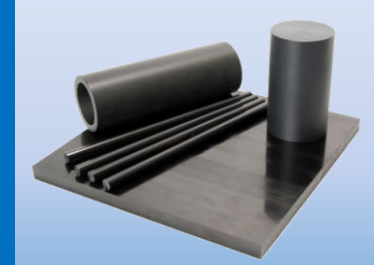
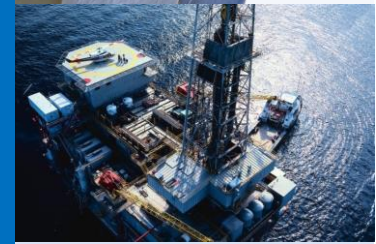




PB3000 SERIES

Polyetheretherketone (PEEK)

The **PB3000 series** is a strong and stiff material that is used in applications that require peak performance at elevated temperature ranges. PBY'S **PB3000** series material are used in such areas as: automotive, aerospace, oil and natural gas, electronics, and FDA suitable environments. applications requiring strength and stiffness as well as high ductility. Chemically resistant to aggressive environments, ideal material for sterilization of medical and food contact applications. **PB3000 materials** have raised the bar on high performance, easy to machine, application adaptable, stock shape materials. With the addition of hundreds of custom compounds, PB3000 materials have no limit as to the applications it can fulfill and do so with outstanding results!!



KEY MATERIAL ADVANTAGES:

- Rigid and high strength
- Excellent chemical resistance
- Good mechanical properties at high temperatures
- Excellent chemical resistance
- Bearing grade has excellent wear properties
- Extreme resistance to hot water and steam
- UL 94 V-0 flammability rating (sample @ 0.059" thickness)
- Very low smoke and toxic gas emissions when exposed to flame
- Glass-filled, Bearing grade, FDA grades available

APPLICATIONS:

- Semiconductor
- Aerospace parts
- Seals
- Pump and valve assembly
- Electrical components
- Medical instrument parts
- Food processing equipment

* SPEC INCLUDES: VIRGIN, 30% GLASS FILLED, 30% CARBON FIBER FILLED PEEK

PEEK TYPICAL PROPERTY RESULTS:

	UNITS	ASTM TEST	VIRGIN PEEK (PB3000)	30% GLASS PEEK (PB3200)	30% CARBON FIBER PEEK (PB3100)	BEARING GRADE PEEK (PB3300)
Tensile Strength	PSI	D-638	14,000	24,620	32,500	25,000
Flexural Modulus	PSI	D-790	590,000	1,450,000	2,930,000	1,800,000
Izod Impact (notched)	FT-LBS./IN.	D-256	1.6	1.84	1.65	1.80
Heat Deflection Temp @ 264 psi	1.8 Mpa	D-648	306°F	599°F	599°F	500°F
Max. continuous service temp in air	F°		480 F°	482 F°	599 F°	599°F
Water Absorption (immersion for 24 hours)	%	D-570	0.50	0.11	0.06%	0.05%
Coefficient of Linear Thermal Expansion	in/in/°Fx10	D-696	2.60	1.20	1.45	1.44
Coefficient of Friction (dynamic)			0.25	0.30	0.16	0.21

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