁ (系数)	: 1.5
π (3.14)	: 圆周率	α ₂ (系数)	: 0.025
n (min ⁻¹)	: 主轴转速	α ₃ (系数)	: 0.8
M _d (kg·cm)	: 扭矩	β ₁ (系数)	: 1.0
fr (mm/rev)	: 每转进给量	β ₂ (系数)	: 0.8
T (kgf)	: 轴向力	β ₃ (系数)	: 0.7
D (mm)	: 钻头直径	r ₂ (系数)	: 1.8
HB (HB)	: 工件材料硬度	r ₃ (系数)	: 0.65
(根据实验数据值)			

WSTAR 钻头

(通用型)



刀柄规格

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)				夹紧螺钉 WS254012T	扳手 TKY08D	刮板 WPT4405	防烧熔剂 MK1KS
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长 L3	颈长 L2	全长 L1	柄径 D4				
						VP15TF	VP10H								
14.0 14.4	3	TAWSNH1400S16	●	14.0	TAWNH1400T	●	<input type="checkbox"/>	51	67	115	16	WS254012T	TKY08D	WPT4405	MK1KS
				14.1	TAWNH1410T	●	<input type="checkbox"/>	80	97	145	16				
				14.2	TAWNH1420T	●	<input type="checkbox"/>								
				14.3	TAWNH1430T	●	<input type="checkbox"/>								
14.5 15.4	5	TAWMNH1400S16	●	14.4	TAWNH1440T	●	<input type="checkbox"/>	122	137	185	16	WS254012T	TKY08D	WPT4405	MK1KS
				14.5	TAWNH1450T	●	<input type="checkbox"/>	54	75	125	20				
				14.6	TAWNH1460T	●	<input type="checkbox"/>								
				14.7	TAWNH1470T	●	<input type="checkbox"/>								
15.5 16.4	8	TAWLNH1400S16	●	14.8	TAWNH1480T	●	<input type="checkbox"/>	85	105	155	20	WS254013T	TKY08D	WPT4405	MK1KS
				14.9	TAWNH1490T	●	<input type="checkbox"/>								
				15.0	TAWNH1500T	●	<input type="checkbox"/>								
				15.1	TAWNH1510T	●	<input type="checkbox"/>								
				15.2	TAWNH1520T	●	<input type="checkbox"/>								
				15.3	TAWNH1530T	●	<input type="checkbox"/>								
				15.4	TAWNH1540T	●	<input type="checkbox"/>								
				15.5 16.4	3	TAWSN1600S20	●								
15.6	TAWN1560T	●	<input type="checkbox"/>												
15.7	TAWN1570T	●	<input type="checkbox"/>												
15.8	TAWN1580T	●	<input type="checkbox"/>												
15.9	TAWN1590T	●	<input type="checkbox"/>												
16.0	TAWN1600T	●	<input type="checkbox"/>												
16.1	TAWN1610T	●	<input type="checkbox"/>												
16.2	TAWN1620T	●	<input type="checkbox"/>												
5	TAWMN1600S20	●	16.3		TAWN1630T	●	<input type="checkbox"/>	91 (91)	115 (115)	165 (165)	20	WS254014T	TKY08D	WPT4405	MK1KS
			16.4		TAWN1640T	●	<input type="checkbox"/>								
			16.5		TAWN1650T	●	<input type="checkbox"/>								
			16.6		TAWN1660T	●	<input type="checkbox"/>								
			16.7		TAWN1670T	●	<input type="checkbox"/>								
			16.8		TAWN1680T	●	<input type="checkbox"/>								
			16.9		TAWN1690T	●	<input type="checkbox"/>								
			17.0		TAWN1700T	●	<input type="checkbox"/>								
8	TAWLN1600S20	●	16.2	TAWN1620T	●	<input type="checkbox"/>	138 (138)	158 (158)	208 (208)	20	WS254014T	TKY08D	WPT4405	MK1KS	
			16.3	TAWN1630T	●	<input type="checkbox"/>									
			16.4	TAWN1640T	●	<input type="checkbox"/>									
			16.5	TAWN1650T	●	<input type="checkbox"/>									
			16.6	TAWN1660T	●	<input type="checkbox"/>									
			16.7	TAWN1670T	●	<input type="checkbox"/>									
			16.8	TAWN1680T	●	<input type="checkbox"/>									
			16.9	TAWN1690T	●	<input type="checkbox"/>									

注1: ()内尺寸为安装TAWN(U型)刀片时的尺寸。

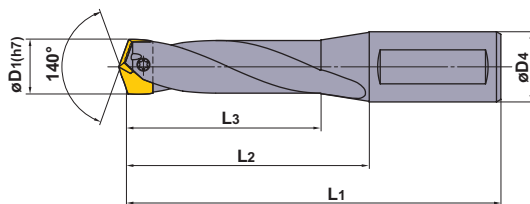
注2: TAWS/M/L NH1400S16、TAWS/M/L NH1500S20的刀柄不能使用TAWN(U型)刀片。

