

Material Cutting Parameters Chart

Material	Cutting Speed m/min	Chip Load mm/tooth	Depth of Cut mm
Aluminum 6061	200-500	0.1	3
Aluminum 7075	150-400	0.08	2.5
Steel 1045	60-150	0.1	2
Stainless Steel 304	40-100	0.08	1.5
Stainless Steel 316	35-90	0.07	1.2
Titanium Ti-6Al-4V	30-60	0.08	1
Brass C360	150-400	0.1	3
Delrin (POM)	200-600	0.15	4
Cast Iron	60-120	0.1	2.5
Copper	100-300	0.1	2
Aluminum 2024	120-320	0.08	2
Aluminum 5083	180-420	0.1	2.8
Alloy Steel 4140	50-120	0.08	1.8
Alloy Steel 4340	45-110	0.07	1.5
Tool Steel A2	25-60	0.05	1
Stainless 17-4PH	35-90	0.07	1.2
Stainless 430	45-110	0.08	1.5
Duplex 2205	30-80	0.06	1
Titanium Ti-5553	20-45	0.05	0.8
Titanium Grade 2	25-50	0.06	0.9
Brass C260	120-320	0.1	2.8
Bronze C932	80-220	0.08	1.8
Copper C110	90-240	0.08	1.5
Beryllium Copper	70-180	0.06	1.2
Nylon 6	180-450	0.12	3
PEEK	120-260	0.08	1.5
Acrylic	150-400	0.09	2.5
Ductile Iron	55-140	0.08	2
Gray Iron	60-160	0.1	2.5
Alloy Steel 8620	50-115	0.07	1.6

