

GARR TOOL Drilling Guide for Aluminum Series 3-Flute Drills

			CHIPLOAD PER TOOTH (Fz)					
Material	Type	SFM (Vc)	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"
Aluminum Alloy	6061	450 - 650	.0020" - .0040"	.0025" - .0050"	.0035" - .0060"	.0045" - .0070"	.0055" - .0080"	.0065" - .0100"
Cast Aluminum	380	300 - 500	.0015" - .0030"	.0020" - .0040"	.0030" - .0050"	.0030" - .0060"	.0035" - .0070"	.0040" - .0080"
Magnesium		250 - 500	.0015" - .0030"	.0020" - .0040"	.0030" - .0050"	.0030" - .0060"	.0035" - .0070"	.0040" - .0080"
Copper & Brass		250 - 400	.0010" - .0025"	.0020" - .0030"	.0020" - .0030"	.0020" - .0040"	.0030" - .0050"	.0030" - .0060"
Titanium	6Al-4V	100 - 300	.0010" - .0020"	.0020" - .0030"	.0020" - .0030"	.0020" - .0040"	.0030" - .0050"	.0030" - .0060"

			CHIPLOAD PER TOOTH (Fz)					
Material	Type	M/Min. (Vc)	4.0mm	6.0mm	8.0mm	10.0mm	12.0mm	16.0mm
Aluminum Alloy	6061	140 - 200	.050 - .100	.065 - .125	.090 - .150	.115 - .175	.150 - .200	.165 - .250
Cast Aluminum	380	90 - 150	.038 - .075	.050 - .100	.075 - .125	.075 - .150	.090 - .175	.100 - .200
Magnesium		75 - 150	.038 - .075	.050 - .100	.075 - .125	.075 - .150	.090 - .175	.100 - .200
Copper, Brass		75 - 120	.025 - .060	.050 - .075	.050 - .075	.050 - .100	.075 - .125	.075 - .150
Titanium	6Al-4V	30 - 90	.025 - .050	.050 - .075	.050 - .075	.050 - .100	.075 - .125	.075 - .150



NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.