注3: 标准品以外的特殊形状(例如不同直径,长度和带倒角刃等),材料等有什么需求也可咨询。

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)							
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长 L3	颈长 L2	全长 L1	柄径 D4				
						VP15TF	VP10H								
16.5 17.4	3	TAWSN1700S20	●	16.5	TAWN1650T	●	<input type="checkbox"/>	61 (61)	85 (85)	135 (135)	20	WS254015T	①TKY08D	WPT4405	MK1KS
					TAWNH1650T	●	<input type="checkbox"/>								
				16.6	TAWN1660T	●	<input type="checkbox"/>								
					TAWNH1660T	●	<input type="checkbox"/>								
	5	TAWMN1700S20	●	16.7	TAWN1670T	●	<input type="checkbox"/>	96 (96)	120 (120)	170 (170)	20	WS254015T	①TKY08D	WPT4405	MK1KS
					TAWNH1670T	●	<input type="checkbox"/>								
				16.8	TAWN1680T	●	<input type="checkbox"/>								
					TAWNH1680T	●	<input type="checkbox"/>								
	8 <small>NEW</small>	TAWLN1700S20	●	16.9	TAWN1690T	●	<input type="checkbox"/>	146 (146)	166 (166)	216 (216)	20	WS254015T	①TKY08D	WPT4405	MK1KS
					TAWNH1690T	●	<input type="checkbox"/>								
				17.0	TAWN1700T	●	<input type="checkbox"/>								
					TAWNH1700T	●	<input type="checkbox"/>								
17.5 18.4	3	TAWSN1800S20	●	17.1	TAWN1710T	●	<input type="checkbox"/>	65 (65)	90 (90)	140 (140)	20	WS254016T	①TKY08D	WPT4405	MK1KS
					TAWNH1710T	●	<input type="checkbox"/>								
				17.2	TAWN1720T	●	<input type="checkbox"/>								
					TAWNH1720T	●	<input type="checkbox"/>								
	5	TAWMN1800S20	●	17.3	TAWN1730T	●	<input type="checkbox"/>	102 (102)	125 (125)	175 (175)	20	WS254016T	①TKY08D	WPT4405	MK1KS
					TAWNH1730T	●	<input type="checkbox"/>								
				17.4	TAWN1740T	●	<input type="checkbox"/>								
					TAWNH1740T	●	<input type="checkbox"/>								
	8 <small>NEW</small>	TAWLN1800S20	●	17.5	TAWN1750T	●	<input type="checkbox"/>	154 (154)	174 (174)	224 (224)	20	WS254016T	①TKY08D	WPT4405	MK1KS
					TAWNH1750T	●	<input type="checkbox"/>								
				17.6	TAWN1760T	●	<input type="checkbox"/>								
					TAWNH1760T	●	<input type="checkbox"/>								
18.5 19.4	3	TAWSN1900S25	●	17.7	TAWN1770T	●	<input type="checkbox"/>	68 (68)	99 (99)	155 (155)	25	WS304517T	②TKY10T	WPT4405	MK1KS
					TAWNH1770T	●	<input type="checkbox"/>								
				17.8	TAWN1780T	●	<input type="checkbox"/>								
					TAWNH1780T	●	<input type="checkbox"/>								
	5	TAWMN1900S25	●	17.9	TAWN1790T	●	<input type="checkbox"/>	107 (107)	134 (134)	190 (190)	25	WS304517T	②TKY10T	WPT4405	MK1KS
					TAWNH1790T	●	<input type="checkbox"/>								
				18.0	TAWN1800T	●	<input type="checkbox"/>								
					TAWNH1800T	●	<input type="checkbox"/>								
	8 <small>NEW</small>	TAWLN1900S25	●	18.1	TAWN1810T	●	<input type="checkbox"/>	162 (162)	185 (185)	241 (241)	25	WS304517T	②TKY10T	WPT4405	MK1KS
					TAWNH1810T	●	<input type="checkbox"/>								
				18.2	TAWN1820T	●	<input type="checkbox"/>								
					TAWNH1820T	●	<input type="checkbox"/>								
8 <small>NEW</small>	TAWLN1900S25	●	18.3	TAWN1830T	●	<input type="checkbox"/>	107 (107)	134 (134)	190 (190)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1830T	●	<input type="checkbox"/>									
			18.4	TAWN1840T	●	<input type="checkbox"/>									
				TAWNH1840T	●	<input type="checkbox"/>									
8 <small>NEW</small>	TAWLN1900S25	●	18.5	TAWN1850T	●	<input type="checkbox"/>	162 (162)	185 (185)	241 (241)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1850T	●	<input type="checkbox"/>									
			18.6	TAWN1860T	●	<input type="checkbox"/>									
				TAWNH1860T	●	<input type="checkbox"/>									
8 <small>NEW</small>	TAWLN1900S25	●	18.7	TAWN1870T	●	<input type="checkbox"/>	107 (107)	134 (134)	190 (190)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1870T	●	<input type="checkbox"/>									
			18.8	TAWN1880T	●	<input type="checkbox"/>									
				TAWNH1880T	●	<input type="checkbox"/>									
8 <small>NEW</small>	TAWLN1900S25	●	18.9	TAWN1890T	●	<input type="checkbox"/>	107 (107)	134 (134)	190 (190)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1890T	●	<input type="checkbox"/>									
			19.0	TAWN1900T	●	<input type="checkbox"/>									
				TAWNH1900T	●	<input type="checkbox"/>									
8 <small>NEW</small>	TAWLN1900S25	●	19.1	TAWN1910T	●	<input type="checkbox"/>	162 (162)	185 (185)	241 (241)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1910T	●	<input type="checkbox"/>									
			19.2	TAWN1920T	●	<input type="checkbox"/>									
				TAWNH1920T	●	<input type="checkbox"/>									
8 <small>NEW</small>	TAWLN1900S25	●	19.3	TAWN1930T	●	<input type="checkbox"/>	162 (162)	185 (185)	241 (241)	25	WS304517T	②TKY10T	WPT4405	MK1KS	
				TAWNH1930T	●	<input type="checkbox"/>									
			19.4	TAWN1940T	●	<input type="checkbox"/>									
				TAWNH1940T	●	<input type="checkbox"/>									

WSTAR 钻头

(通用型)







刀柄规格

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)				夹紧螺钉	扳手	刮板	防烧熔剂
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长	颈长	全长	柄径				
						VP15TF	VP10H	L3	L2	L1	D4				
19.5 20.4	3	TAWSN2000S25	●	19.5	TAWN1950T	●	□	72 (72)	99 (99)	155 (155)	25	WS304518T	TKY10T	WPT4405	MK1KS
					TAWNH1950T	●	□								
					TAWN1960T	●	□								
					TAWNH1960T	●	□								
					TAWN1970T	●	□								
					TAWNH1970T	●	□								
	5	TAWMN2000S25	●	19.6	TAWN1980T	●	□	113 (113)	139 (139)	195 (195)	25	WS304518T	TKY10T	WPT4405	MK1KS
					TAWNH1980T	●	□								
					TAWN1990T	●	□								
					TAWNH1990T	●	□								
					TAWN2000T	●	□								
					TAWNH2000T	●	□								
NEW 8	TAWLN2000S25	●	20.0	TAWN2010T	□	□	170 (170)	193 (193)	249 (249)	25	WS304518T	TKY10T	WPT4405	MK1KS	
				TAWNH2010T	□	□									
				TAWN2020T	□	□									
				TAWNH2020T	□	□									
				TAWN2030T	□	□									
				TAWNH2030T	□	□									
20.5 21.4	3	TAWSN2100S25	●	20.5	TAWN2050T	●	□	75 (75)	99 (99)	155 (155)	25	WS304518T	TKY10T	WPT4405	MK1KS
					TAWNH2050T	●	□								
					TAWN2060T	□	□								
					TAWNH2060T	□	□								
					TAWN2070T	□	□								
					TAWNH2070T	□	□								
	5	TAWMN2100S25	●	20.6	TAWN2080T	□	□	118 (118)	139 (139)	195 (195)	25	WS304518T	TKY10T	WPT4405	MK1KS
					TAWNH2080T	□	□								
					TAWN2090T	□	□								
					TAWNH2090T	□	□								
					TAWN2100T	●	□								
					TAWNH2100T	●	□								
NEW 8	TAWLN2100S25	●	21.0	TAWN2110T	□	□	178 (178)	202 (202)	258 (258)	25	WS304518T	TKY10T	WPT4405	MK1KS	
				TAWNH2110T	□	□									
				TAWN2120T	□	□									
				TAWNH2120T	□	□									
				TAWN2130T	□	□									
				TAWNH2130T	□	□									
21.5 22.4	3	TAWSN2200S25	●	21.5	TAWN2150T	●	□	79.3 (79)	104.3 (104)	160.3 (160)	25	WS355520T	TKY15T	WPT4405	MK1KS
					TAWNH2150T	●	□								
					TAWN2160T	□	□								
	5	TAWMN2200S25	●	21.6	TAWN2170T	□	□	124.3 (124)	144.3 (144)	200.3 (200)	25	WS355520T	TKY15T	WPT4405	MK1KS
					TAWNH2160T	□	□								
					TAWN2170T	□	□								
NEW 8	TAWLN2200S25	●	21.7	TAWN2180T	□	□	186 (185.7)	210 (209.7)	266 (265.7)	25	WS355520T	TKY15T	WPT4405	MK1KS	
				TAWNH2170T	□	□									
				TAWN2180T	□	□									
				21.8	TAWN2190T	□	□								
					TAWNH2180T	□	□								
				21.9	TAWN2190T	□	□								

