

FTL132

✓ **General description:**

FTL132 is a non-asbestos, semi-flexible friction material from the **FTL** range. It is available in roll form and is suitable for use under dry operating conditions only (i.e. it is unsuitable for use in oil).

As with other materials from this range, **FTL132** is sufficiently flexible, when supplied in rolls, to make fitting to curved metal parts a relatively simple operation, after which the heat generated in service will increase its strength and stiffness. Alternatively, **FTL132** can be heat treated in an oven at a temperature of between 200 & 230°C for a period of not less than 60 minutes, either before or after fitting.

The frictional characteristics of **FTL132** in both its initial flexible and rigid heat-treated states are virtually identical. It exhibits excellent temperature, wear resistance, and is quiet in operation. This material is manufactured with a ground surface on both sides so may be bonded on either.

This material is specifically developed for bonding to brake shoes. It is suitable for riveting once fully cured.

✓ **Application:**

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

✓ **Bonding:**

FTL132 can 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

✓ **Recommended Operation Range:**

Pressure	
Dynamic (dry)	70 - 860 kN/m ²
Static	70 - 2410 kN/m ²
Max rubbing speed	25 m/s
Max continuous temperature	150 °C
Max intermittent temperature	250 °C
Max temperature	325 °C

✓ **Availability**

Roll
Lengths: 7.5 metres up to & including 6.4 mm thick
5.0 metres 6.5 mm & above
Maximum width – 330mm
Thickness range: 3.0 to 12.7 mm

✓ **Technical Data**

Static Friction Coefficient	0.35
Dynamic Friction Coefficient	0.38
Density	1.71g/cm ³
Tensile Strength	7.6 N/mm ²
Compressive Strength	45 N/mm ²
Shear Strength	5.2 N/mm ²
Hardness	65 Shore D
Thermal Conductivity	0.51W/m°C

✓ **Test Conditions**

Temperature Sensitivity
Application speed 15 m/s
Clamping pressure 0.61 MN/m²
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
Average Temperature 140°C

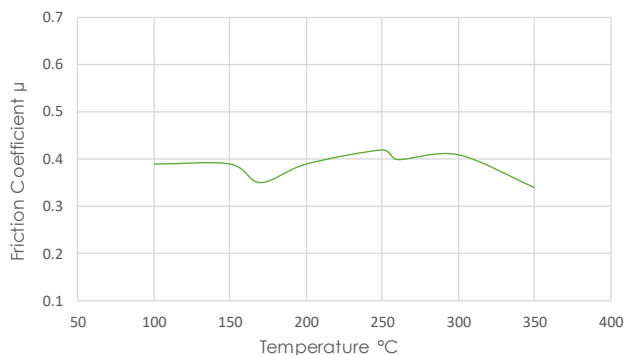
Pressure Sensitivity

Application speed 15 m/s
Average temperature 80°C

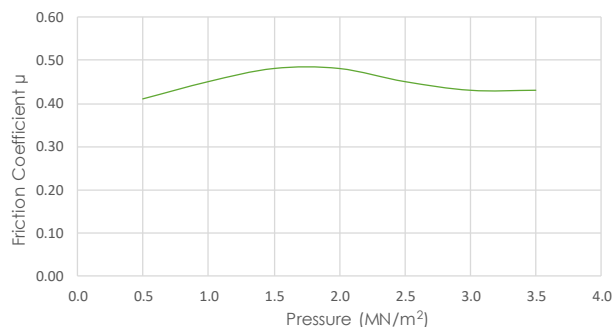
Speed Sensitivity

Clamping pressure 0.61 MN/m²
Average temperature 80°C

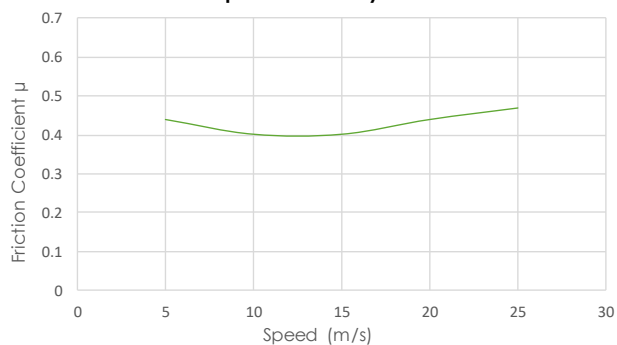
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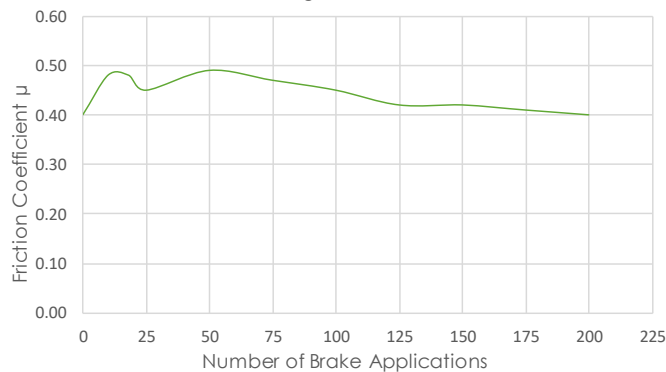
Pressure Sensitivity



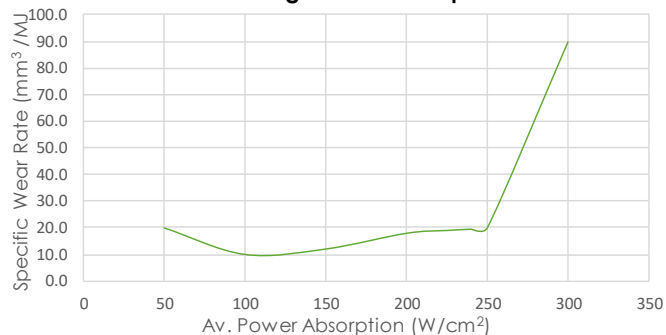
Speed Sensitivity



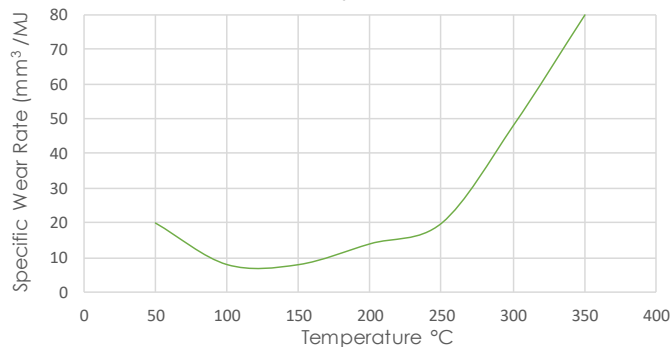
Initial Bedding Characteristics



Wear vs Average Power Absorption



Wear vs Temperature



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