

DRILLING (INDEXABLE TYPE)

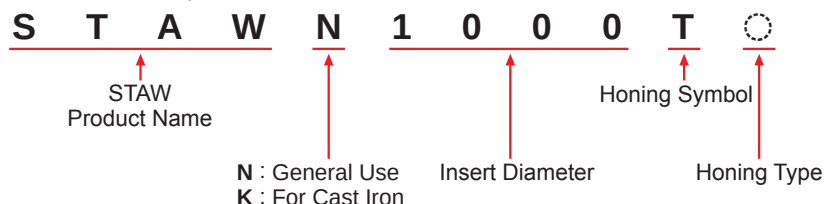
STAW

CARBIDE

HONE WIDTH

If an insert with honing other than standard is needed, please order using the symbols below.

(Insert Order Number)



(Honing Standard)

Honing Type	Hone Width (mm)
F	0
G	0.02—0.05
H	0.05—0.10
-(Standard)	0.10—0.15
K	0.15—0.20
S	0.20—0.25
M	0.25—0.30

RECOMMENDED CUTTING CONDITIONS

Work Material	Drill Diameter Conditions Hardness	φ10.0—φ12.9		φ13.0—φ13.9		φ14.0—φ15.4		φ15.5—φ18.4	
		Cutting Speed (m/min)	Feed (mm/rev)	Cutting Speed (m/min)	Feed (mm/rev)	Cutting Speed (m/min)	Feed (mm/rev)	Cutting Speed (m/min)	Feed (mm/rev)
P Mild Steel	≤180HB	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)
	180—280HB	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)
	280—350HB	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)	90 (70—110)	0.30 (0.20—0.35)
M Stainless Steel	≤200HB	40 (30—50)	0.13 (0.10—0.16)	50 (40—60)	0.15 (0.12—0.18)	60 (50—70)	0.17 (0.14—0.20)	60 (50—70)	0.17 (0.14—0.20)
K Cast Iron	Tensile Strength ≤350MPa	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	120 (80—140)	0.45 (0.35—0.55)
	Ductile Cast Iron Tensile Strength ≤450MPa	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)

(Note 1) When using a drill for 1.5D depth of hole, it is possible to increase the feed rate by approx. 20%.

(Note 2) When using the 8D type holder, reduce the cutting speed by approx. 20%.

(Note 3) When using the 8D type holder, it is recommended to drill a pilot guide hole.

(Note 4) For stainless steel, please use internal coolant. (Mist & MQL are not recommended).

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