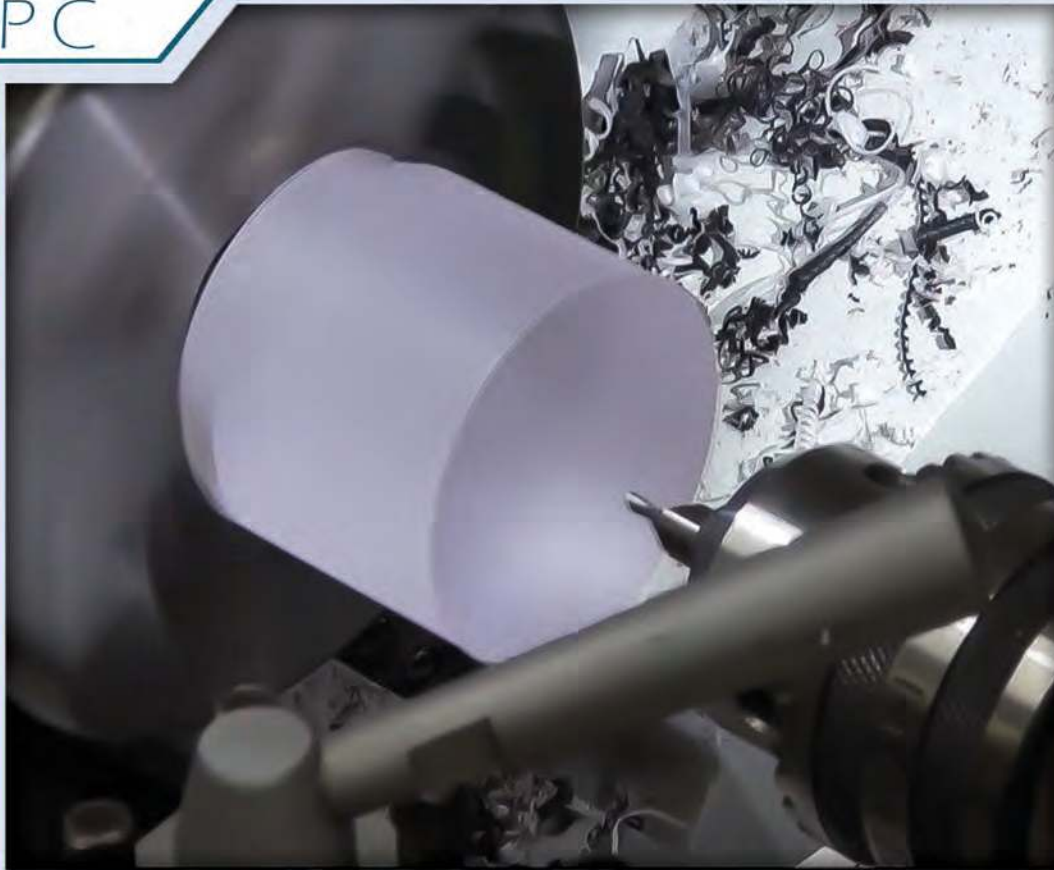
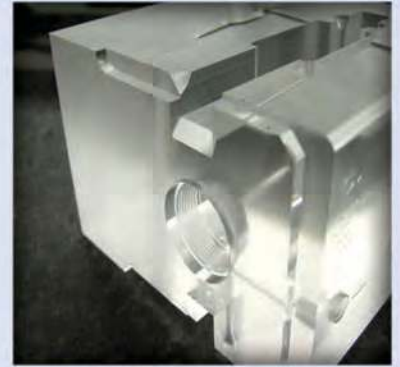




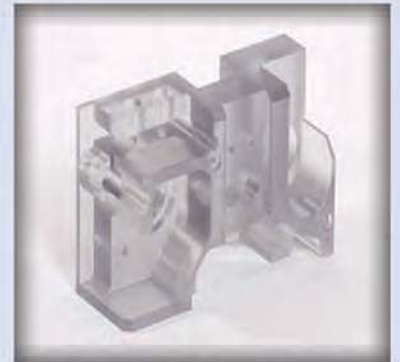
MECHETEC®
PC



Polycarbonate (PC)



Easily Machined and Fabricated



Excellent Toughness

APPLICATIONS

Manifolds
Sight Glasses
Electrical Insulators
Aircraft Instrumentation
Electrical Component Housings

KEY FEATURES

265 °F Continuous Use Temperature
Superior Electrical Properties
Excellent UV Resistance
Transparent

SHAPES AND SIZES

ROD DIAMETER

NATURAL	0.375" - 8.0"
BLACK	0.375" - 8.0"
Rg-20	0.50" - 8.0"

SHEET THICKNESS

NATURAL	0.25" - 4.0"
BLACK	0.25" - 4.0"
Rg-20	0.25" - 4.0"



MECHETEC®

PC

	Test Method	Units	NATURAL and BLACK Unfilled Polycarbonate	PC Rg-20 20% Glass Fiber Reinforced PC
Mechanical				
Specific Gravity	ASTM-D792	---	1.20	1.35
Tensile Strength	ASTM-D638	psi	9,500	16,000
Tensile Elongation	ASTM-D638	%	110	5
Tensile Modulus of Elasticity	ASTM-D638	psi	330,000	860,000
Flexural Strength	ASTM-D790	psi	13,500	19,000
Flexural Modulus of Elasticity	ASTM-D790	psi	340,000	800,000
Compressive Strength	ASTM-D695	psi	12,500	16,000
Izod Notched Impact	ASTM-D256	ft.-lb./in.	17.0	2.0
Rockwell Hardness	ASTM-D785	M or R scale	M70 (R118)	M91 (R122)
Thermal				
Coef. of Linear Thermal Expansion	ASTM-D696	in./in./deg F	3.8×10^{-5}	1.49×10^{-5}
Max. Continuous Use Temp.	UL 746	°F	265	265
Heat Deflection Temp. @ 264 psi	ASTM-D3418	°F	270	295
Electrical				
Dielectric Strength-Short Term	ASTM-D149	volts/mil	380	490
Dielectric Constant @ 60 Hz	ASTM-D150	---	3.17	3.17
Dielectric Constant @ 10 ⁶ Hz	ASTM-D150	---	2.96	3.13
Dissipation Factor @ 60 Hz	ASTM-D150	---	0.0009	0.0009
Volume Resistivity	ASTM-D257	ohm-cm	>10 ¹⁷	>10 ¹⁷
Miscellaneous				
Water Absorption/24 hrs.	ASTM-D570	% weight	0.15	0.16
Water Absorption @ Saturation	ASTM-D570	% weight	0.35	0.29
Flammability	UL-94	---	HB	HB

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