

FTL135

✓ **General description:**

FTL135 is a rigid moulded friction material having a non-asbestos base. It is grey in colour and incorporates a blend of selected friction modifying agents. This complex matrix of ingredients is created with a specially developed binder system.

FTL 135 has a high friction coefficient, which combined with an excellent resistance to fade and wear offers high performance characteristics that are particularly suited to severe duty applications.

This material although not intended to operate in oil is not physically damaged by moderate oil contamination.

✓ **Application:**

Industrial disc brakes.
Disc brakes for off-highway equipment.
Miscellaneous industrial devices

✓ **Bonding:**

FTL135 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.

N.B. Care should be taken to ensure that the temperature to which the material is to be subjected does not exceed the recommendations of the adhesive manufacturer.

✓ **Mating Surface**

A good quality, fine grained pearlitic cast iron or cold rolled steel with a Brinell hardness of 200. Cast steels are not recommended

✓ **Recommended Operation Range:**

| | |
|-------------------------------|------------------------------|
| Pressure | |
| Dynamic | 0.35 – 5.2 MN/m ² |
| Max. rubbing speed | 25 m/s |
| Max. continuous temperature | 225 °C |
| Max. intermittent temperature | 400 °C |
| Max. temperature | 650 °C |

✓ **Availability**

Although primarily manufactured in the form of pads for disc brakes, integrally moulded onto steel backplates, the company can also supply this material in rectangular block and sheet form for machining into special shapes. Sizes are available on request

✓ **Technical Data**

| | |
|-------------------------------------|------------------------|
| Static Friction Coefficient | 0.38 |
| Dynamic Friction Coefficient | 0.42 |
| Density | 3 g/cm ³ |
| Compressive Strength | 60.3 N/mm ² |
| Shear Strength | 9.8 N/mm ² |
| Gogan Hardness | 21Gg |
| Thermal Conductivity | 1.4 W/m ² C |

✓ **Test Conditions**

Temperature Sensitivity

Application speed 20 m/s
Clamping pressure 1.22 MN/m²
Temperatures ranging from 50 to 600°C in steps of 25°C

Initial Bedding

Application speed 15 m/s
Clamping pressure 1.22 MN/m²
Average Temperature 150°C

Pressure Sensitivity

Application speed 15 m/s
Average temperature 80°C

Speed Sensitivity

Clamping pressure 1.22 MN/m²
Average temperature 150°C

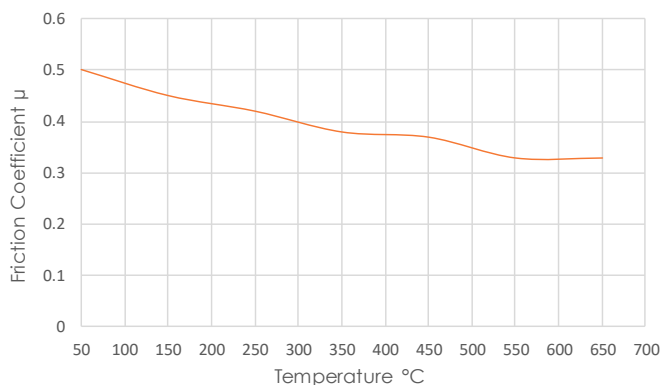
Pressure Sensitivity

Application speed 15 m/s
Average temperature 80°C

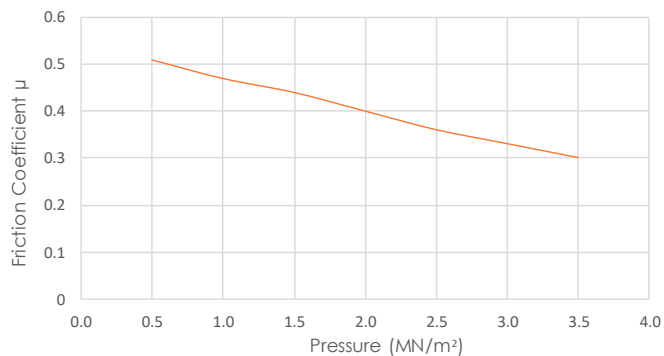
Speed Sensitivity

Clamping pressure 0.61 MN/m²
Average temperature 80°C

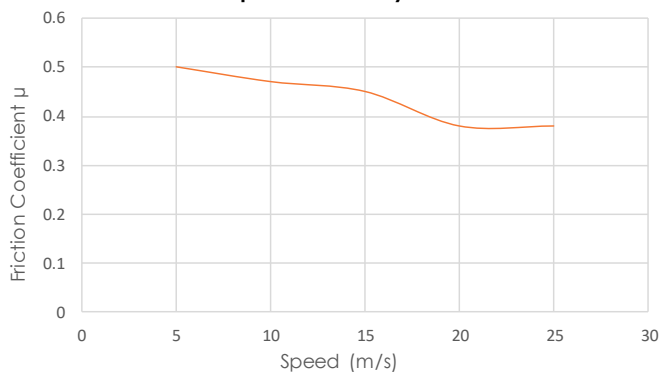
Temperature Sensitivity



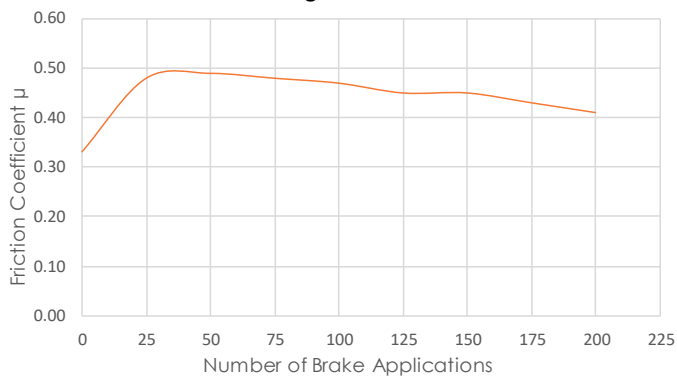
Pressure Sensitivity



Speed Sensitivity



Initial Bedding Characteristics



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 Industrial Clutch Parts Ltd, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.