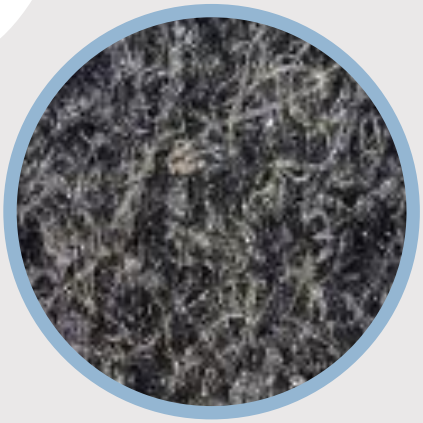
IBFS P208 CARBON FRICTION PAPER



Microstructure of P208 50X

INDUSTRIAL BRAKE & FRICTION SUPPLY

Established in 1998. With more than 20 years experience supporting the mining and earthmoving industry in Australia.

CONTACT

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TYPICAL APPLICATIONS

Wheel Brakes, LSD,
Transmissions clutches

MATING MATERIAL

Surface finish < 0.5um Ra (20µ")
Steel
Cast steel
Grey cast iron

DESCRIPTION

P208C has a structure of highly conductive fibres designed to provide outstanding thermal capability. The use of porous carbonaceous materials improves the stability of the torque curve over a wide range of temperatures and pressures.

- Low static to dynamic coefficient of friction for enhanced engagement characteristics
- Smooth engagement
- Excellent energy capability
- Good wear resistance

FRICTION COEFFICIENT

Static: 0.09 - 0.13

Dynamic: 0.11 - 0.13

RECOMMENDED LOAD

Max dynamic pressure: 4.5 N/mm² (653 Lbf/in²)

Max rubbing speed: 45 m/s (147 Ft/sec)

Max specific power: 4.0 W/mm² (3.4 HP/in²)

OIL GROOVING

Multi-pass tangential groove patterns in variety of configurations.

Grooves can either be pressed or machined.

DIMENSIONS

Friction thickness: 0.50 mm (0.02") ~ 1.20mm (0.05)

Friction diameter: 1,200 mm (47") max - 50 mm (2") min

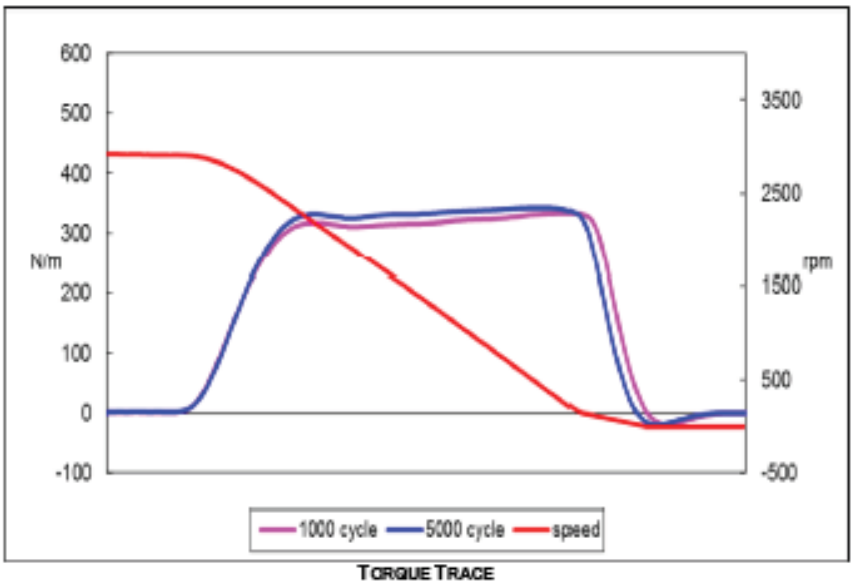
The above data is taken from specific test parameters therefore results can vary in different application conditions

LABORATORY TESTS

Tests carried out over 5000 cycles.

TORQUE TRACE

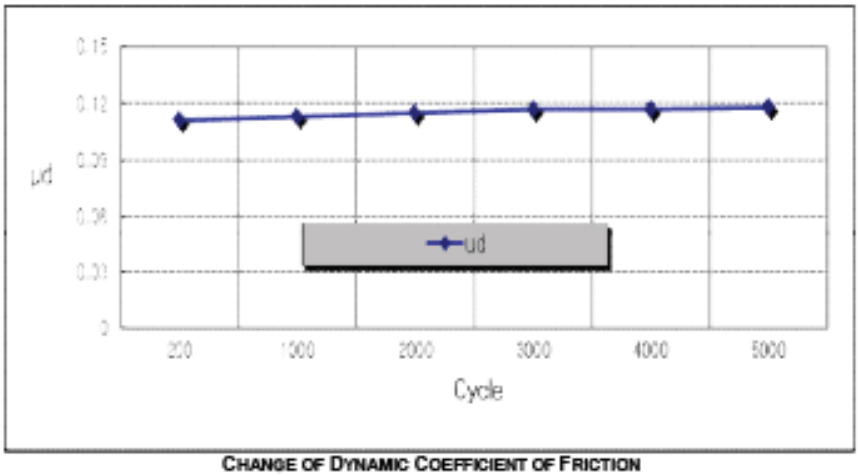
A smoother curve indicates low NVH (Noise, Vibration and Harshness). This results in a smoother engagement with less heat generation.



TORQUE TRACE

DYNAMIC COEFFICIENT OF FRICTION

Dynamic Coefficient refers to the sliding friction while discs are in motion. Over 5000 cycles friction coefficients remain stable resulting in reliable braking performance after repeated engagements.
When coefficients are low friction is reduced resulting in more heat build-up and glazing.



CHANGE OF DYNAMIC COEFFICIENT OF FRICTION

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Total cycles	5,000 cycles
Inertia	0.04 kgf·m·sec^2
Dynamic rpm	2940
Friction facing dimensions	Ø133.5mm × Ø99.0mm
Friction surfaces	4
Unit energy	0.74J/㎟
Unit pressure	2.0 Mpa
Oil type	Tractor oil
Oil temperature	80℃(±5℃)
Arrangement	pDpDp

TEST CONDITION

INDUSTRIAL BRAKE & FRICTION SUPPLY