

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (m/min)	Finish—Light Cutting		Light—Semi-Heavy Cutting		Medium—Heavy Cutting	
					Feed per Tooth (mm/tooth)	Breaker	Feed per Tooth (mm/tooth)	Breaker	Feed per Tooth (mm/tooth)	Breaker
P	Mild Steel	≤180HB	F7030	280 (210—350)	0.18 (0.08—0.28)	JL	0.2 (0.1—0.3)	JM	0.25 (0.1—0.35)	JH
			MP6120	250 (200—300)	—	—	0.2 (0.1—0.3)	JM	—	—
			VP15TF	250 (200—300)	0.18 (0.08—0.28)	JL	0.2 (0.1—0.3)	JM	0.25 (0.1—0.35)	JH FT
			VP30RT	230 (180—280)	0.18 (0.08—0.28)	JL	0.2 (0.1—0.3)	JM	0.25 (0.1—0.35)	JH
			NX4545	180 (130—230)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	—	—
	Carbon Steel Alloy Steel	180—280HB	F7030	250 (200—300)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	0.2 (0.1—0.3)	JH
			MP6120	220 (170—270)	—	—	0.18 (0.1—0.28)	JM	—	—
			VP15TF	220 (170—270)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	0.2 (0.1—0.3)	JH FT
			VP30RT	200 (150—250)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	0.2 (0.1—0.3)	JH
			NX4545	150 (120—180)	0.13 (0.06—0.2)	JL	0.15 (0.1—0.25)	JM	—	—
		280—350HB	F7030	180 (130—230)	0.13 (0.06—0.2)	JL	0.15 (0.1—0.25)	JM	0.18 (0.1—0.28)	JH
			MP6120	140 (100—180)	—	—	0.15 (0.1—0.25)	JM	—	—
			VP15TF	140 (100—180)	0.13 (0.06—0.2)	JL	0.15 (0.1—0.25)	JM	0.18 (0.1—0.28)	JH FT
			VP30RT	120 (80—160)	0.13 (0.06—0.2)	JL	0.15 (0.1—0.25)	JM	0.18 (0.1—0.28)	JH
			NX4545	100 (80—120)	0.1 (0.05—0.15)	JL	0.13 (0.1—0.2)	JM	—	—
M	Stainless Steel	≤270HB	VP15TF	220 (170—270)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	0.2 (0.1—0.3)	JH FT
			VP30RT	200 (150—250)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	0.2 (0.1—0.3)	JH
			NX4545	150 (120—180)	0.15 (0.07—0.23)	JL	0.18 (0.1—0.28)	JM	—	—
K	Cast Iron Ductile Cast Iron	Tensile Strength ≤450MPa	MC5020	200 (150—250)	—	—	0.2 (0.1—0.3)	JM	0.25 (0.1—0.35)	JH FT
			VP15TF	180 (130—230)	0.18 (0.1—0.28)	JL	0.2 (0.1—0.3)	JM	0.25 (0.1—0.35)	JH FT
N	Aluminium Alloy	—	HTi10	300—	0.15 (0.1—0.2)	JP	0.2 (0.1—0.3)	JP	0.3 (0.2—0.4)	JP
S	Titanium Alloy	—	MP9120	50 (40—60)	—	—	0.15 (0.05—0.2)	JM	—	—
			VP15TF	50 (40—60)	0.1 (0.05—0.2)	JL	0.15 (0.05—0.2)	JM	—	—
	Heat Resistant Alloy	—	MP9120	40 (20—50)	—	—	0.15 (0.05—0.2)	JM	—	—
			VP15TF	40 (20—50)	0.1 (0.05—0.2)	JL	0.15 (0.05—0.2)	JM	—	—
H	Hardened Steel	40—55HRC	VP15TF	80 (60—100)	0.08 (0.04—0.13)	JL	0.1 (0.05—0.15)	JM	0.12 (0.07—0.17)	JH FT

● Revolution (min⁻¹) = (1000 x Cutting Speed) ÷ (3.14 x φD1) ● Table Feed (mm/min) = Feed per Tooth x Number of Teeth x Cutter Revolution

INSTRUCTIONS FOR USING INSERTS

Instructions for use of the JP breaker

- The JP breaker has sharp cutting edges. Wear gloves when handling.
- When machining aluminium alloy, welding to the cutting edge tends to occur, often leading to insert failure. To prevent this, wet cutting is recommended.

Instructions for use of wiper inserts



- Wiper inserts for the ASX400 are single-cornered.
- When installing a wiper insert, place the insert so that the small chamfer is located as shown.
- The peripheral cutting edge of the wiper insert does not protrude as far as standard inserts. This may cause extra wear on the insert behind the wiper.