

## Injection Molding & Machining

Materials	Young Modulus	Tensile Stress	Choc (Izod Notched)	HDT	Specifications
ABS	2 Gpa	35 Mpa / 60 Mpa	10 - 200 J/m	-40 to +80°C	Dimensional stability / Aesthetics
ABS/PC	2,5 Gpa	50 Mpa / 70 Mpa	500 - 650 J/m	-40 to +100°C	Shock-resistant / Aesthetics
HDPE	0,75 Gpa	25 Mpa / 30 Mpa	10 - 200 J/m	-50 to +105°C	Durability / Shock-resistant
PA6	3 Gpa	75 Mpa / 85 Mpa	20 - 150 J/m	-30 to +110°C	Mechanical strength / Temperature resistance
PA66 GF30	9 Gpa	150 Mpa / 230 Mpa	50 - 100 J/m	-30 to +120°C	Rigidity / Mechanical Strength
PBT	2,5 Gpa	50 Mpa / 80 Mpa	30 - 50 J/m	-40 to +120 °C	Insulating / Fluid
PC	2,5 Gpa	70 Mpa / 90 Mpa	500 - 900 J/m	-40 to +125°C	Clearness / Shock-resistant
PC GF10	3,5 Gpa	65 Mpa / 110 Mpa	100 - 200 J/m	-40 to +125°C	Shock-resistant / Rigidity
PEEK	4 Gpa	85 Mpa / 150 Mpa	60 - 90 J/m	-50 to +200°C	Abrasion, warm and chemical-resistant
PEI	3 Gpa	90 Mpa / 140 Mpa	50 - 60 J/m	-50 to +170°C	Heat-resistant
PMMA	3 Gpa	60 Mpa / 100 Mpa	10 - 130 J/m	-20 to +70°C	Clearness / Optical / UV-resistant
POM	3 Gpa	60 Mpa / 90 Mpa	50 - 120 J/m	-40 to +100°C	Abrasion-resistant
PP	1,25 Gpa	30 Mpa / 50 Mpa	20 - 1000 J/m	0 to +80°C	Chemical-resistanr / 0,4mm hinges
PP GF20	4 Gpa	60 Mpa / 90 Mpa	20 - 200 J/m	-10 to +100°C	Fluid / Robustness
PPS	7 Gpa	85 Mpa / 140 Mpa	40 - 80 J/m	-100 to +140°C	Chemical and Heat-resistant
PPS GF40	14 Gpa	140 Mpa / 200 Mpa	70 - 120 J/m	-100 to +140°C	Fluid / High rigidity
PSU	2,5 Gpa	60 Mpa / 110 Mpa	40 - 100 J/m	-100 to +150°C	Thermal and Chemical-resistant
PTFE	0,75 Gpa	20 Mpa / - Mpa	350 - 500 J/m	-80 to +200°C	Chemical and Abrasion-resistant / Self-lubricating
SILICONE	-	5 Mpa / - Mpa	- J/m	-50 to +200°C	Flexibility / Heat and stretch-resistant
TPE	-	25 Mpa / - Mpa	50 J/m	-30 to +100°C	Flexibility
TPU	-	15 Mpa / - Mpa	10 to 100 J/m	-30 to +90°C	Flexibility / Abrasion-resistant
TPV	-	10 Mpa / - Mpa	- J/m	-40 to +130°C	Rubber Like