

United Mould Materials for CNC machining

Plastics: UNITED MOULD manufactures your CNC machined prototypes out of almost any material that we can purchase on the open market. For special requests we can also use a material that you provide. In the table below you will find high-quality materials that we commonly used in our factory.

Metals: We can also machine metals by using heat-shrink cutter holders for our high-speed spindles to ensure cutting accuracy. We can get mostly any metal material that you desire. Common metals used for CNC prototypes include the ones in the table below. We will always advice our customers on the machine-ability of any material enquired.

Type:	Material Name	Abbreviation
Superalloy	Tungsten/Wolfram	W
Superalloy	Waspaloy	Waspalloy
Plastic	Acrylonitrile butadiene styrene	ABS
Plastic	Acrylonitrile butadiene styrene	ABS - high temp
Plastic	Acrylonitrile butadiene styrene	ABS - anti static
Plastic	Acrylonitrile butadiene styrene + Polycarbonate	ABS + PC
Plastic	High-density polyethylene	HDPE, PEHD
Plastic	Nylon 6	PA6
Plastic	Nylon 6 + 30% Glass Fill	PA6 + 30% GF
Plastic	Nylon 6-6 + 30% Glass Fill	PA66 + 30% GF
Plastic	Nylon 6-6 Polyamide	PA66
Plastic	Polybutylene terephthalate	PBT
Plastic	Polycarbonate	PC
Plastic	Polycarbonate - Glass fill	PC + GF
Plastic	Polycarbonate + 30% Glass fill	PC + 30 % GF
Plastic	Polyether ether ketone	PEEK
Plastic	Polyetherimide	PEI
Plastic	Polyetherimide + 30% Glass Fill	Ultem 1000 + 30% GF
Plastic	Polyetherimide + Ultem 1000	PEI + Ultem 1000
Plastic	Polyethylene	PE
Plastic	Polyethylene terephthalate	PET
Plastic	Polymethyl methacrylate	PMMA - Clear Acrylic
Plastic	Polymethyl methacrylate - acrylic	PMMA - Acrylic
Plastic	Polyoxybenzylmethyleneglycolanhydride	Bakelite
Plastic	Polyoxymethylene	POM
Plastic	Polyphenylene sulfide	PPS
Plastic	Polyphenylene sulfide + Glass Fill	PPS + GF
Plastic	Polyphenylsulfone	PPSU
Plastic	Polypropylene	PP
Plastic	Polytetrafluoroethylene	PTFE
Plastic	Polyvinyl chloride	PVC
Plastic	Polyvinyl chloride + White/Grey	PVC - White/Gray
Plastic	Polyvinylidene fluoride	PVDF
Metal	Aluminum - 1050	AL 1050
Metal	Aluminum - 1060	AL 1060
Metal	Aluminum - 2024	AL 2024
Metal	Aluminum - 5052-H11	AL 5052-H11
Metal	Aluminum - 5083	AL 5083
Metal	Aluminum - 6061	AL 6061
Metal	Aluminum - 6082	AL 6082
Metal	Aluminum - 7075	AL 7075
Metal	Aluminum - bronze	AL + Br
Metal	Aluminum - MIC-6	AL - MIC-6
Metal	Aluminum - QC-10	AL QC-10
Metal	Brass	Cu + Zn

Metal	Copper	Cu
Metal	Copper - beryllium	Cu + Be
Metal	Copper - chrome	Cu +Cr
Metal	Copper - tungsten	Cu + W
Metal	Magnesium	Mg
Metal	Magnesium alloy	
Metal	Phosphor bronze	Cu + Sn + P
Metal	Steel - Stainless 303	SS 303
Metal	Steel - Stainless 304	SS 304
Metal	Steel - Stainless 316	SS 316
Metal	Steel - Stainless 410	SS 410
Metal	Steel - Stainless 431	SS 431
Metal	Steel - Stainless 440	SS 440
Metal	Steel - Stainless 630	SS 630
Metal	Steel 1040	SS 1040
Metal	Steel 45	SS 45
Metal	Steel D2	SS D2
Metal	Tin bronze	
Metal	Titanium	Ti
Metal	Titanium alloy	
Metal	Zinc	Zn
Fibre	Carbon Fibre	CFRP, CRP, CFRTTP