



Material: FTL178

Description

Developed for industrial applications, 178 is a rigid, asbestos-free, moulded friction material. It is a general purpose friction material suitable for light medium duty, wet and dry industrial applications. In recent years it has become a very well regarded material. It gives it good wear and tensile strength while still achieving average and stable friction levels.

Applications

- Various industrial applications.
- Linings for tractor brake discs.
- Low friction torque limiting and tension brake applications.
- Industrial assembly applications.

Physical properties

- Density g/cm 1.78-1.88
- Hardness (SHORE-D) 85-90
- Acetone extraction <2%
- Ignition loss 40-45%

Mechanical properties

- Tensile strength N/mm² (ASTM D-638) 13.225
- Compressive strength N/mm² 10% (UNE 53205) 96.25
- Ultimate compressive strength N/mm² (UNE 53205) 171

Friction properties

- Friction coefficient (dynamic) μ (See graph) 0.40 \pm 0.05
- Wear rate (@ 79N, 7m/s) F.A.S.T 50 - 70mm³ /Kwh

F.A.S.T. test conditions (max temperature).

The FAST is a 90-minute test at constant pressure and velocity, which reports response of friction coefficient vs temperature. These are maximum temperatures resistance before material lost coefficient

F=79N v=7m/s t=90min	<250°C
F=100N v=7m/s t=70min	<278°C
F=100N v=11m/s t=45min	<300°C

Recommended operating temperatures (max):

- Continuous operation 250°C
- Intermittent operation 350 °C

Adhesives

The use of any well known thermosetting adhesive is recommended.

Rubbing surfaces

Good quality, fine grained pearlitic cast iron with Brinell hardness of 150-200 is recommended.

μ (friction coefficient) vs temperature @79N/7m/s