注1: () 内尺寸为安装TAWN (U型) 刀片时的尺寸。

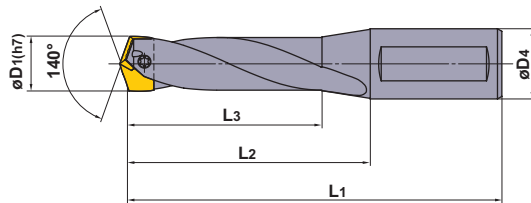
注2: 标准品以外的特殊形状(例如不同直径,长度和带倒角刃等),材料等有什么需求也可咨询。

●: 标准库存品 □: 预订产品

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)							
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长 L3	颈长 L2	全长 L1	柄径 D4				
						VP15TF	VP10H								
21.5 22.4 NEW	3	TAWSN2200S25	●	22.0	TAWN2200T	●	□	79.3 (79)	104.3 (104)	160.3 (160)	25	WS355520T	TKY15T	WPT4405	MK1KS
					TAWNH2200T	●	□								
				22.1	TAWN2210T	□	□								
	5	TAWMN2200S25	●	22.2	TAWN2220T	□	□	124.3 (124)	144.3 (144)	200.3 (200)	25	WS355520T	TKY15T	WPT4405	MK1KS
					TAWNH2220T	□	□								
				22.3	TAWN2230T	□	□								
	8	TAWLN2200S25	●	22.4	TAWN2240T	□	□	186 (185.7)	210 (209.7)	266 (265.7)	25	WS355520T	TKY15T	WPT4405	MK1KS
					TAWNH2240T	□	□								
					TAWN2250T	●	□								
22.5 23.4 NEW	3	TAWSN2300S25	●	22.5	TAWN2250T	●	□	82.3 (82)	104.3 (104)	160.3 (160)	25	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2250T	●	□								
				22.6	TAWN2260T	□	□								
				22.7	TAWN2270T	□	□								
				22.8	TAWN2280T	□	□								
	5	TAWMN2300S25	●	22.9	TAWN2290T	□	□	129.3 (129)	154.3 (154)	210.3 (210)	25	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2290T	□	□								
				23.0	TAWN2300T	●	□								
				23.1	TAWN2310T	□	□								
				23.2	TAWN2320T	□	□								
	8	TAWLN2300S25	●	23.3	TAWN2330T	□	□	194 (193.7)	223 (222.7)	279 (278.7)	25	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2330T	□	□								
				23.4	TAWN2340T	□	□								
					TAWNH2340T	□	□								
					TAWN2350T	●	□								
23.5 24.4 NEW	3	TAWSN2400S32	●	23.5	TAWN2350T	●	□	86.3 (86)	110.3 (110)	170.3 (170)	32	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2350T	●	□								
				23.6	TAWN2360T	□	□								
				23.7	TAWN2370T	□	□								
				23.8	TAWN2380T	□	□								
	5	TAWMN2400S32	●	23.9	TAWN2390T	□	□	135.3 (135)	160.3 (160)	220.3 (220)	32	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2390T	□	□								
				24.0	TAWN2400T	●	□								
				24.1	TAWN2410T	□	□								
				24.2	TAWN2420T	□	□								
	8	TAWLN2400S32	●	24.3	TAWN2430T	□	□	202 (201.7)	232 (231.7)	292 (291.7)	32	WS355521T	TKY15T	WPT4405	MK1KS
					TAWNH2430T	□	□								
				24.4	TAWN2440T	□	□								
					TAWNH2440T	□	□								
					TAWN2450T	●	□								
24.5 25.4 NEW	3	TAWSN2500S32	●	24.5	TAWN2450T	●	□	88.6 (88)	110.6 (110)	170.6 (170)	32	WS406023T	TKY25T	WPT4405	MK1KS
					TAWNH2450T	●	□								
				24.6	TAWN2460T	□	□								
	5	TAWMN2500S32	●	24.7	TAWN2470T	□	□	140.6 (140)	165.6 (165)	225.6 (225)	32	WS406023T	TKY25T	WPT4405	MK1KS
					TAWNH2470T	□	□								
				24.8	TAWN2480T	□	□								
	8	TAWLN2500S32	●	24.9	TAWN2490T	□	□	210 (209.4)	240 (239.4)	300 (299.4)	32	WS406023T	TKY25T	WPT4405	MK1KS
					TAWNH2490T	□	□								
					TAWN2500T	●	□								

WSTAR 钻头

(通用型)







刀柄规格

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)				夹紧螺钉	扳手	刮板	防烧熔剂
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长 L3	颈长 L2	全长 L1	柄径 D4				
						VP15TF	VP10H								
24.5 25.4	3	TAWSN2500S32	●	25.0	TAWN2500T	●	□	88.6 (88)	110.6 (110)	170.6 (170)	32	WS406023T	TKY25T	WPT4405	MK1KS
				25.1	TAWN2510T	□	□								
				25.2	TAWN2520T	□	□								
				25.3	TAWN2530T	□	□								
				25.4	TAWN2540T	□	□								
				25.5	TAWN2550T	●	□								
	5	TAWMN2500S32	●	25.2	TAWN2520T	□	□	140.6 (140)	165.6 (165)	225.6 (225)	32	WS406023T	TKY25T	WPT4405	MK1KS
				25.3	TAWN2530T	□	□								
				25.4	TAWN2540T	□	□								
				25.5	TAWN2550T	□	□								
				25.6	TAWN2560T	□	□								
				25.7	TAWN2570T	□	□								
25.5 26.4	3	TAWSN2600S32	●	25.5	TAWN2550T	●	□	92.6 (92)	115.6 (115)	175.6 (175)	32	WS406024T	TKY25T	WPT4405	MK1KS
				25.6	TAWN2560T	□	□								
				25.7	TAWN2570T	□	□								
				25.8	TAWN2580T	□	□								
				25.9	TAWN2590T	□	□								
				26.0	TAWN2600T	●	□								
	5	TAWMN2600S32	●	25.9	TAWN2590T	□	□	146.6 (146)	170.6 (170)	230.6 (230)	32	WS406024T	TKY25T	WPT4405	MK1KS
				26.0	TAWN2600T	●	□								
				26.1	TAWN2610T	□	□								
				26.2	TAWN2620T	□	□								
				26.3	TAWN2630T	□	□								
				26.4	TAWN2640T	□	□								
26.5 27.4	3	TAWSN2700S32	●	26.5	TAWN2650T	●	□	94.6 (94)	115.6 (115)	175.6 (175)	32	WS406024T	TKY25T	WPT4405	MK1KS
				26.6	TAWN2660T	□	□								
				26.7	TAWN2670T	□	□								
				26.8	TAWN2680T	□	□								
				26.9	TAWN2690T	□	□								
				27.0	TAWN2700T	●	□								
	5	TAWMN2700S32	●	27.0	TAWN2700T	●	□	151.6 (151)	175.6 (175)	235.6 (235)	32	WS406024T	TKY25T	WPT4405	MK1KS
				27.1	TAWN2710T	□	□								
				27.2	TAWN2720T	□	□								
				27.3	TAWN2730T	□	□								
				27.4	TAWN2740T	□	□								
				27.5	TAWN2750T	□	□								
8	TAWLN2700S32	●	27.3	TAWN2730T	□	□	226 (225.4)	256 (255.4)	316 (315.4)	32	WS406024T	TKY25T	WPT4405	MK1KS	
			27.4	TAWN2740T	□	□									
			27.5	TAWN2750T	□	□									
			27.6	TAWN2760T	□	□									
			27.7	TAWN2770T	□	□									
			27.8	TAWN2780T	□	□									

