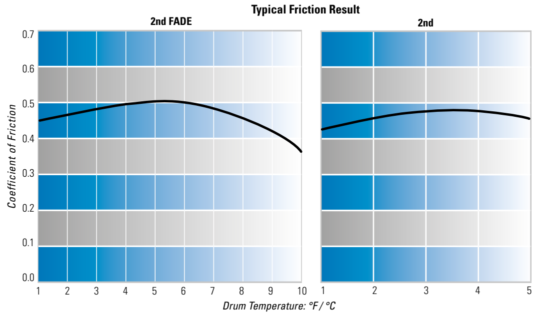
Universal Flat Sheets

AF/800

Molded, rigid and asbestos free material. Available in pieces of 22" x 22" (558.8mm x 558,8mm) with thickness from 3/16"(4.8mm) to 2 1/2"(63.5mm) – or pieces of 15 3/4" x 15 3/4" (400.0mm x 400.0mm) with thickness from 1/8" (3.2mm) to 3/4" (19.0mm).
Can be supplied in other thicknesses upon inquiry.

Applications: Recommended for industrial brakes of machines and equipment to transport loads which require flat braking surfaces.

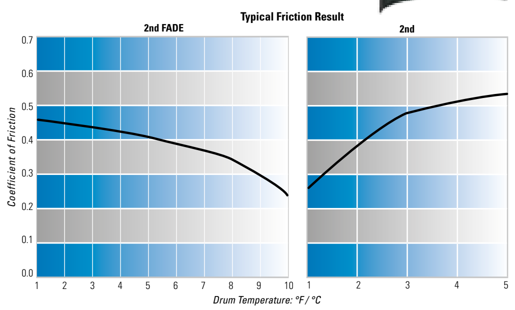


Flexible Molded Slabs

TF/850

Molded, semi-flexible and asbestos free material.
Available in sheets of 25 3/8"(645.0mm) of width and inner diameter of 16 1/4" (418.8mm), with thickness from 3/16" (4.8mm) to 7/8"(22.2mm).
Can be supplied in other thicknesses upon inquiry.

Applications: Vehicles, tractors, farming implements and industrial use.

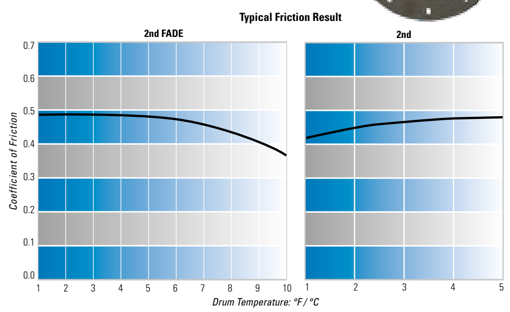


Molded Clutch Facings

LA/201

Molded and asbestos free material. Rubber as basic composition.
Available in individual pieces according to the customer`s design. Dimensions according to specifications of the brake manufacturer.

Applications: Brakes for agricultural machinery.



		AF/800	TF/850	LA/201
	Friction level / Coefficient of friction	medium high GG (0,48- 0,47)	medium GF (0,51 - 0,37)	medium high GG (0,48 - 0,45)
	With or without metal	Metal-free	Metal-free	With metallic fibers
	Flexibility and Wear	Rigid and ow wear	Good flexibility	Low flexibility and low wear
Peak working temperature	Maximum continuous temperature	300° F/ 150° C	300° F/ 150° C	446°F/ 230° C
	Short time temperature:	572° F/ 300° C	480°F/ 250°C	662°F/ 350° C
Peak working pressure	Maximum continuous pressure	200 PSI	200 PSI	150 PSI
	Short time pressure:	250 PSI	250 PSI	250 PSI

Established in 1954, Fras-le is engaged in the manufacturing of friction materials. In its business- Safety in Motion Control- Fras-le has become the largest company in Latin America and one of the world leaders in the sector. Fras-le was the first manufacturer of friction materials in Brazil to achieve the ISO 9001 certification, in addition to ISO 14001 and the ISOTS 16949. These awards confirm Fras-le's constant concern with applying the most technology allied to environmental preservation. In its advanced Research and Development Center – one of the best equipped labs in the world – Fras-le has a chemical, physical and pilot lab that enable it to develop high-performance products.

With plants in the state of Rio Grande do Sul- Brazil, United States and China, distribution centers in Europe and Argentina, and commercial operations in The United States, Chile, Mexico, Germany, The United Arab Emirates, South Africa and China, the company counts on a well structured team to assist customers in more than 80 countries across the five continents where it operates. Fras-le provides products with the quality of original equipment to ensure safety, efficiency and technology to OEM companies and to the aftermarket. There are more than nine thousand different parts in the Fras-le product range, such as brake linings and pads for light and heavy vehicles, pads for aircraft, clutch facings, brake shoes and pads for motorcycles, molded and woven brake linings, brake shoes for railway vehicles and subway, as well as universal flat sheets.

