

Fras-le Expansion is strengthened with the acquisition of FREMAX

Within its business plan for expansion, Fras-le signed an agreement on October 05th to buy all the shares of the company Jofund S.A, holder of the FREMAX brand. Following the acquisition procedures and after meeting all preceding conditions, Fras-le will add 2,500 part numbers to its already-diversified portfolio, thus ensuring its leading position in the friction material market in Brazil and strengthening its product portfolio for global supply.

FREMAX has global operations and offices in Brazil, the Netherlands, and Argentina, and a portfolio of over 100,000 applications. FREMAX is recognized for the production and marketing of brake discs and drums, as well as brake pads and wheel hubs. They are a traditional manufacturer of light brake disks and drums for Aftermarket and OEM companies. A relevant portion of its revenues goes to the foreign market. Based in Joinville, Santa Catarina State, it has 580 employees and its revenues in 2017 amounted to R\$ 188 million.

"This acquisition provides us with favorable conditions to move forward on our path of growth," says Sérgio L. de Carvalho, CEO of Fras-le, noting that "the synergy between the business of brake discs and pads is significant, which will allow us to expand the supply of products and better serve the market needs."

In 2017, Fras-le had one of the greatest periods of expansion, reinforcing its place in the international market. It was a period of important acquisitions and associations involving three companies in Argentina and Uruguay. In India, ASK Fras-le Friction was created to supply the markets of India, Bangladesh, Nepal and Sri Lanka. It has also doubled the industrial unit of China and opened a sales office and a warehouse in Colombia. At the same time, Fras-le took over control of Juríd do Brasil, In Sorocaba (SP), which is focused on the manufacturing and distribution of Premium brake products for light vehicles.



Photo: Êxito Comunicação e Negócio



Brake Colloquium & Exhibition

The engineer Diego Severo Antunes, MSc. from the Engineering team at Fras-le will present technical work at the 36th Annual SAE Brake Colloquium & Exhibition, which takes place this week. The work, Drum Brake Squeal Prediction by CEA and Modal Participation Factor Evaluation, deals with a computational simulation methodology for the prediction of drum brake noise, being extended to the calculation of modal participation factors. This methodology can predict brake noise and identify the components that are contributing to this noise, allowing us to work more robustly on the solution to the problem.



Photo: Magrão Scalco

Randon Proving Ground **now is Centro Tecnológico Randon**

Inaugurated in 2010 to serve the corporate needs of the Randon Companies, the Proving Ground, with 87 hectares, 15 kilometers and 20 types of tracks, has been transformed into the Randon Technology Center (CTR). It is managed by a qualified engineering team that collects, delivers and performs complete tests for automotive vehicles in 2,200 m² of laboratories with advanced equipment and systems. The site, which ensures total privacy and confidentiality, has gained a new identity and logo as a complex for research, development, innovation and anticipation of cutting-edge trends in the automotive industry.

It is the first independent technology center for tests with trucks, buses, passenger vehicles, motorcycles, road equipment, off-road vehicles and auto parts, and it is the only one in South America designed to withstand 16 tons per axle on the track. High complexity improvement of the site is constantly demanded by automakers and integrated suppliers of national and foreign trucks, buses, agricultural machinery, automobiles and

motorcycles.

“The CTR operates within a bold structure designed to establish it as a benchmark and to foster innovation in products from all off the companies in the group. The idea is to prepare the Randon Companies to absorb, assimilate and, above all, anticipate new trends in the automotive industry on a global scale,” says Cesar Augusto Ferreira, director of Technology and Innovation of the Auto Parts Division for the Randon Companies.

The CTR is licensed by the State Foundation for Environmental Protection (FEPAM), has various recognitions and is accredited to perform certification trials for vehicle braking systems, as per Resolution 519/15 of CONTRAN, with a Recognition Certificate in the standard NBR ISO/IEC 17025:2005 by the Metrological Network of Rio Grande do Sul. The Centro Tecnológico in Brazil earns certification for this type of activity, which enables it to produce highly safe and reliable results.