注1: () 内尺寸为安装TAWN (U型) 刀片时的尺寸。

注2: 标准品以外的特殊形状(例如不同直径,长度和带倒角刃等),材料等有什么需求也可咨询。

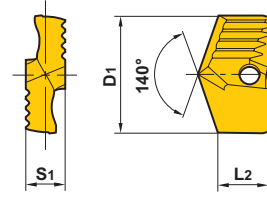
●: 标准库存品 □: 预订生产产品

钻头直径 适用范围 D1 (mm)	孔深 (l/d)	刀柄		适用刀片				尺寸 (mm)								
		型号	库存	钻头直径 D1 (mm)	型号	库存		有效槽长 L3	颈长 L2	全长 L1	柄径 D4					
						VP15TF	VP10H									
27.5 28.4	3	TAWSN2800S32	●	27.5	TAWN2750T	●	□	97.2 (97)	120.2 (120)	180.2 (180)	32	WS508026T	TKY27T	WPT4405	MK1KS	
					TAWNH2750T	●	□									
				27.6	TAWN2760T	□	□									
					TAWNH2760T	□	□									
				27.7	TAWN2770T	□	□									
		TAWNH2770T	□	□												
					27.8	TAWN2780T	□	□	157.2 (157)	180.2 (180)	240.2 (240)	32	WS508026T	TKY27T	WPT4405	MK1KS
		TAWNH2780T	□	□												
	27.9	TAWN2790T	□	□												
		TAWNH2790T	□	□												
	28.0	TAWN2800T	●	□												
		TAWNH2800T	●	□												
					28.1	TAWN2810T	□	□	234 (233.8)	264 (263.8)	324 (323.8)	32	WS508026T	TKY27T	WPT4405	MK1KS
		TAWNH2810T	□	□												
	28.2	TAWN2820T	□	□												
	TAWNH2820T	□	□													
28.3	TAWN2830T	□	□													
	TAWNH2830T	□	□													
				28.4	TAWN2840T	□	□									
				28.4	TAWNH2840T	□	□									
28.5 29.4	3	TAWSN2900S32	●	28.5	TAWN2850T	●	□	100.2 (100)	125.2 (125)	185.2 (185)	32	WS508027T	TKY27T	WPT4405	MK1KS	
					TAWNH2850T	●	□									
				28.6	TAWN2860T	□	□									
					TAWNH2860T	□	□									
				28.7	TAWN2870T	□	□									
		TAWNH2870T	□	□												
					28.8	TAWN2880T	□	□	162.2 (162)	185.2 (185)	245.2 (245)	32	WS508027T	TKY27T	WPT4405	MK1KS
		TAWNH2880T	□	□												
	28.9	TAWN2890T	□	□												
		TAWNH2890T	□	□												
	29.0	TAWN2900T	●	□												
		TAWNH2900T	●	□												
					29.1	TAWN2910T	□	□	242 (241.8)	272 (271.8)	332 (331.8)	32	WS508027T	TKY27T	WPT4405	MK1KS
		TAWNH2910T	□	□												
	29.2	TAWN2920T	□	□												
	TAWNH2920T	□	□													
29.3	TAWN2930T	□	□													
	TAWNH2930T	□	□													
				29.4	TAWN2940T	□	□									
				29.4	TAWNH2940T	□	□									
29.5 30.4	3	TAWSN3000S32	●	29.5	TAWN2950T	●	□	104.2 (104)	125.2 (125)	185.2 (185)	32	WS508027T	TKY27T	WPT4405	MK1KS	
					TAWNH2950T	●	□									
				29.6	TAWN2960T	□	□									
					TAWNH2960T	□	□									
				29.7	TAWN2970T	□	□									
		TAWNH2970T	□	□												
					29.8	TAWN2980T	□	□	167.2 (167)	195.2 (195)	255.2 (255)	32	WS508027T	TKY27T	WPT4405	MK1KS
		TAWNH2980T	□	□												
	29.9	TAWN2990T	□	□												
		TAWNH2990T	□	□												
	30.0	TAWN3000T	●	□												
		TAWNH3000T	●	□												
					30.1	TAWN3010T	□	□	250 (249.8)	285 (284.8)	345 (344.8)	32	WS508027T	TKY27T	WPT4405	MK1KS
		TAWNH3010T	□	□												
	30.2	TAWN3020T	□	□												
	TAWNH3020T	□	□													
30.3	TAWN3030T	□	□													
	TAWNH3030T	□	□													
				30.4	TAWN3040T	□	□									
				30.4	TAWNH3040T	□	□									

刀片

H 型

NEW



型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWNH1400T	●	□	14.0	7.6	5.0	TAWSNH 1400S16
1410T	●	□	14.1	7.6	5.0	TAWMNH 1400S16
1420T	●	□	14.2	7.6	5.0	TAWLNH 1400S16
1430T	●	□	14.3	7.6	5.0	
1440T	●	□	14.4	7.6	5.0	
1450T	●	□	14.5	7.5	5.0	
1460T	●	□	14.6	7.5	5.0	
1470T	●	□	14.7	7.5	5.0	TAWSNH 1500S20
1480T	●	□	14.8	7.5	5.0	
1490T	●	□	14.9	7.5	5.0	TAWMNH 1500S20
1500T	●	□	15.0	7.4	5.0	
1510T	●	□	15.1	7.4	5.0	TAWLNH 1500S20
1520T	●	□	15.2	7.4	5.0	
1530T	●	□	15.3	7.4	5.0	
1540T	●	□	15.4	7.4	5.0	
1550T	●	□	15.5	7.9	6.0	
1560T	●	□	15.6	7.9	6.0	
1570T	●	□	15.7	7.9	6.0	TAWSN 1600S20
1580T	●	□	15.8	7.9	6.0	
1590T	●	□	15.9	7.9	6.0	TAWMN 1600S20
1600T	●	□	16.0	7.8	6.0	
1610T	●	□	16.1	7.8	6.0	TAWLN 1600S20
1620T	●	□	16.2	7.8	6.0	
1630T	●	□	16.3	7.8	6.0	
1640T	●	□	16.4	7.8	6.0	
1650T	●	□	16.5	7.7	6.0	
1660T	●	□	16.6	7.7	6.0	
1670T	●	□	16.7	7.7	6.0	TAWSN 1700S20
1680T	●	□	16.8	7.7	6.0	
1690T	●	□	16.9	7.7	6.0	TAWMN 1700S20
1700T	●	□	17.0	7.6	6.0	
1710T	●	□	17.1	7.6	6.0	TAWLN 1700S20
1720T	●	□	17.2	7.6	6.0	
1730T	●	□	17.3	7.6	6.0	
1740T	●	□	17.4	7.6	6.0	
1750T	●	□	17.5	7.5	6.0	
1760T	●	□	17.6	7.5	6.0	
1770T	●	□	17.7	7.5	6.0	TAWSN 1800S20
1780T	●	□	17.8	7.5	6.0	
1790T	●	□	17.9	7.5	6.0	TAWMN 1800S20
1800T	●	□	18.0	7.4	6.0	
1810T	●	□	18.1	7.4	6.0	TAWLN 1800S20
1820T	●	□	18.2	7.4	6.0	
1830T	●	□	18.3	7.4	6.0	
1840T	●	□	18.4	7.4	6.0	

