

GENERAL MACHINING GUIDE

Drilling based on Jobber drill lengths
For deep hole drilling reduce speeds by

3 x Drill Diameter	10%
4 x Drill Diameter	20%
5 x Drill Diameter	30%
More than 6 x Drill Diameter	40%

ALUMINIUM - Yellow Band

Tool Material

Tool Material			TAPPING	DRILLING									
MACHINED MATERIALS	HARDNESS MATERIALS	HARDNESS MATERIALS	Cutting Speed	Cutting Speed	Feed Rate for Diameters								
			Metres/min	Metres/min	3mm	5mm	6mm	8mm	10mm	12mm	16mm	20mm	
ALUMINIUM ALLOYS													
Wrought & Extruded	<150	541M/mm ²	30-55	50-60	0.120	0.150	0.170	0.220	0.260	0.280	0.320	0.360	
Wrought & Treated	>150	541M/mm ²	27-50	35-50	0.085	0.110	0.120	0.160	0.190	0.200	0.240	0.280	
"Cast, Low Silicon <5%"	<150	541M/mm ²	20-35	30-40	0.085	0.110	0.120	0.160	0.190	0.200	0.240	0.280	
"Cast, High Silicon >10%"	>150	541M/mm ²	15-30	23-35	0.085	0.110	0.120	0.160	0.190	0.200	0.240	0.280	
COPPER													
Pure Copper	<100	-	15-30	35-55	0.062	0.080	0.095	0.120	0.140	0.150	0.160	0.210	
"Brass, Soft"	<200	717M/mm ²	40-50	40-50	0.150	0.190	0.210	0.280	0.330	0.350	0.400	0.450	
"Brass, Bronze"	>200	717M/mm ²	30-50	35-45	0.085	0.110	0.120	0.160	0.190	0.200	0.240	0.280	