**Farm Equipment Another Application for**

**Freudenberg’s Low-friction Sealing Solutions**

**Weinheim (Germany), November 16, 2017. ‘Green Future – Smart Technology’ – that is the central theme of AGRITECHNICA 2017, which takes place this week in Hanover. The world’s leading trade fair for agricultural technology is focusing on forward-looking products and technologies that enable a sustained increase in agricultural efficiency. In the agricultural industry as well as other sectors, Freudenberg Sealing Technologies provides low-friction sealing products that help to save fuel, reduce emissions and extend the lifespan of industrial powertrain systems.**

Manufacturers of mobile work and heavy machinery for agriculture are facing the same challenges as automakers. Strict environmental regulations, rising fuel prices and long maintenance intervals require the use of new, innovative technologies. At the same time, sealing technology offers enormous potential. It is ultimately responsible for nearly one-quarter of all the lost mechanical energy in today’s automatic transmissions.

That’s why transmission manufacturers are working full steam to reduce system friction in transmissions, in order to keep performance losses as low as possible. Freudenberg is supporting them with its Low Emission Sealing Solutions (LESS) products, which reduce frictional losses, installation space, weight, fuel consumption and emissions. “Freudenberg Sealing Technologies has geared its research and development activities to the solution of these problems in particular,” said Angelika Mulac, Vice President of the Mobile Machinery business unit. “Innovative products such as Levitas and Levitorq are the result. The technologies were originally developed for our automotive customers, but we now use them for various product platforms and sectors, and ensure that all our customers benefit from highly advanced solutions of this kind.”

With the transmission seal Levitas, Freudenberg Sealing Technologies is pursuing a fundamentally new approach in seal design. During operation, the seal floats on a hydrodynamic oil film that it produces on its own. The film prevents direct physical contact between the shaft and the seal ring. As a result, only fluid friction occurs; this reduces friction up to 70 percent. Another advantage: The seals are bidirectional, which simplifies mounting at the transmission manufacturer.

Levitorq thrust washers from Freudenberg also function with a hydrodynamic oil film. They have been conceived in a way that allows a bearing to run or a force to act on its support surface. Thrust washers have been traditionally made of metal. Freudenberg has developed thermoplastic and thermosetting alternatives with the help of its material expertise and design know-how, in combination with special software programs and test capabilities. They are replacing heavy, torque-reducing thrust washers made of metal. This reduces the components’ weight and friction while improving flatness control.

More information on these products from Freudenberg Sealing Technologies for the agricultural industry can be found on the Internet at <https://www.fst.com/markets/mobile-machinery/agriculture>. Information on the company's LESS initiative is available at http://less.fst.com.

***Images:*** *XXXXX*

**About Freudenberg Sealing Technologies**

As the leading specialist in sealing applications and their markets, Freudenberg Sealing Technologies is a supplier as well as a development and service partner serving customers in a wide variety of sectors including the automotive industry, civil aviation, mechanical engineering, shipbuilding, the food and pharmaceuticals industries, and agricultural and construction machinery. In 2016, Freudenberg Sealing Technologies generated sales of more than €2.3 billion and employed approximately 15,000 people. More information at [www.fst.com](http://www.fst.com)

The company is part to the global Freudenberg Group which, with its Business Areas Seals and Vibration Control Technology, Nonwovens and Filtration, Household Products as well as Specialties and Others. In 2016, the Group generated sales of more than
€8.6 billion in and employed approximately 48,000 associates in around 60 countries. More information is available at [www.freudenberg.com](http://www.freudenberg.com).

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