

# Hydropower Industry

## TriboTex 7 and TriboGlide 15

ACM Composites has been developing, manufacturing and supplying highly engineered composite bearings to the Hydropower Industry for many years and TriboTex 7 and TriboGlide 15 materials offer significant increase in performance without the need for periodic lubrication and maintenance.

Both the TriboTex 7 and TriboGlide 15 are self lubricating materials that have been specially developed to meet the demands of applications requiring high load capability, low wear, low friction and long life. ACM Hydropower Industry materials have proven to offer superior wear performance from abrasive water conditions when compared to rubber and other non-metallic bearings.

For the repair of turbine main shaft bearings our materials can be supplied in one piece and freeze fitted into the existing housing thus reducing downtime costs. For new build we can supply the bearing as a fully machined stand alone item or as a complete bearing/housing package ready for installation.



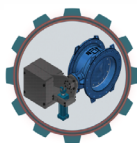
As a world class supplier, ACM Composites offers a professional service with technical support from their experienced team of plastic technologists/application engineers including, design recommendation, technical proposals and quotation, machining recommendations and bearing installation assistance.

### Advantages in using ACM materials

- ▲ Competitive price
- ▲ High load capability
- ▲ Excellent shock resistance
- ▲ Good elasticity
- ▲ Low swell characteristics
- ▲ Low start-up friction
- ▲ Pollution free operation
- ▲ Short delivery time (repair 48 hours)
- ▲ Shaft friendly
- ▲ Excellent corrosion resistance
- ▲ Low noise signature
- ▲ Good dimensional stability
- ▲ Runs hydrodynamically
- ▲ Low wear rate – long life

### Applications

- ▲ Pump bearings, wear & seal rings
- ▲ Trash rack bearings
- ▲ Wicket gate (guide vane) bearings
- ▲ Hub bearings
- ▲ Sluice gate bearings and slides
- ▲ Control linkage bearings
- ▲ Segmented shaft seals
- ▲ Turbine bearings



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acm COMPOSITES



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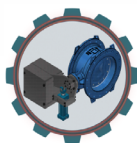
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# Material/Design Specification

Property	Unit	TriboTex 7	TriboGlide 15
Compressive strength (normal)	MPa	375	375
Compressive modulus (normal)	MPa	2,750	2,750
Impact strength (normal)	kJ/m <sup>2</sup>	100	100
Density	g/cm <sup>3</sup>	1.30	1.30
Hardness	Rockwell M	100	100
Coefficient of friction (dry)	-	0.13 – 0.15	0.07 – 0.12
Maximum operating temperature	°C	130	130
Minimum operating temperature	°C	-40	-40
Thermal expansion coefficient (parallel)	/ °C	5 x 10 <sup>-5</sup>	6 x 10 <sup>-5</sup>
Thermal expansion coefficient (normal)	/ °C	10 x 10 <sup>-5</sup>	12 x 10 <sup>-5</sup>
Swell in water	%	< 0.15	< 0.20

(nominal values)



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