Tracks

- | | |
|------------------|---------------------------------|
| ■ Dirt Road (1) | ■ Circular with speed bumps (1) |
| ■ Slalom (1) | ■ Pass-by noise (1) |
| ■ Circular (2) | ■ Ramps - asphalt and dirt (8) |
| ■ High Speed (1) | ■ Special durability tracks (5) |

Competitive Features

- Total confidentiality of information;
- Standardized tests;
- Tests that comply with Brazilian and international laws;
- Accelerated service life tests;
- Faster development and launch of products;
- Reliability of the tests;
- Tests with greater safety;
- Tests on special tracks that enable real assessments;
- Specialized engineering team;
- Experienced team of drivers and technicians.

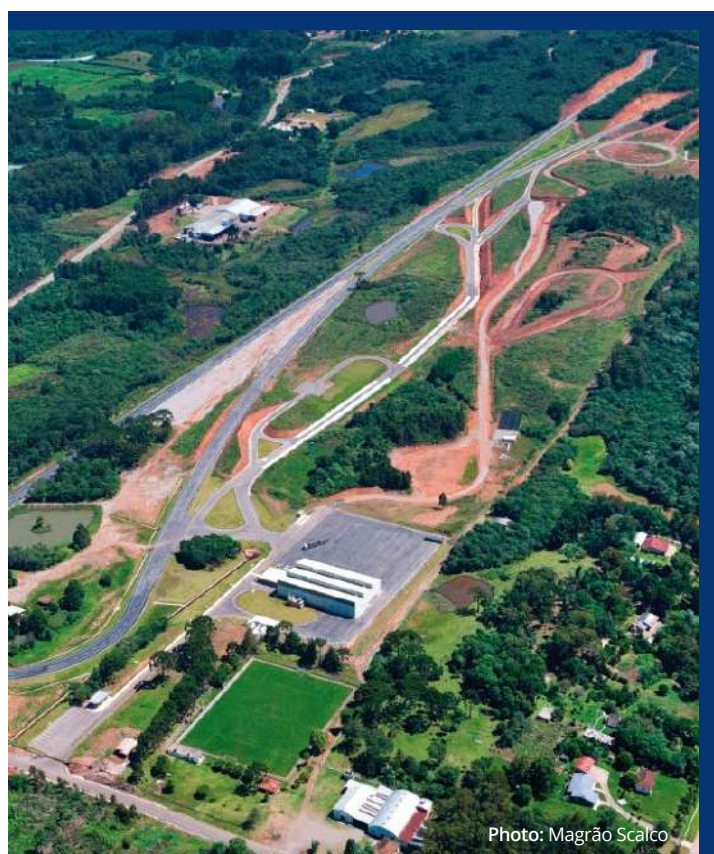


Photo: Magrão Scalco

Improvement of formulation for Stock Car Brake Pads

"Always aiming to provide continuous improvements in its product lines, Fras-le has implemented new friction material from the Racing line for the StockCar, Stock Light and Brazilian Brands categories," announced André Brezolin, PMO / Project Leader of the Company's Auto Parts Division. These improvements have been implemented as of August 2018, based on a new composite that uses different raw materials associated with changes in the production process which aims to provide improvements in the feel of the brake pedal (greater modulation of the brake pedal), greater friction in the initial braking phase (initial bite) and better thermal dissipation of the friction material (reducing the formation of thermal cracks on the surface of the brake disc).



Photo: Fras-le



Photo: VICAR



SAVE THE DATE AND FOLLOW FRAS-LE
**ON THE MOST IMPORTANT TRADE SHOWS
OF THE AUTOMOTIVE SEGMENT**

STOCKCAR
FORNECEDOR OFICIAL

LONDRINA/PR

October 21th
Autódromo Internacional Ayrton Senna

GOIÂNIA/GO

November 04th
Autódromo Internacional de Goiânia

SÃO PAULO/SP

December 09th
Autódromo José Carlos Pace

www.stockcar.com.br

automechanika
BUENOS AIRES

NOVEMBER 07th TO 10th

La Rural Predio Ferial - Buenos Aires, Argentina
<https://automechanika.ar.messefrankfurt.com/buenosaires/en.html>

automechanika
SHANGHAI

NOVEMBER 28th TO DECEMBER 1st

National Exhibition and Convention Center - Shanghai - China
automechanika-shanghai.hk.messefrankfurt.com/shanghai/en/visitors/welcome.html

www.fras-le.com.br