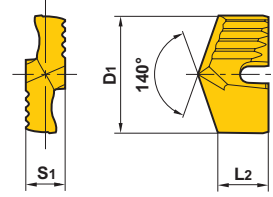
型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWNH1850T	●	□	18.5	9.3	7.0	
1860T	●	□	18.6	9.3	7.0	
1870T	●	□	18.7	9.3	7.0	TAWSN 1900S25
1880T	●	□	18.8	9.3	7.0	
1890T	●	□	18.9	9.3	7.0	TAWMN 1900S25
1900T	●	□	19.0	9.2	7.0	
1910T	●	□	19.1	9.2	7.0	TAWLN 1900S25
1920T	●	□	19.2	9.2	7.0	
1930T	●	□	19.3	9.2	7.0	
1940T	●	□	19.4	9.2	7.0	
1950T	●	□	19.5	9.1	7.0	
1960T	●	□	19.6	9.1	7.0	
1970T	●	□	19.7	9.1	7.0	
1980T	●	□	19.8	9.1	7.0	TAWSN 2000S25
1990T	●	□	19.9	9.1	7.0	
2000T	●	□	20.0	9.0	7.0	TAWMN 2000S25
2010T	□	□	20.1	9.0	7.0	
2020T	□	□	20.2	9.0	7.0	TAWLN 2000S25
2030T	□	□	20.3	9.0	7.0	
2040T	□	□	20.4	9.0	7.0	
2050T	●	□	20.5	8.9	7.0	
2060T	□	□	20.6	8.9	7.0	
2070T	□	□	20.7	8.9	7.0	TAWSN 2100S25
2080T	□	□	20.8	8.9	7.0	
2090T	□	□	20.9	8.9	7.0	TAWMN 2100S25
2100T	●	□	21.0	8.8	7.0	
2110T	□	□	21.1	8.8	7.0	TAWLN 2100S25
2120T	□	□	21.2	8.8	7.0	
2130T	□	□	21.3	8.8	7.0	
2140T	□	□	21.4	8.8	7.0	
2150T	●	□	21.5	10.6	8.0	
2160T	□	□	21.6	10.6	8.0	
2170T	□	□	21.7	10.6	8.0	TAWSN 2200S25
2180T	□	□	21.8	10.6	8.0	
2190T	□	□	21.9	10.6	8.0	TAWMN 2200S25
2200T	●	□	22.0	10.5	8.0	
2210T	□	□	22.1	10.5	8.0	TAWLN 2200S25
2220T	□	□	22.2	10.5	8.0	
2230T	□	□	22.3	10.5	8.0	
2240T	□	□	22.4	10.5	8.0	
2250T	●	□	22.5	10.4	8.0	TAWSN 2300S25
2260T	□	□	22.6	10.4	8.0	TAWMN 2300S25
2270T	□	□	22.7	10.4	8.0	
2280T	□	□	22.8	10.4	8.0	TAWLN 2300S25
2290T	□	□	22.9	10.4	8.0	

型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWNH2300T	●	□	23.0	10.3	8.0	TAWSN 2300S25
2310T	□	□	23.1	10.3	8.0	TAWMN 2300S25
2320T	□	□	23.2	10.3	8.0	TAWLN 2300S25
2330T	□	□	23.3	10.3	8.0	TAWSN 2300S25
2340T	□	□	23.4	10.3	8.0	TAWMN 2300S25
2350T	●	□	23.5	10.2	8.0	TAWLN 2300S25
2360T	□	□	23.6	10.2	8.0	TAWSN 2400S32
2370T	□	□	23.7	10.2	8.0	TAWMN 2400S32
2380T	□	□	23.8	10.2	8.0	TAWLN 2400S32
2390T	□	□	23.9	10.2	8.0	TAWSN 2400S32
2400T	●	□	24.0	10.1	8.0	TAWMN 2400S32
2410T	□	□	24.1	10.1	8.0	TAWLN 2400S32
2420T	□	□	24.2	10.1	8.0	TAWSN 2400S32
2430T	□	□	24.3	10.1	8.0	TAWMN 2400S32
2440T	□	□	24.4	10.1	8.0	TAWLN 2400S32
2450T	●	□	24.5	11.7	9.0	TAWSN 2500S32
2460T	□	□	24.6	11.7	9.0	TAWMN 2500S32
2470T	□	□	24.7	11.7	9.0	TAWLN 2500S32
2480T	□	□	24.8	11.7	9.0	TAWSN 2500S32
2490T	□	□	24.9	11.7	9.0	TAWMN 2500S32
2500T	●	□	25.0	11.6	9.0	TAWLN 2500S32
2510T	□	□	25.1	11.6	9.0	TAWSN 2500S32
2520T	□	□	25.2	11.6	9.0	TAWMN 2500S32
2530T	□	□	25.3	11.6	9.0	TAWLN 2500S32
2540T	□	□	25.4	11.6	9.0	TAWSN 2500S32
2550T	●	□	25.5	11.5	9.0	TAWMN 2500S32
2560T	□	□	25.6	11.5	9.0	TAWLN 2500S32
2570T	□	□	25.7	11.5	9.0	TAWSN 2600S32
2580T	□	□	25.8	11.5	9.0	TAWMN 2600S32
2590T	□	□	25.9	11.5	9.0	TAWLN 2600S32
2600T	●	□	26.0	11.4	9.0	TAWSN 2600S32
2610T	□	□	26.1	11.4	9.0	TAWMN 2600S32
2620T	□	□	26.2	11.4	9.0	TAWLN 2600S32
2630T	□	□	26.3	11.4	9.0	TAWSN 2600S32
2640T	□	□	26.4	11.4	9.0	TAWMN 2600S32
2650T	●	□	26.5	11.3	9.0	TAWLN 2600S32
2660T	□	□	26.6	11.3	9.0	TAWSN 2700S32
2670T	□	□	26.7	11.3	9.0	TAWMN 2700S32
2680T	□	□	26.8	11.3	9.0	TAWLN 2700S32
2690T	□	□	26.9	11.3	9.0	TAWSN 2700S32
2700T	●	□	27.0	11.2	9.0	TAWMN 2700S32
2710T	□	□	27.1	11.2	9.0	TAWLN 2700S32
2720T	□	□	27.2	11.2	9.0	TAWSN 2700S32
2730T	□	□	27.3	11.2	9.0	TAWMN 2700S32
2740T	□	□	27.4	11.2	9.0	TAWLN 2700S32

型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWNH2750T	●	□	27.5	12.3	10.0	TAWSN 2800S32
2760T	□	□	27.6	12.3	10.0	TAWMN 2800S32
2770T	□	□	27.7	12.3	10.0	TAWLN 2800S32
2780T	□	□	27.8	12.3	10.0	TAWSN 2800S32
2790T	□	□	27.9	12.3	10.0	TAWMN 2800S32
2800T	●	□	28.0	12.2	10.0	TAWLN 2800S32
2810T	□	□	28.1	12.2	10.0	TAWSN 2800S32
2820T	□	□	28.2	12.2	10.0	TAWMN 2800S32
2830T	□	□	28.3	12.2	10.0	TAWLN 2800S32
2840T	□	□	28.4	12.2	10.0	TAWSN 2800S32
2850T	●	□	28.5	12.1	10.0	TAWMN 2800S32
2860T	□	□	28.6	12.1	10.0	TAWLN 2800S32
2870T	□	□	28.7	12.1	10.0	TAWSN 2900S32
2880T	□	□	28.8	12.1	10.0	TAWMN 2900S32
2890T	□	□	28.9	12.1	10.0	TAWLN 2900S32
2900T	●	□	29.0	12.0	10.0	TAWSN 2900S32
2910T	□	□	29.1	12.0	10.0	TAWMN 2900S32
2920T	□	□	29.2	12.0	10.0	TAWLN 2900S32
2930T	□	□	29.3	12.0	10.0	TAWSN 2900S32
2940T	□	□	29.4	12.0	10.0	TAWMN 2900S32
2950T	●	□	29.5	11.9	10.0	TAWLN 2900S32
2960T	□	□	29.6	11.9	10.0	TAWSN 3000S32
2970T	□	□	29.7	11.9	10.0	TAWMN 3000S32
2980T	□	□	29.8	11.9	10.0	TAWLN 3000S32
2990T	□	□	29.9	11.9	10.0	TAWSN 3000S32
3000T	●	□	30.0	11.8	10.0	TAWMN 3000S32
3010T	□	□	30.1	11.8	10.0	TAWLN 3000S32
3020T	□	□	30.2	11.8	10.0	TAWSN 3000S32
3030T	□	□	30.3	11.8	10.0	TAWMN 3000S32
3040T	□	□	30.4	11.8	10.0	TAWLN 3000S32

