







# Tool Selection Guide

## Tapping

			Code	DOREX	DOREX VAV	DOREX TiN	DOREX TiCN	TINIB	FEDUB	GG	GG TiN	SIREX	SIREX SR	TAREX	
Material	Material groups	Hardness (HB)	Cutting material	HSS-E	HSS-E	HSS-E	HSS-E	PM	PM	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	
			Surface	uncoated	vaporized	TiN	TiCN	vaporized	vaporized	nitrided	TiN	uncoated	uncoated	uncoated	
			Blind bore								●	●		●	●
			Through hole	●	●	●	●	●	●	●	●	●	●		
			Chapter	8				8		8		8	8	8	8
			Strength (N/mm <sup>2</sup> )												
1. Steel	P	1.1 Magnetic soft iron	≤120	≤400		●	●	●							
		1.2 Structural, case hardened steel	≤200	≤700	●	●	●	●					●	●	
		1.3 Carbon steel	≤250	≤850	●	●	●	●					●	●	
		1.4 Alloy steel	≤250	≤850		●	●	●							
		1.5 Alloy/heat treated steel	>250, ≤350	>850, ≤1200		●	●	●							
		1.6 Alloy/heat treated steel	>350	>1200											
	H	1.7 Hardened steel to 45 HRC	≤400	≤1400											
		1.8 Hardened steel to 58 HRC	≤600	≤2200											
2. Stainless steel	M	2.1 Stainless steel, sulphuretted	≤250	≤850		●	●	●							
		2.2 Austenitic	≤250	≤850		●	●	●							
		2.3 Ferritic, ferritic & austenitic, martensitic	≤300	≤1000					●						
3. Cast iron	K	3.1 Grey cast iron	≤150	≤500						●	●				
		3.2 Grey cast iron, heat treated	>150, ≤300	>500, ≤1000						●	●				
		3.3 Vermicular cast iron	200-250	400-500											
		3.4 Spher. graph. cast iron	≤200	≤700	●	●	●	●					●	●	
		3.5 Spher. graph. cast iron, heat treated	>200, ≤300	>700, ≤1000		●	●	●							
		3.6 Malleable iron	≤200	≤700	●	●	●	●						●	●
		3.7 Malleable iron, heat treated	>200, ≤300	>700, <1000		●	●	●							
4. Titanium	S	4.1 Pure titanium	≤200	≤700				●							
		4.2 Titanium alloys	≤270	≤900				●							
		4.3 Titanium alloys	>270, ≤300	>900, ≤1250				●							
5. Nickel	S	5.1 Pure nickel	≤150	≤500		●	●	●					●		
		5.2 Nickel alloys, heat resistant	<270	≤900					●						
		5.3 Nickel alloys, high heat resistance	>270, ≤350	>900, ≤1200					●						
6. Copper	S	6.1 Non-alloy copper	≤100	≤350	●		●	●						●	
		6.2 short chip, brass, bronze, red brass	≤200	≤700							●	●			
		6.3 long chip brass	≤200	≤700	●		●	●						●	
		6.4 Cu-Al-Fe alloy (Ampco)	≤470	≤500											
7. Aluminium/ Magnesium	N	7.1 Alu, Mg non-alloy	≤100	≤350	●		●	●					●	●	
		7.2 Alu wrought alloy, breaking strain (A 5) <14 %	≤180	≤600	●		●	●					●	●	
		7.3 Alu wrought alloy, breaking strain (A 5) ≥14 %	≤180	≤600	●		●	●					●	●	
		7.4 Alu cast alloy, Si <10 %	<180	≤600	●		●	●				●			
		7.5 Alu cast alloy, Si ≥10 %	≤180	≤600	●		●	●				●			
8. Plastics	S	8.1 Thermoplastics			●		●	●						●	
		8.2 Thermosetting plastics								●	●				
		8.3 Fibre reinforced plastics								●	●				

● very good    ● good

