



Material: FTL142

General Description

FTL142 is a rigid moulded, resin based material, containing non-asbestos mineral fibres in a random dispersion with selected friction modifiers. It has a medium coefficient of friction with a good resistance to fade and wear.

Both surfaces are ground during manufacture so that it can be either bonded or riveted to brake shoes and metal parts.

FTL142 is not suitable for operating in oil.

Application

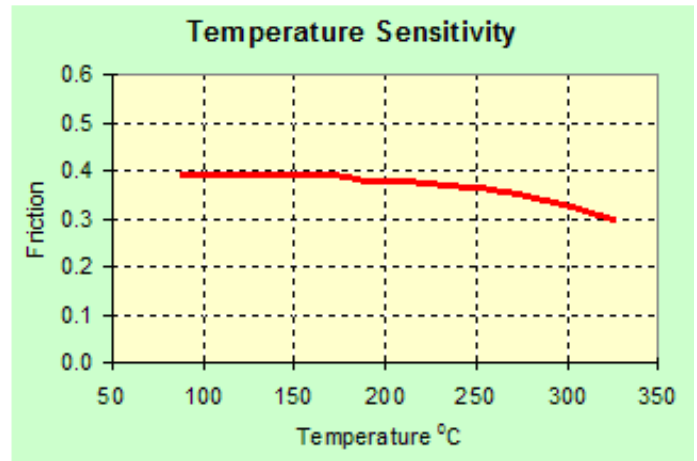
- Industrial drum and band-brakes
- Industrial clutches
- Miscellaneous industrial devices
- Crane and excavator brake and clutch linings.

Bonding

FTL142 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.



TECHNICAL DATA

Friction

μ for design purposes: Static (cold) 0.35
Dynamic 0.40

Recommended operating range

Pressure

Dynamic 70 - 860 kN/m² (10 - 125 lbf/in²)
Static 70 - 2410 kN/m² (10 - 350 lbf/in²)

Max. rubbing speed 25 m/s (82 ft/s)
Max. continuous temperature 180°C
Max. intermittent temperature 275°C
Max. temperature 325°C

Availability

Linings

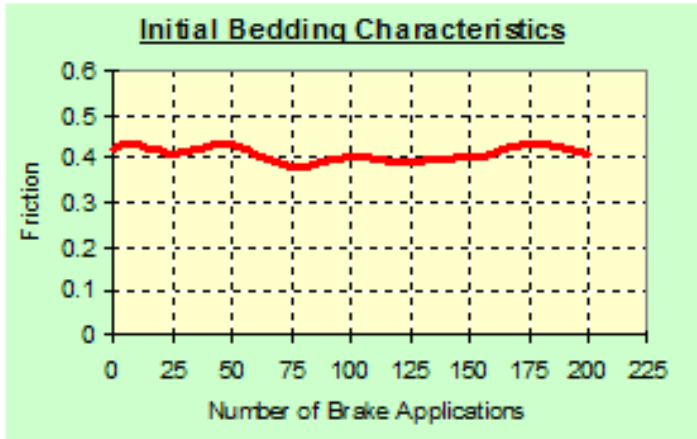
Width 25 to 305 mm
Thickness 4.75 to 38.1 mm
Max. length 711 mm but not exceeding arc of 145°

Sheets

1016 mm long x 711 mm wide
Thickness range 4.75 to 38.1 mm



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Test Conditions

Temperature Sensitivity (see over)

Application speed 15 m/s

Clamping pressure 0.61 MN/m² (88.5 lbf/in²)

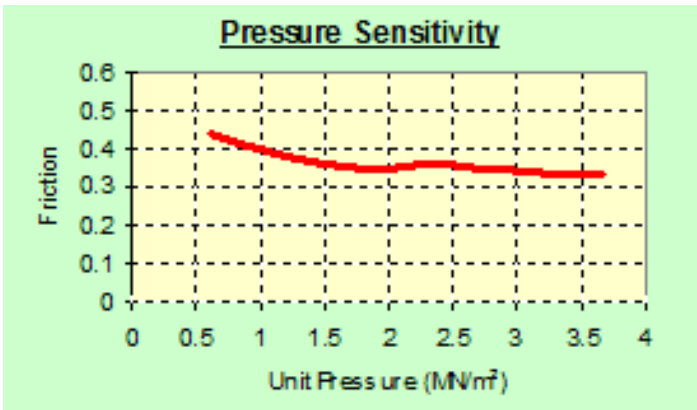
Temperatures ranging from 50 to 350°C in steps of 25°C

Initial Bedding

Application speed 15 m/s

Clamping pressure 0.61 MN/m² (88.5 lbf/in²)

Average Temperature 140°C



Pressure Sensitivity

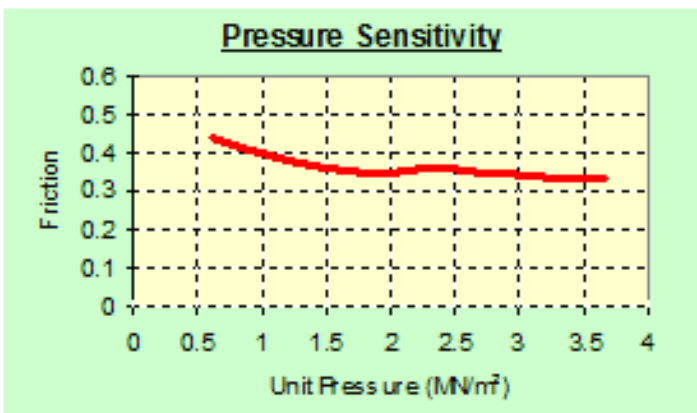
Application speed 15 m/s

Average temperature 80°C

Speed Sensitivity

Clamping pressure 0.61 MN/m² (88.5 lbf/in²)

Average temperature 80°C



Physical Properties

Density 1.90 g/cc

Hardness (Gogan) Below 26 Gc

Ultimate tensile strength 16.4 MN/m² (2,370 lbf/in²)

Ultimate compressive strength 88.7 MN/m² (12870 lbf/in²)

Ultimate shear strength 29.6 MN/m² (4300 lbf/in²)

Ultimate Crossbreak strength 40.6 MN/m² (5900 lbf/in²)

(All the physical properties shown above are all mean values)