Ferotec Friction Ltd

D3904 Product Data Sheet

General Description

D3904 is a rigid moulded friction material, dark grey in colour and having a non-asbestos basis of short steel filaments in a random dispersion. It incorporates a blend of carefully chosen friction modifying elements and a binder system which has been specially developed to enhance its performance. D3904 is a high friction material, with excellent anti fade and wear properties, and is particularly quiet in operation. It can be used at all duty levels, and will offer consistent behaviour throughout. The material is unsuitable for working in oil.

Applications

Industrial drum and band-brake linings
Industrial disc brakes
Industrial plate type clutches
Crane and excavator brake and clutch linings
Miscellaneous industrial devices

Bonding

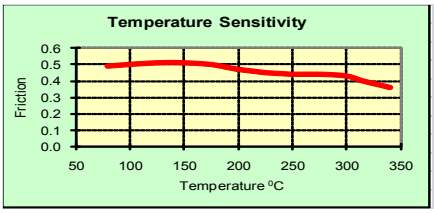
D3904 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive.

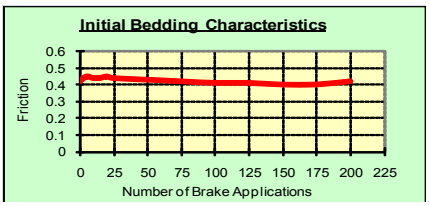
Mating Surface

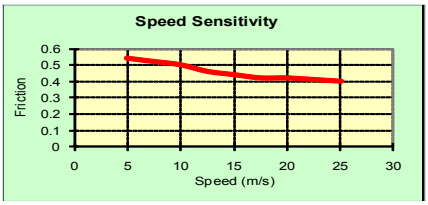
A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

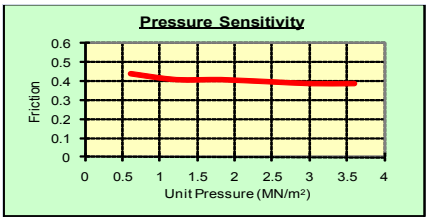
Availability

- Sheet size 660mm x 330mm x 3.2 up to 12.7mm thick
- Sheet size 660mm x 530mm x above 12.7mm to 25.4mm thick
- Special shapes and discs on request









TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.40
	Dynamic	0.45

Recommended Operating Range

Pressure	Dynamic	70-860 kN/m²
	Static	70-2,410 kN/m²
Max. rubbing speed	25 m/s	
Max. continuous temperature	175°C	
Max. intermittent temperature	225°C	
Max. temperature	300°C	

Test Conditions

Application Speed	15m/s
Clamping pressure	0.61 MN/m³ (88.5 ibf/in²)
Average temperature	Initial Bedding 140°C
Average temperature	Pressure Sensitivity / Speed Sensitivity 80°C

PHYSICAL PROPERTIES

Density	2.10 g/cc
Ultimate tensile strength	15.2 MPa (2,200 lbf/in²)
Ultimate compressive strength	93.0 MPa(13,500 lbf/in²)
Ultimate shear strength	13.8 MPa (2,000 lbf/in²)
Rivet holding capacity	65.4 MPa (9,500 lbf/in²)
Hardness (Shore D)	75
Thermal Conductivity	0.97 W/m°C

(All physical properties shown above are all mean values)

The information supplied in this data sheet is believed to be accurate and reliable, and was obtained by scientific and laboratory testing. However, since actual conditions of use are largely outside the control of FEROTEC FRICTION LIMITED, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.

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