刀片

U 型



型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWN1550T	●	□	15.5	7.9	6.0	TAWSN 1600S20
1560T	●	□	15.6	7.9	6.0	
1570T	●	□	15.7	7.9	6.0	
1580T	●	□	15.8	7.9	6.0	
1590T	●	□	15.9	7.9	6.0	
1600T	●	□	16.0	7.8	6.0	
1610T	●	□	16.1	7.8	6.0	
1620T	●	□	16.2	7.8	6.0	
1630T	●	□	16.3	7.8	6.0	
1640T	●	□	16.4	7.8	6.0	
1650T	●	□	16.5	7.7	6.0	TAWSN 1700S20
1660T	●	□	16.6	7.7	6.0	
1670T	●	□	16.7	7.7	6.0	
1680T	●	□	16.8	7.7	6.0	
1690T	●	□	16.9	7.7	6.0	
1700T	●	□	17.0	7.6	6.0	
1710T	●	□	17.1	7.6	6.0	
1720T	●	□	17.2	7.6	6.0	
1730T	●	□	17.3	7.6	6.0	
1740T	●	□	17.4	7.6	6.0	
1750T	●	□	17.5	7.5	6.0	TAWSN 1800S20
1760T	●	□	17.6	7.5	6.0	
1770T	●	□	17.7	7.5	6.0	
1780T	●	□	17.8	7.5	6.0	
1790T	●	□	17.9	7.5	6.0	
1800T	●	□	18.0	7.4	6.0	
1810T	●	□	18.1	7.4	6.0	
1820T	●	□	18.2	7.4	6.0	
1830T	●	□	18.3	7.4	6.0	
1840T	●	□	18.4	7.4	6.0	
1850T	●	□	18.5	9.3	7.0	TAWSN 1900S25
1860T	●	□	18.6	9.3	7.0	
1870T	●	□	18.7	9.3	7.0	
1880T	●	□	18.8	9.3	7.0	
1890T	●	□	18.9	9.3	7.0	
1900T	●	□	19.0	9.2	7.0	
1910T	●	□	19.1	9.2	7.0	
1920T	●	□	19.2	9.2	7.0	
1930T	●	□	19.3	9.2	7.0	
1940T	●	□	19.4	9.2	7.0	

型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWN1950T	●	□	19.5	9.1	7.0	TAWSN 2000S25
1960T	●	□	19.6	9.1	7.0	
1970T	●	□	19.7	9.1	7.0	
1980T	●	□	19.8	9.1	7.0	
1990T	●	□	19.9	9.1	7.0	
2000T	●	□	20.0	9.0	7.0	
2010T	□	□	20.1	9.0	7.0	
2020T	□	□	20.2	9.0	7.0	
2030T	□	□	20.3	9.0	7.0	
2040T	□	□	20.4	9.0	7.0	
2050T	●	□	20.5	8.9	7.0	TAWSN 2100S25
2060T	□	□	20.6	8.9	7.0	
2070T	□	□	20.7	8.9	7.0	
2080T	□	□	20.8	8.9	7.0	
2090T	□	□	20.9	8.9	7.0	
2100T	●	□	21.0	8.8	7.0	
2110T	□	□	21.1	8.8	7.0	
2120T	□	□	21.2	8.8	7.0	
2130T	□	□	21.3	8.8	7.0	
2140T	□	□	21.4	8.8	7.0	
2150T	●	□	21.5	10.3	8.0	TAWSN 2200S25
2160T	□	□	21.6	10.3	8.0	
2170T	□	□	21.7	10.3	8.0	
2180T	□	□	21.8	10.3	8.0	
2190T	□	□	21.9	10.3	8.0	
2200T	●	□	22.0	10.2	8.0	
2210T	□	□	22.1	10.2	8.0	
2220T	□	□	22.2	10.2	8.0	
2230T	□	□	22.3	10.2	8.0	
2240T	□	□	22.4	10.2	8.0	
2250T	●	□	22.5	10.1	8.0	TAWSN 2300S25
2260T	□	□	22.6	10.1	8.0	
2270T	□	□	22.7	10.1	8.0	
2280T	□	□	22.8	10.1	8.0	
2290T	□	□	22.9	10.1	8.0	
2300T	●	□	23.0	10.0	8.0	
2310T	□	□	23.1	10.0	8.0	
2320T	□	□	23.2	10.0	8.0	
2330T	□	□	23.3	10.0	8.0	
2340T	□	□	23.4	10.0	8.0	

型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWN2350T	●	□	23.5	9.9	8.0	TAWSN 2400S32
2360T	□	□	23.6	9.9	8.0	
2370T	□	□	23.7	9.9	8.0	
2380T	□	□	23.8	9.9	8.0	
2390T	□	□	23.9	9.9	8.0	
2400T	●	□	24.0	9.8	8.0	
2410T	□	□	24.1	9.8	8.0	
2420T	□	□	24.2	9.8	8.0	
2430T	□	□	24.3	9.8	8.0	
2440T	□	□	24.4	9.8	8.0	
2450T	●	□	24.5	11.1	9.0	TAWSN 2500S32
2460T	□	□	24.6	11.1	9.0	
2470T	□	□	24.7	11.1	9.0	
2480T	□	□	24.8	11.1	9.0	
2490T	□	□	24.9	11.1	9.0	
2500T	●	□	25.0	11.0	9.0	
2510T	□	□	25.1	11.0	9.0	
2520T	□	□	25.2	11.0	9.0	
2530T	□	□	25.3	11.0	9.0	
2540T	□	□	25.4	11.0	9.0	
2550T	●	□	25.5	10.9	9.0	TAWSN 2600S32
2560T	□	□	25.6	10.9	9.0	
2570T	□	□	25.7	10.9	9.0	
2580T	□	□	25.8	10.9	9.0	
2590T	□	□	25.9	10.9	9.0	
2600T	●	□	26.0	10.8	9.0	
2610T	□	□	26.1	10.8	9.0	
2620T	□	□	26.2	10.8	9.0	
2630T	□	□	26.3	10.8	9.0	
2640T	□	□	26.4	10.8	9.0	
2650T	●	□	26.5	10.7	9.0	TAWSN 2700S32
2660T	□	□	26.6	10.7	9.0	
2670T	□	□	26.7	10.7	9.0	
2680T	□	□	26.8	10.7	9.0	
2690T	□	□	26.9	10.7	9.0	
2700T	●	□	27.0	10.6	9.0	
2710T	□	□	27.1	10.6	9.0	
2720T	□	□	27.2	10.6	9.0	
2730T	□	□	27.3	10.6	9.0	
2740T	□	□	27.4	10.6	9.0	
2750T	●	□	27.5	12.1	10.0	TAWSN 2800S32
2760T	□	□	27.6	12.1	10.0	
2770T	□	□	27.7	12.1	10.0	
2780T	□	□	27.8	12.1	10.0	
2790T	□	□	27.9	12.1	10.0	
2800T	●	□	28.0	12.0	10.0	
2810T	□	□	28.1	12.0	10.0	
2820T	□	□	28.2	12.0	10.0	
2830T	□	□	28.3	12.0	10.0	
2840T	□	□	28.4	12.0	10.0	

