

STANDARD CUTTING CONDITIONS

P Steel

Application	Chipbreaker	Grades	Cutting speed V_c (m/min)			Depth of cut a_p (mm)	Feed f (mm/rev)
			Low carbon steels Alloy steels	Medium carbon steels Alloy steels	High carbon steels Alloy steels		
Precision finishing	TF	T9215	150 - 400	150 - 400	120 - 300	0.1 - 0.5	0.03 - 0.15
		T9225	120 - 300	120 - 300	100 - 250		
Finishing	TSF	NS9530	150 - 250	80 - 220	80 - 180	0.2 - 1.5	0.08 - 0.4
		GT9530	150 - 300	80 - 250	80 - 200		
		AT9530	150 - 300	80 - 250	80 - 200		
		T9215	150 - 400	150 - 400	120 - 300		
	ZF	T9215	150 - 400	150 - 400	120 - 300	0.2 - 1.5	0.07 - 0.2
		T9225	120 - 300	120 - 300	100 - 250		
Finishing (Wiper)	FW	T9205	180 - 400	180 - 400	150 - 350	0.2 - 1.5	0.08 - 0.4
		T9215	150 - 400	150 - 400	120 - 300		
		T9225	120 - 300	120 - 300	100 - 250		
		NS9530	150 - 250	80 - 220	80 - 180	0.5 - 1.5	0.2 - 0.4
		GT9530	150 - 300	80 - 250	80 - 200		
Finishing to medium cutting	ZM	T9215	150 - 400	150 - 400	120 - 300	0.7 - 2.0	0.15 - 0.4
		T9225	120 - 300	120 - 300	100 - 250		
Finishing to medium cutting (Wiper)	SW	T9205	180 - 400	180 - 400	150 - 350	0.5 - 2.0	0.3 - 0.6
		T9215	150 - 400	150 - 400	120 - 300		
		T9225	120 - 300	120 - 300	100 - 250		
Finishing to medium cutting	NM	T9225	120 - 300	120 - 300	100 - 250	0.5 - 2.0	0.15 - 0.4
Medium cutting	TM	T9215	150 - 400	150 - 400	120 - 300	1.0 - 3.0	0.2 - 0.5
		T9225	120 - 300	120 - 300	100 - 250		

M Stainless

Application	Chipbreaker	Grades	Cutting speed V_c (m/min)			Depth of cut a_p (mm)	Feed f (mm/rev)
			Austenitic	Ferritic / Martensitic	Precipitation hardened		
Finishing	SS	AH630	90 - 190	110 - 210	60 - 90	0.5 - 3.0	0.08 - 0.2
		AH645	70 - 150	90 - 170	-		
Medium cutting	SM	T6120	140 - 240	160 - 280	80 - 150	1.0 - 3.0	0.2 - 0.5
		T6130	100 - 200	120 - 240	70 - 110		
		AH630	90 - 190	110 - 210	60 - 90		

K Cast Iron

Application	Chipbreaker	Grades	Cutting speed V_c (m/min)		Depth of cut a_p (mm)	Feed f (mm/rev)
			Grey cast irons	Ductile cast irons		
Finishing to medium cutting (Wiper)	SW	T5115	140 - 400	140 - 370	0.5 - 2.0	0.3 - 0.6
Medium cutting	TM	T515	150 - 700	140 - 370	1.0 - 3.0	0.2 - 0.5

S Superalloys and titanium

Application	Chipbreaker	Grades	Cutting speed V_c (m/min)		Depth of cut a_p (mm)	Feed f (mm/rev)
			Titanium alloys	Ni-base alloys		
Medium cutting	TM	AH8015	20 - 150	20 - 100	1.0 - 3.0	0.2 - 0.5