



Material: FTL131

General Description

FTL131 is a rigid moulded friction material, dark grey in colour and having a non-asbestos basis of mineral fibres together with friction modifiers and a synthetic rubber binder system. It has a high coefficient of friction together with excellent resistance to fade and wear and is quiet in operation.

Both surfaces of FTL131 are ground in production so that it may be bonded on either or it may be attached by rivetting. Although minor oil contamination does not damage FTL131 physically, the material is not suitable for use immersed in oil.

Application

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

Bonding

FTL131 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
for design purposes: 0.40 Static (cold)
0.38 Dynamic

Recommended operating range

Pressure: Dynamic 70 – 860 KN/m²
Static 70 – 2410 KN/m²

Max. rubbing speed 25 m/s
Max. continuous temperature 175 °C
Max. intermittent temperature 225 °C
300 °C Max. temperature

Size range

Sheets
610 x 381 mm wide
Thickness range: 4.0 to 30.0 mm

Linings
Maximum length – 610mm
Maximum width – 300mm

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 250°C

Initial Bedding

Application speed 15 m/s
Clamping pressure 0.61 MN/m² (88.5 lbf/in²)
Average Temperature 1400°C

Pressure Sensitivity

Application speed 15 m/s
Average temperature 800°C

Speed Sensitivity

Clamping pressure 0.61 MN/m² (88.5 lbf/in²)
Average temperature 800°C

Physical Properties

Density	2.00 g/cc typical
Hardness (Shore 'D')	75 – 85 typical
Ultimate tensile strength Longitudinal	11.9 MN/m ² (1,700 lbf/in ²)
Ultimate compressive strength 51.7 MN/m ² (7,500 lbf/in ²)	
Ultimate shear strength Longitudinal	5.86 MN/m ² (850 lbf/in ²)
Thermal conductivity	0.51 W/m°C



Material: FTL131

