

TAPPING SPEEDS

MATERIAL	Hardness	Straight Flute	Through holes Spiral Point	Blind holes Spiral Flute	Fluteless
	Hb	M/Min	M/Min	M/Min	M/Min
CARBON & ALLOY STEEL					
Mild Steel	<120	12 – 24	15 – 28	12 – 24	20 – 40
Low/Medium Carbon Steel	<200	11 – 20	16 – 24	10 – 18	18 – 35
Higher Carbon Steel	<250	8 – 12	10 – 16	8 – 12	12 – 25
Low Alloy Engineering Steel	<250	6 – 10	8 – 12	6 – 10	8 – 16
Alloy Steel – Heat Treated	>300		3 – 9	3 – 5	
Alloy Steel – Heat Treated	>350	3 – 7	2 – 5		
STAINLESS STEEL					
Free Cutting (magnetic) Ferritic	<250	6 – 10	8 – 12	5 – 9	10 – 16
Austentic (non-magnetic)	<250		5 – 9	4 – 7	8 – 14
Martensic / Maraging Duplex Alloy			4 – 6	2 – 5	5 – 8
CAST IRON					
Plain Grey Iron – Ferritic Malleable	<150	9 – 15	10 – 16		
Plain SG Iron – Pearlitic Malleable	<250	6 – 12	5 – 9		
Alloy SG Iron NiHard	>250	3 – 5	4 – 8		
ALUMINIUM					
Wrought (soft) & Extruded	<150	15 – 25	25 – 35b	18 – 30	30 – 50
Wrought & Treated	>150	12 – 20	20 – 35b	16 – 25	25 – 40
Cast Low Silicon 5%	<150	10 – 15	15 – 22b	12 – 18	20 – 30
Cast High Silicon 10%	>150	8 – 12	10 – 18b	8 – 16	
COPPER					
Pure Copper	<100	6 – 12		9 – 15	14 – 20
Alpha Brass (soft yellow)	<200	24 – 30			20 – 30
Beta Brass	>200	18 – 24			
High Tensile Bronze	<350	8 – 16	9 – 18b	8 – 16	
NICKEL					
Pure Nickel	<300	5 – 9	7 – 11	5 – 8	15 – 22
Nickel, Nimonic 75 Hasteloy Alloys	>300		3 – 7		
Nickel, Inconel 718 Alloy			1 – 4		
TITANIUM					
Pure Titanium	<200	6 – 12	8 – 10	5 – 8	10 – 15
Titanium Alloys	>300		3 – 6	3 – 6	6 – 12