

+++ PRESS RELEASE +++ FIRST INTELLIGENT FRICTION PAD +++ 09/24/2019 +++ LF GmbH & Co.KG +++

RFID transponder successfully embedded into a friction pad for the first time!

Since its launch 3 years ago, LF GmbH & Co. KG has striven to achieve efficient energy management during the manufacturing process of friction pads. The resulting, greatly reduced resource input is an important advantage of our patented LIQFRIC® products from liquid phase.

The company has successfully proven the efficacy and practicability of this new concept of manufacturing clutch- and friction pads during the past months in various projects with several renowned project partners.

To be able to integrate active and passive sensors into friction pads, the chips are embedded into the liquid compound directly during the die-casting process. This isn't possible with today's conventional friction pads because of high temperatures and extreme pressure conditions during their manufacturing process (e.g. Sinter- or NAO pads).



“We have met one of our most important development goals of 2019! We have embedded a RFID chip into a brake pad for the first time. Based on our LIQFRIC® technology for the manufacturing of friction materials from liquid phase, we have embedded a preprogrammed chip during the die-casting process into a friction pad and successfully read it out.”
(R. Milczarek, head of R&D at LF GMBH & CO. KG)

RFID chip (radio-frequency identification) embedded in a typical brake pad with reader
(Photo LF GmbH & Co. KG/ N. Wittig) – Download: <https://www.liqfric.com/liqfric-download>

LF GmbH & Co. KG has started a collaboration with a renowned German research association on a project on integrating sensors into friction pads. First test results are expected in spring 2020.

Further developing sensor technology in brake pads for the user's benefit is part of the platform strategy of LIQFRIC® - the first innovative brake pad from liquid phase.

Integrated sensors allow for various future possibilities, for example:

- Protection from product piracy
- Wear measurement
- Thermal management

LF GmbH & Co. KG was founded in 2016 with the goal of manufacturing friction materials by using a liquid die-casting process. The company is located in Leverkusen, where it develops, produces and distributes 2-component liquid friction compounds for the manufacturing of brake- and clutch friction materials.

For more information about LF GmbH & Co. KG and the brand LIQFRIC®, please visit our homepage: www.liqfric.com.