ISO 9001 14001 TS 16949

FRASLE®
www.fras-le.com

08/2009

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FRASLE®

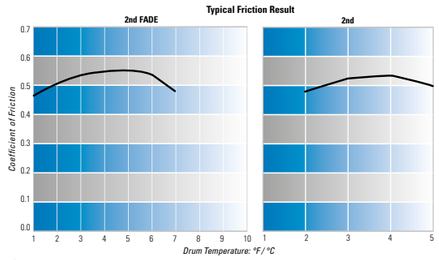
Woven Brake Linings

Woven material, made of finely carded yarns either with or without metallic reinforcement (used to provide greater resistance and to help dissipate heat). Asbestos free, it mixes synthetic, organic and inorganic fibers. Used mostly in severe dry operations requiring a curved braking surface. Our advanced weaving and finishing process assures durability and compatibility with the mating surface. Linings are supplied rectified (ground on both sides), outer and inner. Supplied in rolls of approximately 10 meters (32.81 feet). Can be supplied in various thicknesses, upon inquiry.

LT/867

Supplied in rolls with width from 1" (25.4mm) to 13" (330.2mm), in thickness from 5/32" (4mm) to 1 ¼" (31.8mm).

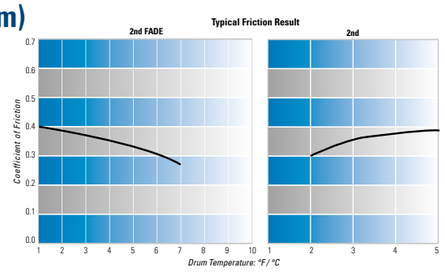
Applications: Recommended for general use on internal or external industrial drum brakes operating in dry conditions.
* Not recommended for use in oil immersed conditions.



LT/867 without metal (w/m)

Supplied in plates with thickness from ½" (12.7mm) to 1 ¼" (41.8mm).

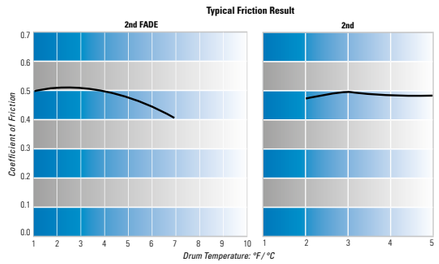
Applications: Recommended for general use on internal or external industrial drum brakes under dry conditions in areas subject to corrosion. Also used on special brakes which do not withstand the use of metal (hydro generators).
*Not recommended for use in oil conditions.



LT/871

Sold in individual pieces according to the customer`s design. Available in pieces, either drilled or undrilled, in thickness from 3/16" (4.8 mm) to 3/8" (9.5 mm), with or without grooves, according to the customer`s specifications.

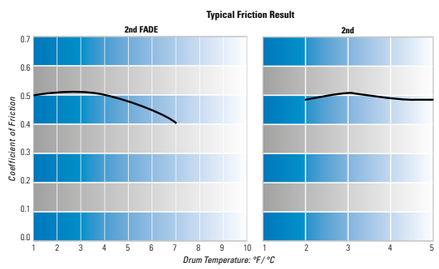
Applications: Recommended for general use on internal or external industrial drum brakes operating in **oil immersed conditions.**



LT/872

Supplied in rolls with width from 1" (25.4mm) to 13" (330.2mm), in thickness from 5/32" (4mm) to ½" (12.7 mm), and a maximum length of 5.0 meters.

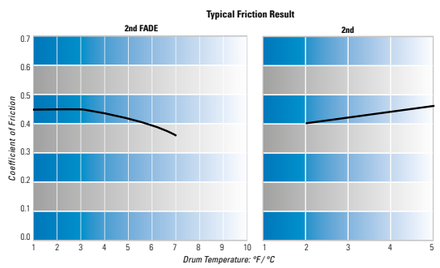
Applications: Recommended for general use on internal or external industrial drum brakes operating in **oil immersed conditions.**



LT/882

Sold in individual pieces according to the customer`s design. Available in pieces, either drilled or undrilled, in thickness from ¼" (6,4mm) to ¼" (31.8mm), according to specifications.

Applications: Designed especially for oil field drilling rigs. Lining life is excellent and the LT 882 is the only asbestos free oilfield product proven to outperform asbestos competitors in all applications.



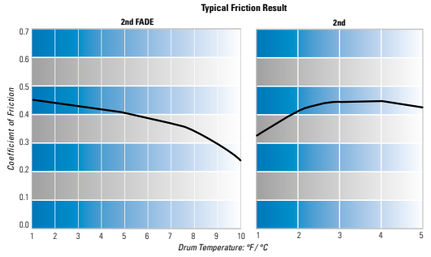
Molded Brake Linings

Molded and semi-flexible material, asbestos free, available in rolls, with or without insertion of wire mesh on the internal face. The rubber, which is the basis of its composition, provides flexibility, making it suitable for a wide spectrum of industrial or automotive applications. For automotive applications we recommend attaching the lining to the shoe by bonding. For industrial brakes with thickness lower than 3/8", we recommend to bond the lining on its metallic support. Available in rolls of approximately 8 meters (26.25 feet) for thickness up to 5/16" (8mm) (inclusive) and approximately 5 meters (16.4 feet) for greater thickness. Other thicknesses under inquiry.

