

# Rail Industry Materials

## TriboTex 3, TriboTex 7 and TriboTemp 20

ACM Composites has been developing, manufacturing and supplying highly engineered composite bearings to the Rail Industry for many years.

The ACM Composites range of materials now offers the design engineer a choice of different material characteristics to suit each application. Each grade of material can operate under dry, grease or oil lubricated conditions and offers improved performance over existing non-metallic bearings.

These materials have been specifically developed to meet the demands of applications requiring high load capability, low wear, low friction and long life and have therefore proved to be ideal for the Rail Industry. All grades are available in sheet, tube, moulded or as fully machined components.

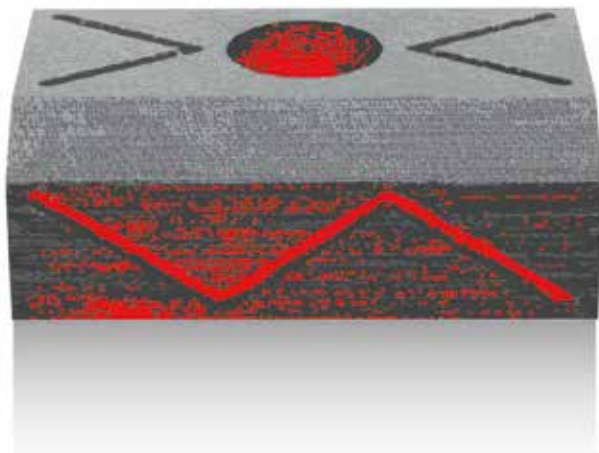
As a world class supplier ACM Composites offers a professional service with technical support from their experienced team of plastic technologists/ application engineers including, design recommendation, technical proposals and quotation, machining recommendations and continued support.

### Advantages of Rail Industry Materials

- ▲ Competitive price
- ▲ High load capability
- ▲ Excellent shock resistance
- ▲ Good elasticity
- ▲ Short delivery time (repair 48 hours)
- ▲ Kindness to mating surfaces
- ▲ Excellent corrosion resistance
- ▲ Low wear rate

### Applications

- ▲ Anti-roll bar bearings
- ▲ Anti-friction liners/pads
- ▲ Trunnion bearings
- ▲ Coupler wearing pads
- ▲ Side bearer pads
- ▲ Horn block liners
- ▲ Gangway faceplate liners
- ▲ Tread plate rubbing strips
- ▲ Rubbing blocks
- ▲ Anti-roll bar thrust washers
- ▲ Wearing pads
- ▲ Friction plates



**acm** COMPOSITES

**ACM Bearings Ltd, Derwent Way, Wath Upon Dearne, Rotherham, S63 6EX United Kingdom**

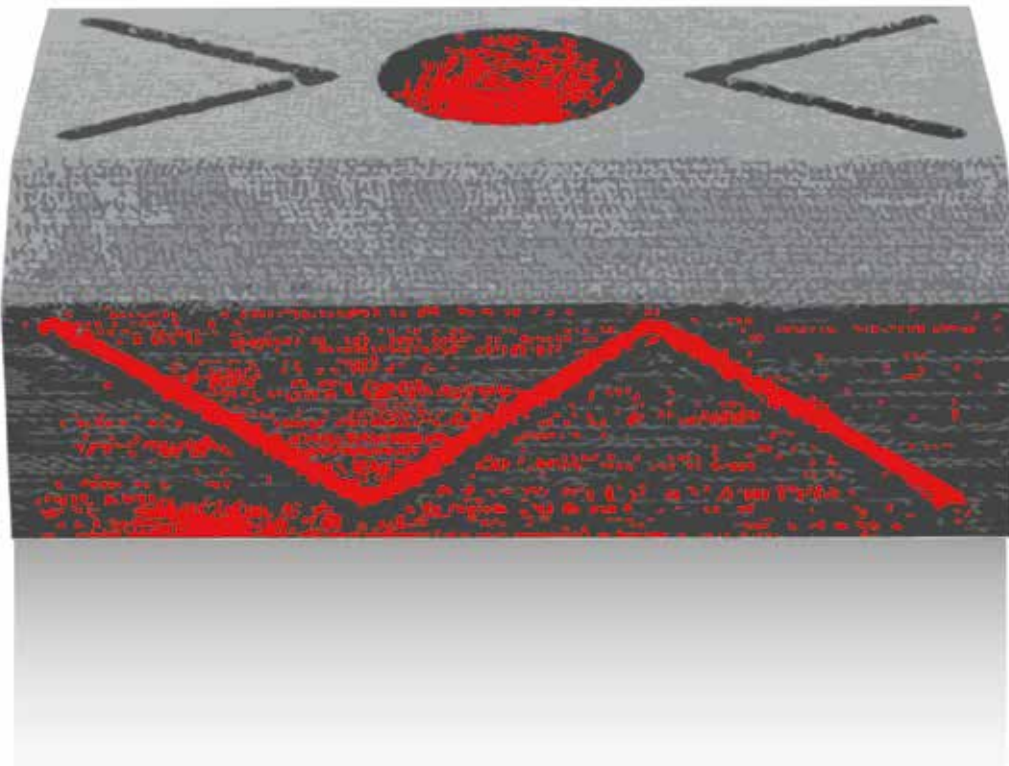
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# Material/Design Specification

Property	Unit	TriboTex 3	TriboTex 7	TriboTemp 20
Compressive strength (normal)	MPa	240	375	140
Compressive modulus (normal)	MPa	2,600	2,750	2,000
Impact strength (normal)	kJ/m <sup>2</sup>	100	100	90
Density	g/cm <sup>3</sup>	1.30	1.30	1.30
Hardness	Rockwell M	95	100	70
Coefficient of friction (dry)	-	0.15 – 0.18	0.13 – 0.15	0.22 – 0.28
Maximum operating temperature	°C	120	130	200
Minimum operating temperature	°C	-40	-40	-40
Thermal expansion coefficient (parallel)	/ °C	5 x 10 <sup>-5</sup>	5 x 10 <sup>-5</sup>	6 x 10 <sup>-5</sup>
Thermal expansion coefficient (normal)	/ °C	10 x 10 <sup>-5</sup>	10 x 10 <sup>-5</sup>	12 x 10 <sup>-5</sup>
Swell in water	%	1.0	< 0.15	< 0.20

(nominal values)



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