

# 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.  
Crane and excavator brake and clutch linings.  
Miscellaneous industrial devices.

✓ **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

✓ **Recommended Operation Range:**

Pressure	
Dynamic	0.07 – 0.860 N/mm <sup>2</sup>
Static	0.07 – 19 N/mm <sup>2</sup>
Max. rubbing speed	25 m/s
Max. continuous temperature	180 °C
Max. intermittent temperature	275 °C
Max. temperature	325 °C

✓ **Availability**

Sheets

914 mm long x 711 mm wide  
Thickness range 5mm to 32 mm

Special Machined Shapes

✓ **Technical Data**

<b>Static Friction Coefficient</b>	0.35
<b>Dynamic Friction Coefficient</b>	0.4
<b>Density</b>	2.1 g/cm <sup>3</sup>
<b>Tensile Strength</b>	15.2 N/mm <sup>2</sup>
<b>Compressive Strength</b>	59.2 N/mm <sup>2</sup>
<b>Shear Strength</b>	29.6 N/mm <sup>2</sup>
<b>Gogan Hardness</b>	27Gg

✓ **Test Conditions**

Temperature Sensitivity

Application speed 15 m/s  
Clamping pressure 0.61 MN/m<sup>2</sup>  
Temperatures ranging from 50 to 350°C in steps of 25°C

Initial Bedding

Application speed 15 m/s  
Clamping pressure 0.61 MN/m<sup>2</sup>  
Average Temperature 140°C

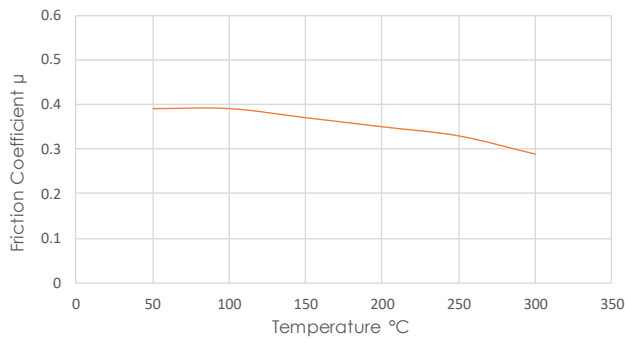
Pressure Sensitivity

Application speed 15 m/s  
Average temperature 80°C

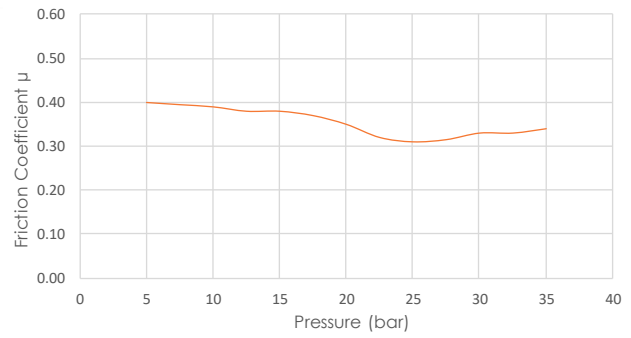
Speed Sensitivity

Clamping pressure 0.61 MN/m<sup>2</sup>  
Average temperature 80°C

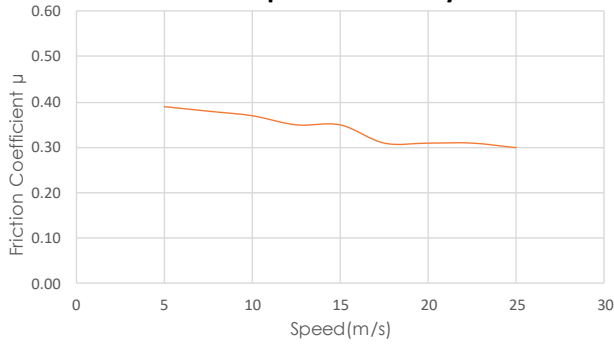
**Temperature Sensitivity**



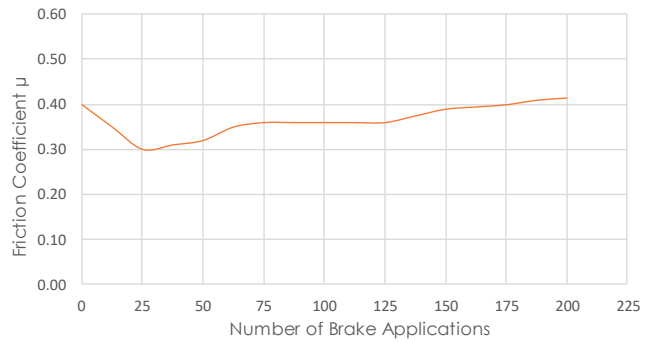
**Pressure Sensitivity**



**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.