LM/825

Available in rolls with width from 1" (25.4mm) to 6" (152.4mm) and thickness from 0.12" (3.0 mm) to ½" (12.7mm).

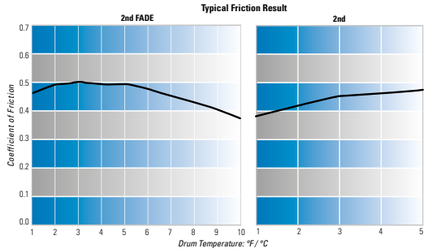
Applications: The wire mesh increases the resistance of the friction material and this characteristic makes it suitable for heavier brakes. For general use on internal or external band-type or drum applications. Its low expansion and growth characteristics avoid eventual instances of wheel locking. Its good mechanical resistance avoids cracks while riveting and mounting the brakes.



LM/826

Available in rolls with width from 1" (25.4mm) to 6" (152.4mm) and thickness from 0.12" (3.0 mm) to ½" (12.7mm).

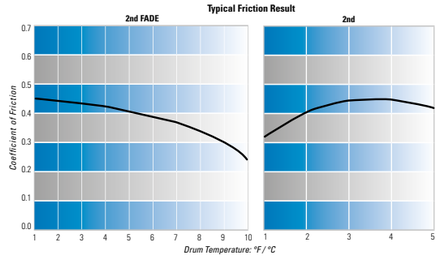
Applications: For general use on internal or external band-type or drum applications. This material can be also used in rear drum brakes of passenger cars, pick-ups and vans. The metallic fibers in its composition increase its mechanical resistance and flexibility.



LM/835

Available in rolls with width from 1" (25.4mm) to 6" (152.4mm) and thickness from 0.12" (3.0 mm) to ½" (12.7mm).

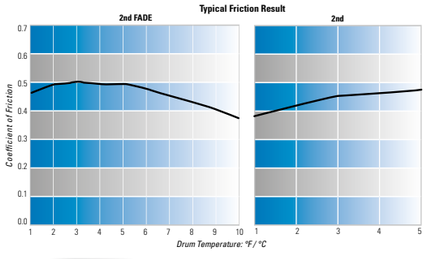
Applications: For general use on internal or external band-type or drum applications. This material can be also used in rear drum brakes of passenger cars, pick-ups and vans. Its low expansion and growth characteristics avoid eventual instances of wheel locking. Its good mechanical resistance avoids cracks while riveting and mounting the brakes.



LM/836

Available in rolls with width from 1" (25.4mm) to 6" (152.4mm) and thickness from 0.12" (3.0 mm) to ½" (12.7mm).

Applications: For general use on internal or external band-type or drum applications. The metallic fibers in its composition increase its mechanical resistance and flexibility.



		LT/867	LT/867 w/m	LT/871	LT/872	LT/882	LM/825	LM/826	LM/835	LM/836
	Friction level / Coefficient of friction	Medium-high GG (0,51 - 0,46)	medium FD (0,37 - 0,22)	medium-high GF (0,49 - 0,40)	Medium-high GF (0,49 - 0,40)	medium FF (0,44 - 0,38)	medium FE (0,43 - 0,35)	medium GF (0,47 - 0,36)	medium FE (0,43 - 0,35)	medium GF (0,47 - 0,36)
	With or without metal	With metal	Metal-free	With metal	With metal	With metal	Metal-free	With metal	Metal-free	With metal
	Flexibility and Wear	Good flexibility and low wear	Good flexibility and low wear	Good flexibility and low wear	Good flexibility and low wear.	Low flexibility and low wear	With wire mesh in inner face. Available with wire mesh in outer faces upon request.	With wire mesh in inner face. Available with wire mesh in outer faces upon request.	Without wire mesh	Without wire mesh
	Maximum continuous temperature	300º F/ 150º C	300º F/ 150º C	300º F/ 150º C	300º F/ 150º C	300º F/ 150º C	Good flexibility and low wear	Good flexibility and low wear	Good flexibility and low wear	Good flexibility and low wear
Peak working temperature	Short time temperature:	480º F/ 250º C	480º F/ 250º C	480º F/ 250º C	480º F/ 250º C	480º F/ 250º C	446ºF/ 230º C	446ºF/ 230º C	446ºF/ 230º C	446ºF/ 230º C
	Maximum continuous pressure:	150 PSI	150 PSI	170 PSI	170 PSI	170 PSI	662ºF/ 350º C	662ºF/ 350º C	662ºF/ 350º C	662ºF/ 350º C
Peak working pressure	Short time pressure:	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI	150 PSI	150 PSI	150 PSI	150 PSI
	Presión en intervalo corto:	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI	250 PSI