型号	库存		尺寸 (mm)			适用刀柄
	VP15TF	VP10H	D1	L2	S1	
TAWN2850T	●	□	28.5	11.9	10.0	TAWSN 2900S32
2860T	□	□	28.6	11.9	10.0	
2870T	□	□	28.7	11.9	10.0	
2880T	□	□	28.8	11.9	10.0	
2890T	□	□	28.9	11.9	10.0	
2900T	●	□	29.0	11.8	10.0	
2910T	□	□	29.1	11.8	10.0	
2920T	□	□	29.2	11.8	10.0	
2930T	□	□	29.3	11.8	10.0	
2940T	□	□	29.4	11.8	10.0	
2950T	●	□	29.5	11.7	10.0	TAWSN 3000S32
2960T	□	□	29.6	11.7	10.0	
2970T	□	□	29.7	11.7	10.0	
2980T	□	□	29.8	11.7	10.0	
2990T	□	□	29.9	11.7	10.0	
3000T	●	□	30.0	11.6	10.0	
3010T	□	□	30.1	11.6	10.0	
3020T	□	□	30.2	11.6	10.0	
3030T	□	□	30.3	11.6	10.0	
3040T	□	□	30.4	11.6	10.0	

推荐切削条件

工件材料	钻头直径	φ14.0—φ15.4		φ15.5—φ18.4		φ18.5—φ21.4	
		切削条件 硬度	切削速度 (m/min)	每转进给量 (mm/rev)	切削速度 (m/min)	每转进给量 (mm/rev)	切削速度 (m/min)
P 软钢	≤HB180	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)
	碳钢 合金钢	HB180—280 HB280—350	70 (60—90) 60 (50—80)	0.20 (0.15—0.25) 0.15 (0.12—0.18)	80 (60—100) 70 (50—90)	0.25 (0.20—0.30) 0.20 (0.15—0.25)	80 (60—100) 70 (50—90)
M 不锈钢	≤HB200	50 (40—60)	0.15 (0.12—0.18)	50 (40—60)	0.15 (0.12—0.18)	60 (50—70)	0.20 (0.15—0.22)
K 普通铸铁 球墨铸铁	抗拉强度 ≤350MPa	70 (50—90)	0.20 (0.15—0.25)	80 (60—90)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)
	抗拉强度 ≤450MPa	70 (50—90)	0.20 (0.15—0.25)	80 (60—90)	0.25 (0.20—0.30)	80 (60—90)	0.25 (0.20—0.30)

工件材料	钻头直径	φ21.5—φ24.4		φ24.5—φ27.4		φ27.5—φ30.4	
		切削条件 硬度	切削速度 (m/min)	每转进给量 (mm/rev)	切削速度 (m/min)	每转进给量 (mm/rev)	切削速度 (m/min)
P 软钢	≤HB180	100 (80—120)	0.30 (0.25—0.35)	110 (80—120)	0.30 (0.25—0.35)	110 (80—120)	0.30 (0.25—0.35)
	碳钢 合金钢	HB180—280 HB280—350	90 (70—110) 80 (60—100)	0.30 (0.25—0.35) 0.25 (0.20—0.30)	100 (80—120) 90 (70—110)	0.30 (0.25—0.35) 0.25 (0.20—0.30)	100 (80—120) 90 (70—110)
M 不锈钢	≤HB200	60 (50—70)	0.20 (0.15—0.22)	70 (60—80)	0.25 (0.20—0.28)	70 (60—80)	0.25 (0.20—0.28)
K 普通铸铁 球墨铸铁	抗拉强度 ≤350MPa	100 (80—110)	0.35 (0.25—0.40)	110 (90—120)	0.35 (0.25—0.40)	110 (90—120)	0.40 (0.30—0.45)
	抗拉强度 ≤450MPa	90 (60—100)	0.30 (0.25—0.35)	100 (80—110)	0.30 (0.25—0.35)	100 (80—110)	0.30 (0.25—0.35)

注1: 使用8D用钻头时, 请把切削速度降低20%左右。

注2: 使用8D用钻头时, 推荐预先进行同尺寸的导孔加工。

注3: 加工软钢、不锈钢时, 推荐H形刃口修磨。

修磨量的选择

若希望订购标准修磨量以外的产品, 请在型号后加上如下图所示的刃口修磨量代号。

(刀片型号)



(修磨量规定)

刃口修磨量代号	修磨量(mm)
F	无
G	0.02—0.05
H	0.05—0.10
无标记(标准品)	0.10—0.15
K	0.15—0.20
S	0.20—0.25
M	0.25—0.30

使用注意事项

刀片安装方法

- 使用H型刀片时, 请拔出夹紧螺钉。
- 使用U型刀片时, 请松开夹紧螺钉。
- 刀片和刀座的锯齿相对应嵌入。
- 用手指轻按刀片的前表面, 用扳手拧紧。(图1)
- 安装后确认刀片和刀座之间没有空隙。(图2)

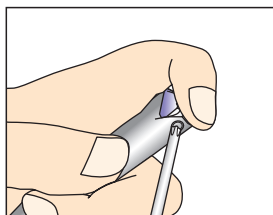


图1

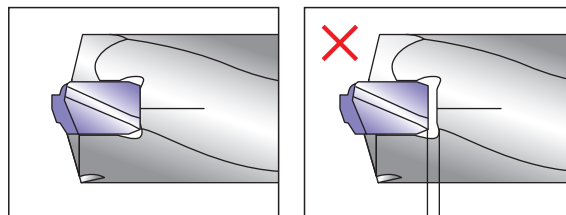


图2

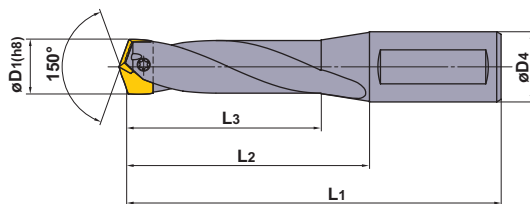
间隙

刀片更换需注意

- 安装新刀片前, 请用压缩空气将刀体上的刀片槽吹干净。若刀体的锯齿面或槽内存有污垢, 请使用附带刮板(WPT4405)将污垢除去。

WSTAR钻头

(桥梁用)



