Ferotec Friction Ltd

D3921 Product Data Sheet

General Description

D3921 is a rigid moulded friction material, light green in colour, and having a non-asbestos basis of short steel filaments in a random dispersion to enhance its heat dissipation properties and strength. It incorporates a blend of carefully selected friction modifiers and a binder which has been specially developed to enhance its properties. Whilst not affected physically by slight oil contamination, this material is not intended to operate in oil. D3921 is also available as semi-cured, semi-flexible roll although in this form it is known by the reference ***D3920***. Information on how to convert D3920 into D3921 is available on request.

Applications

Industrial drum and band-brake linings
Crane and excavator brake and clutch linings
Miscellaneous industrial devices

Bonding

D3921 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

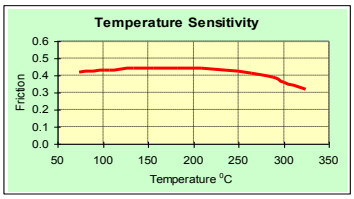
A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

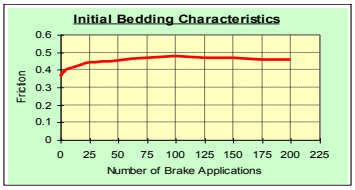
Availability

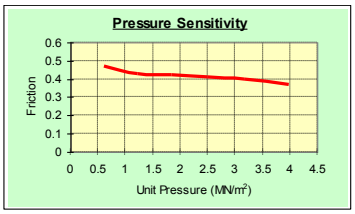
- Roll

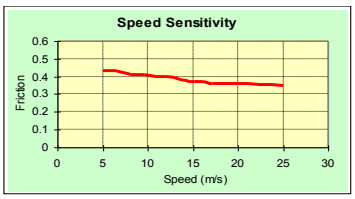
Length	5M
Width	20 to 330mm
Thickness range	3.2mm to 12.7mm

- Sheet size 660mm x 330mm x 3.2 up to 12.7mm thick
- Sheet size 660mm x 530mm x above 12.7mm to 32.0mm thick
- Special shapes and discs on request









TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.38
	Dynamic	0.42

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	2.30 g/cc
Ultimate tensile strength	15.0 MN/m² (2,177 ibf/in²)
Ultimate compressive strength	93.0 MN/m² (13,520 ibf/in²)
Ultimate shear strength	12.0 MN/m² (1,750 ibf/in²)
Rivet holding capacity	86.0 MN/m² (12,500 ibf/in²)
Thermal Conductivity	1.034 W/m°C
Hardness (Shore D)	75

(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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