TT135

Pressure-Molded Bronze Sintered Mat'l

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TT135 is a high-pressure molded sintered bronze friction material. The high proportion of bronze, as well as the carefully chosen types of graphite and silicate result in an extremely high wear resistance, even under high energy conditions. TT135 offers a mid-high friction coefficient with smooth engagement while preserving the mating surfaces. TT135 is designed for extra heavy-duty brake and clutch applications requiring stable, high-temperature performance. The material exhibits a stable friction coefficient level across all temperatures, while maintaining fade resistance. TT135 is suitable for applications where organic materials reach their thermal limits. The material is free of lead. Available in custom geometries including discs, pads, and segments.

Friction Properties

Static Friction Coefficient : 0.478 ±0.05µ
Dynamic Friction Coefficient: 0.462 ±0.05µ
Fade Resistance: $\mu > 0.40$ to 345°C / 653°F
Recovery: Full (returns to baseline μ after fade)

Material: High-Pressure Molded Sintered Bronze Matrix

Appearance/Formats:

Gear Tooth Facings. Disc Brake Pads. Segments.
Clutch Facings & Buttons.
Oil grooves can be pressed or machined.

Physical Properties

Wear Rate: 4.2 x 10-8cm3/J
Mass Loss: 0.5%
Thickness Loss: 5.0% (100 applications at ~202°C/ 396°F)
Tensile Strength: 31kg/cm2
Shear Strength: 6100 lbs.
Brinell Hardness: HB150-250
Specific Gravity: 5.5-6.5 gr/cm3
Fireproof

Applications

Heavily Loaded Segments.
Differential Clutches.
Industrial Brakes (Cycle-Duty). Stamping Presses.
Marine Gearboxes. Hoists and Winches.
Motorsport, Racing Clutch Buttons.
Heavy Vehicle, Construction Machinery.

Thermal Properties

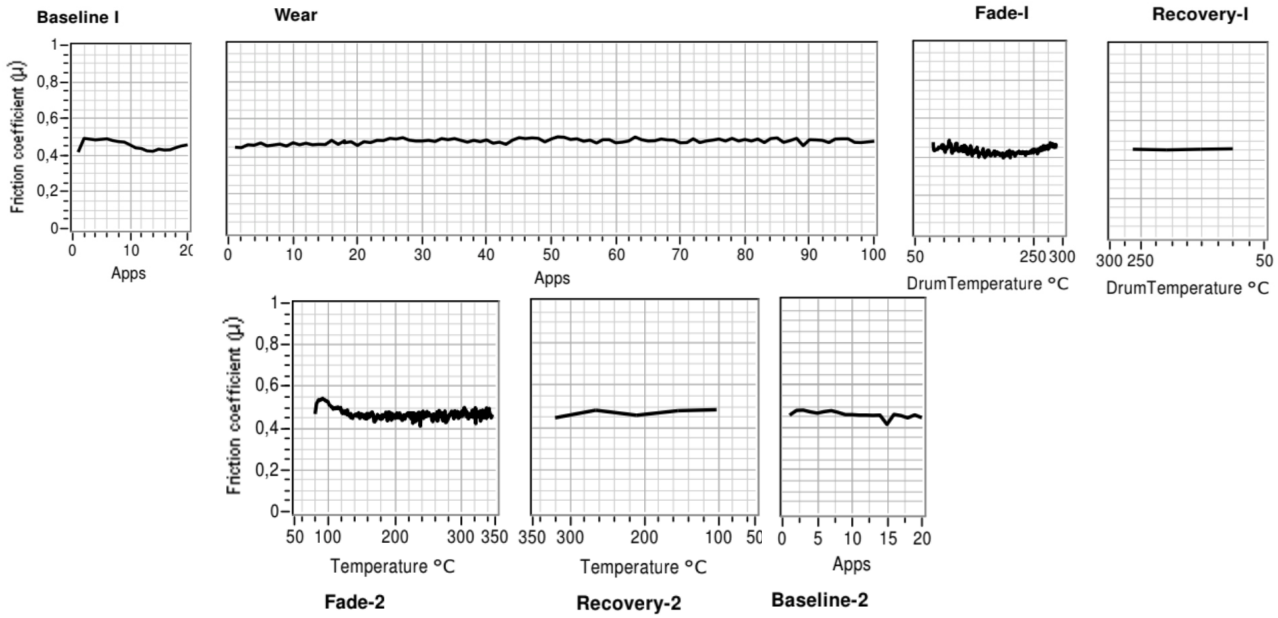
Maximum Continuous Operating Temp: 400 C°/750 F°
Maximum Intermittent Operating Temp: 550 C°/1020 F°
Fading: >345°C / 653°F (no significant fade observed)

Compliance: Reach (EC)1907/2023 & RoHS2015/863/EU

Additional

Recommended Mating Surfaces: Cast Iron with Surface Finish < 0.5µm Ra (20µin CLA).
Steel Hardened & Tempered, Cast Steel, Cast Gray Iron.

IS 2742 Friction Test Summary (Test: AS-FRML-SI-0004)



The above data is taken from specific test parameters, therefore results can vary in differing application conditions.