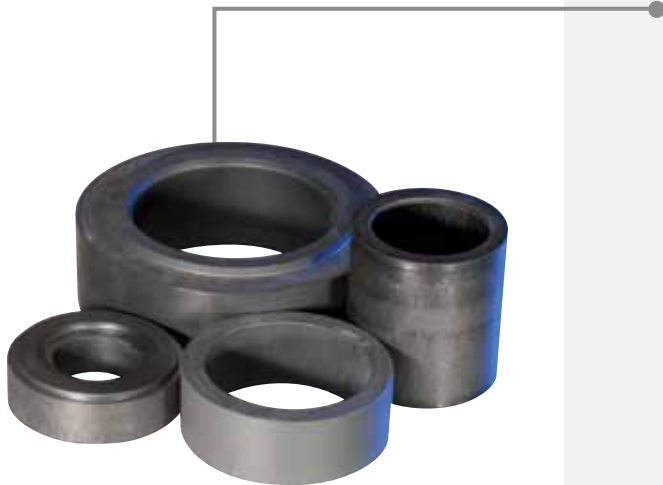


CPI 182

Special polymer alloy for pump bushes



CPI 182 is proprietary polymer alloy for pump bushings designed to be used for wear rings, guide bushings and thrust washers. This material is intended to replace commonly used metallic materials in pump applications.

CPI 182 allows a reduction in running clearance of 50% on wearing elements without the risk of damage to metal components. The properties of CPI 182 help to avoid catastrophic pump failures caused by dry-run start up or excessive vibration. CPI 182 meets the requirements of API610-11th ed, for the application of non metallic wearing parts used in Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries.

CPI 182 provides advantages for pump application such as: higher resistance in occasional dry runs, low coefficient of thermal expansion and excellent resistance to chemical attack as well as impacts, thermal shocks, and hydrolysis.

Other CPI 182 advantages:

- Good machinability with no special treatment required.
- Non galling and non seizing properties.
- Low coefficient of friction ensuring long running life.
- Excellent quality to absorb shock and vibration.
- Increase in hydraulic efficiency, improving pump performance.

CPI should be consulted for the proper design and application of its specialized products and materials. For further advice and technical support please contact CPI directly.

Typical properties	Metric	Imperial
Tensile strength	35 MPa	5000 psi
Elongation (%)	1-2	1-2
Coefficient of thermal expansion	$40 \times 10^{-6} / ^\circ\text{C}$	$2.2 \times 10^{-5} / ^\circ\text{F}$
Hardness (Shore 'D')	80-85	80-85
Specific gravity	1.5	1.5
Water absorption	< 1%	< 1%
Mean temperature limits	-50°C to +250°C	-60 to +480 °F
Melting point	> 300°C	>570 °F
Flexural strength	91 MPa	13200 psi
Compressive strength	114 MPa	16500 psi



Note: The values above are for reference only and are not intended for specification or quality control purposes.