刀柄规格

钻头直径 适用范围 D1 (mm)	钻削孔深 (l/d)	刀柄		适用刀片			尺寸 (mm)				夹紧螺钉	扳手	刮板	防止烧熔剂
		型号	库存	钻头直径 D1 (mm)	型号	库存 VP15TF	有效槽长 L3	颈长 L2	全长 L1	柄径 D4				
24.5 24.6 24.7	3	TAWSB2500S32	●	24.5	TAWB2450T	●	88.6 (88)	110.6 (110)	170.6 (170)	32	WS406023T	TKY25T	WPT4405	MK1KS
				24.6	TAWB2460T	□								
	5	TAWMB2500S32	□	24.6	TAWBH2460T	□	140.6 (140)	165.6 (165)	225.6 (225)	32	WS406023T	TKY25T	WPT4405	MK1KS
				24.7	TAWB2470T	●								
26.5 26.7	3	TAWSB2700S32	●	26.5	TAWB2650T	□	94.6 (94)	115.6 (115)	175.6 (175)	32	WS406024T	TKY25T	WPT4405	MK1KS
				26.7	TAWBH2650T	□								
	5	TAWMB2700S32	□	26.7	TAWB2670T	●	151.6 (151)	175.6 (175)	235.6 (235)	32	WS406024T	TKY25T	WPT4405	MK1KS
				26.7	TAWBH2670T	●								

注1: ()内尺寸为安装TAWN(U型)刀片时的尺寸。

注2: 标准品以外的特殊形状(例如不同直径,长度和带倒角刃等),材料等有什么需求也可咨询。

●: 标准库存品 □: 预订生产产品

刀片

外形	型号	库存 VP15TF	尺寸 (mm)			对应刀柄	修磨量 (mm)	形状
			D1	L2	S1			
U型	TAWB2450T	●	24.5	11.1	9.0	TAWSB2500S32 TAWMB2500S32	0.20-0.25	
	2460T	□	24.6	11.1	9.0			
	2470T	●	24.7	11.1	9.0			
	2650T	□	26.5	10.7	9.0	TAWSB2700S32 TAWMB2700S32	0.20-0.25	
	2670T	●	26.7	10.7	9.0			
H型	TAWBH2450T	●	24.5	11.7	9.0	TAWSB2500S32 TAWMB2500S32	0.20-0.25	
	2460T	□	24.6	11.7	9.0			
	2470T	●	24.7	11.7	9.0			
	2650T	□	26.5	11.3	9.0	TAWSB2700S32 TAWMB2700S32	0.20-0.25	
	2670T	●	26.7	11.3	9.0			

●: 标准库存品(每盒2片)

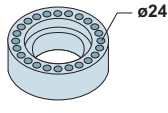
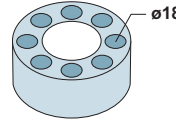
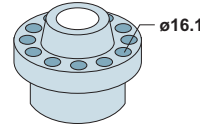
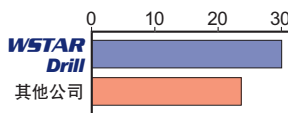
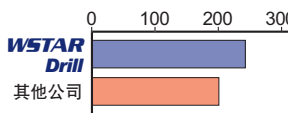
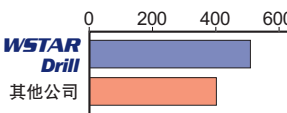
□: 预订生产产品

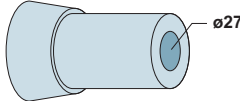
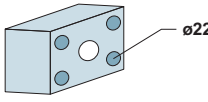
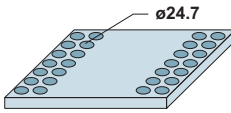
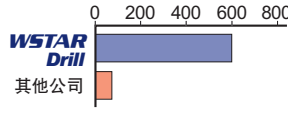
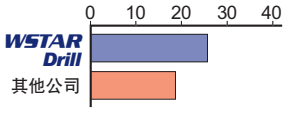
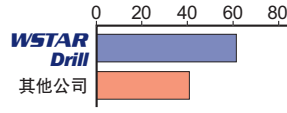
推荐切削条件

工件材料		钻头直径	φ24.5, φ24.6, φ24.7		φ26.5, φ26.7	
			切削速度 (m/min)	每转进给量 (mm/rev)	切削速度 (m/min)	每转进给量 (mm/rev)
P	结构钢	SS400	70 (60-80)	0.30 (0.25-0.35)	70 (60-80)	0.30 (0.25-0.35)
		SM490	65 (55-75)	0.30 (0.25-0.35)	65 (55-75)	0.30 (0.25-0.35)
		SM570	60 (50-70)	0.30 (0.25-0.35)	60 (50-70)	0.30 (0.25-0.35)

WSTAR 钻头

使用实例

刀柄	TAWSN2400S32	TAWMN1800S20	TAWSN1600S20	
刀片(材料)	TAWNH2400T (VP15TF)	TAWN1800T (VP15TF)	TAWN1610T (VP15TF)	
工件材料	S50C 	S48C (HB200) 	SF390A 	
零部件名称	环	齿圈	机械零件	
切削条件	切削速度 (m/min)	90	70	80
	每转进给量 (mm/rev)	0.3	0.3	0.3
	转速 (min ⁻¹)	1194	1238	1582
	进给速度 (mm/min)	358	371	475
切削液	喷雾	水溶性(内冷却)	水溶性(内冷却)	
使用机床	立式加工中心	卧式加工中心	卧式加工中心	
结果	切削长度(m) 	加工孔数(孔) 	加工孔数(孔) 	

刀柄	TAWSN2700S32	TAWLN2200S25	TAWSB2500S32	
刀片(材料)	TAWN2700T (VP15TF)	TAWN2200T (VP15TF)	TAWB2470T (VP15TF)	
工件材料	相当于SCM 	FCD400 	SM490(1张板) 	
零部件名称	钻头体	液压阀	桥梁用钢板	
切削条件	切削速度 (m/min)	80	70	60
	每转进给量 (mm/rev)	0.3	0.2	0.3
	转速 (min ⁻¹)	943	1013	773
	进给速度 (mm/min)	283	203	232
切削液	水溶性(内冷却)	水溶性(内冷却)	喷雾	
使用机床	数控车床	卧式加工中心	炮身钻床	
结果	加工孔数(孔) 	切削长度(m) 	切削长度(m) 	

关于安全

- 请不要直接用手摸切削刃、切屑。● 请在推荐条件范围内使用，提早更换刀具。● 有时会有高温的切屑飞出、伸长的切屑排出。请使用安全罩、防护镜等防护用具。● 使用非水溶性切削液时，务必采取防火措施。
- 安装刀片或零部件时，请使用附带的扳手稳妥安装。● 使用旋转刀具时，务必进行试运转，确认有无共振、振动、异常声音。

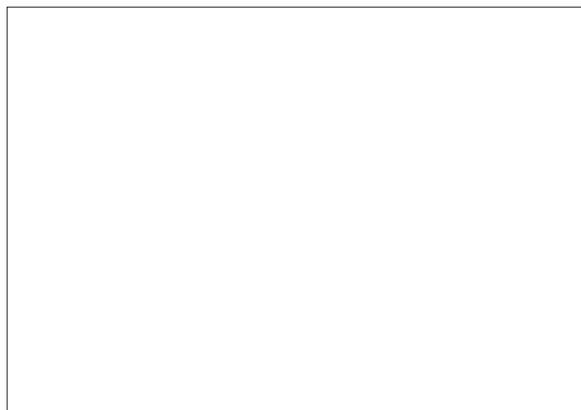
三菱综合材料株式会社
MITSUBISHI MATERIALS CORPORATION

东部亚洲销售部门：

〒130-0015 日本国东京都墨田区横网1-6-1, KFC大楼8楼

电话：81-3-5819-8771 传真：81-3-5819-8774

<http://www.mitsubishicarbide.com>



(规格若有更改，恕不事先通知)

