

Cutting data recommendations for solid carbide drills

Feed and cutting speed

MEGA-180°-Drill-Alu | SCD241

MMG*		Workpiece material	Strength/hardness [N/mm ²] [HRC]		Cutting speed v _c [m/min]				Feed f [mm] for drill diameter					
					Internal cooling	External cooling	MQL	Air	3.00	4.50	6.50	9.50	14.00	20.00
N	N1	N1.1	Aluminium, unalloyed and alloyed < 3 % Si		240	160	200		0.07	0.09	0.12	0.16	0.20	0.24
		N1.2	Aluminium, alloyed ≤ 7 % Si		200	145	160		0.09	0.12	0.16	0.21	0.26	0.31
		N1.3	Aluminium, alloyed > 7 - 12 % Si		175	120	145		0.09	0.12	0.16	0.21	0.26	0.31
	N2	N1.4	Aluminium, alloyed > 12 % Si		145	95	120		0.09	0.12	0.16	0.21	0.26	0.31
		N2.1	Copper, non-alloy and low-alloy		110	80			0.07	0.09	0.12	0.16	0.20	0.24
		N2.2	Copper, alloy		95	70			0.09	0.12	0.16	0.21	0.26	0.31
		N2.3	Brass, bronze, gunmetal		160	130	130	95	0.09	0.14	0.19	0.25	0.33	0.39

* MAPAL machining groups

The specified cutting values are guide values.
The optimum data for the respective machining task should be determined during the test or machining.