

# FTL135.1

## ✓ General description:

**FTL135.1** is a rigid moulded non asbestos material, which incorporates a blend of selected friction modifying agents, together with a specially developed binder system. It also includes a proportion of steel filaments in random dispersion

**FTL135.1** has been produced with the specific aim of presenting good static frictional characteristics, whilst displaying a high stable dynamic coefficient. Good resistance to both fade and wear have also been achieved and the material is suitable for use at medium and heavy duty levels.

Although **FTL135.1** is not affected physically by slight oil contamination, but it is not suitable for use immersed in oil.

## ✓ Application:

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

## ✓ Bonding:

**FTL135.1** 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.

**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 <sup>2</sup>
Max. rubbing speed	25 m/s
Max. continuous temperature	225 °C
Max. intermittent temperature	350 °C
Max. temperature	400 °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

<b>Static Friction Coefficient</b>	0.4
<b>Dynamic Friction Coefficient</b>	0.42
<b>Density</b>	3.3 g/cm <sup>3</sup>
<b>Compressive Strength</b>	572 N/mm <sup>2</sup>
<b>Shear Strength</b>	14.1 N/mm <sup>2</sup>
<b>Thermal Conductivity</b>	1.03 W/m°C

## ✓ Test Conditions

### Temperature Sensitivity

Application speed 20 m/s  
Clamping pressure 1.22 MN/m<sup>2</sup>  
Temperatures ranging from 50 to 550°C in steps of 25°C

### Initial Bedding

Application speed 15 m/s  
Clamping pressure 1.22 MN/m<sup>2</sup>  
Average Temperature 150°C

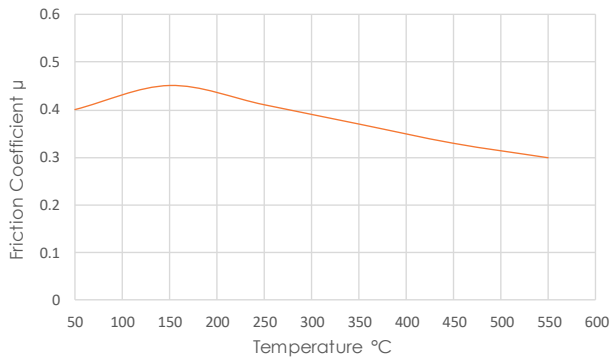
### Pressure Sensitivity

Application speed 15 m/s  
Average temperature 80°C

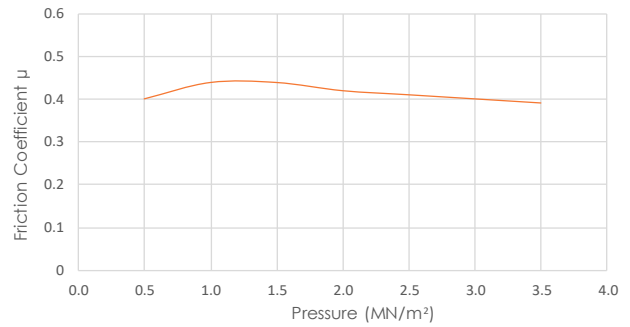
### Speed Sensitivity

Clamping pressure 1.22 MN/m<sup>2</sup>  
Average temperature 150°C

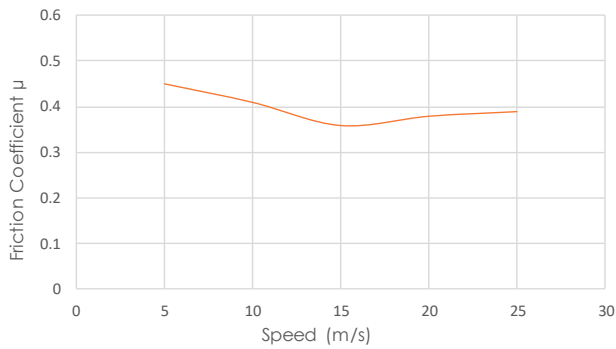
**Temperature Sensitivity**



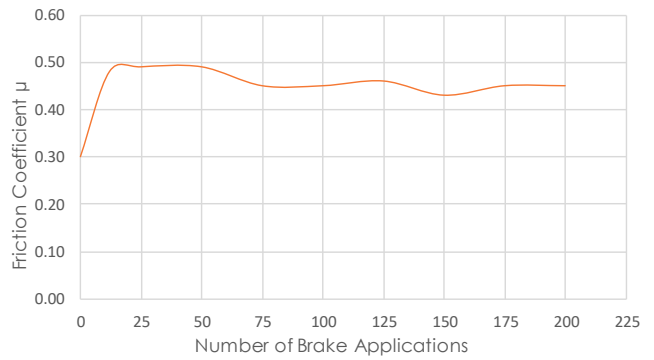
**Pressure Sensitivity**



**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.