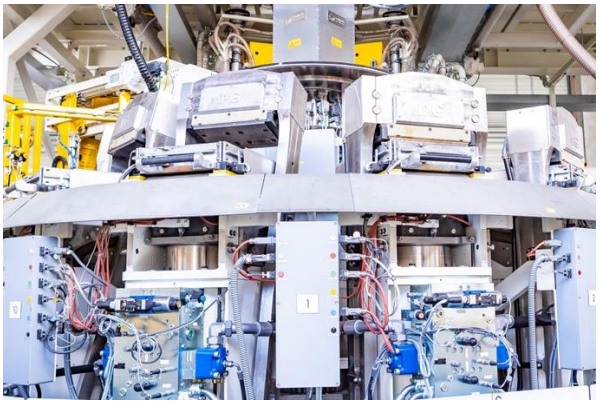
+++ PRESS RELEASE +++ LF GmbH & Co.KG +++ CO_2 reduction for high-volume manufacturing lines +++ 02/08/2021 +++

Up to 85% CO_2 reduction: LF and IAG are developing a plant concept based on the LIQFRIC® friction pad technology and are also adapting the process for existing high-volume production plants.

After building an automated casting system for prototypes to fulfill small series manufacturing needs and service increasing customer orders, LF GmbH & Co. KG is facing the task of further expanding their manufacturing volume.



IAG has extensive experience in customized plant construction (plant photo)



Smart Friction Factory – the first series-compatible machine for the casting of friction linings at LIQFRIC®

“We are very excited to announce our collaboration with IAG (IAG Industrie Automatisierungsgesellschaft m.b.H), a well-known special machine manufacturer for the friction lining industry, with whom we can realize the next steps in the industrialization of our LIQFRIC® concept“, said R&D director Dr. Roman Milczarek.

In order to overcome the technical challenges, LF has signed a cooperation agreement with the Austrian IAG, with the intention of developing and building a large series plant based on the LIQFRIC® casting process in the near future. The aim is to achieve the proven CO_2 saving targets of up to 85%, compared to the standard production conditions, which among other things would lead to a significantly more sustainable production of brake linings.

“For IAG, the goal is to develop a machine concept suitable for the mass market, and thus to lay the foundation for the industrialization of the LIQFRIC® technology.”, said managing director Stefan Gruber.

The cooperation was further expanded in order to adapt the LIQFRIC® material concept for the press systems currently in use in the friction lining industry worldwide. LF hopes that this will result in faster acceptance of this technology in the brake world, while simultaneously reducing production-relevant CO_2 output.
The CO_2 saving effect in this case is significantly lower than with the original LIQFRIC® process, but still means a reduction of approx. 10-15% compared to the classic pressing process. The benefit lies mainly in the use of the already installed press- and plant capacities.

“With our project partners in the automotive- and automotive supplier industry and our learning curve from our **Smart Friction Factory**, we want to consistently go into series applications. Hereby we are realizing the next scaling step on the way to industrial use.", said R. Milczarek and added: “With our technological lead, we also want to advance the production of high-tech brake pads for electromobility and at the same time reduce fine particle emissions. As a strategic goal, we intend large-scale production in 2023. That is why we must take the right action now.“

LF GmbH & Co.KG
Innovationspark
Marie-Curie-Straße 8
51377 Leverkusen
Germany

Phone: +49 214 313 830 30
Fax: +49 214 313 830 39
Mail: info@liqfric.com
Web: **www.liqfric.com**

Sitz Leverkusen
AG Köln HRB 31873
Steuer Nr.:230/5753/3105
USt-ID-Nr. DE 305 923 107

Persönlich haftende Gesellschafterin:
LF Verwaltungs-GmbH, HRB 87146
Geschäftsführung: Dr. Ute Wittig
Dr. Roman Milczarek

VR Bank eG Bergisch-Gladbach-Leverkusen
IBAN DE28 3706 2600 2902 6120 10
BIC GENODED1PAF
Beirat: Dr. H. G. Paul, R. Scholl

LF GmbH & Co. KG was founded in Germany in March 2016 and follows the strategic idea of producing friction materials based on a liquid friction compound that can be hardened at room temperature (or faster at higher temperatures) to make high-temperature stable friction lining materials for automotive, rail, and clutch- as well as industrial applications. The company has entered into development projects and collaborations with some key players in the brake- and clutch industry in Europe and especially in Germany. LIQFRIC® is a registered trademark of LF GmbH & Co. KG.

IAG Industrie Automatisierungsgesellschaft m.b.H. was founded in Austria in 1986 and has achieved technological leadership in the development and production of fully automatic and individual special-purpose machines for the friction lining industry.

For further information, please visit:

LF GmbH & Co.KG
Marie-Curie-Straße 8, 51377 Leverkusen, Germany

www.liqfric.com or info@liqfric.com

IAG Industrie Automatisierungsgesellschaft m.b.H.
Industriestrasse 2, 2722 Weikersdorf, Austria

www.iag.at or www.iag.at/en/contact