



PERFORMANCE PLASTICS PRESS RELEASE

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PPS: new RadiciGroup engineering plastics

**From specialties for metal replacement to LCPAs:
RadiciGroup expands its offering with new innovative products.
At Fakuma 2017, the Group presents its latest product innovations.**

The **RadiciGroup Performance Plastics Business Area** is exhibiting at **Fakuma 2017 (Hall A1 Stand 1106)** in Friedrichshafen, Germany. Germany is a strategic market for RadiciGroup, and the Group's chemicals and engineering plastics businesses both have production sites in the country.

To meet the ever more exacting requirements of the engineering plastics market – notably the important German automotive industry – in terms of innovation and performance, RadiciGroup has carried out its strategy of becoming a partner that can always be counted on. And, to this end, the Group has continued to expand its range of **high performance polymers**. At Fakuma 2017, RadiciGroup is officially announcing its new **PPS**-based products: high-performance polymers, particularly suited to engineering applications.

The distinguishing characteristics of the new **Raditeck® P** materials are as follows:

- Superior chemical resistance to oil, fuel, solvents and water-glycol solutions.
- Retention of mechanical properties when exposed to high temperature in air and other fluids.
- High dimensional stability thanks to very low hygroscopicity.
- Natural flame resistance.

*"The Raditeck® P products were created as part of RadiciGroup's strategy of expanding its speciality products portfolio," stated **Erico Spini, marketing manager Europe** of RadiciGroup Performance Plastics. "A wider choice of available materials allows us to better support our customers, specifically in their projects involving innovation and metal replacement. At Fakuma 2017, we are presenting five Raditeck® P grades, from a 40% glass-fibre fill to a 65% mixed mineral-glass fibre fill. Naturally, we are ready to create new customized grades, in line with our*

collaboration philosophy, which has always positively influenced business relations between our company and our partners.”

The main application sectors for RadiciGroup’s new **Raditeck® P** products are:

- **Automotive:** Raditeck® P provides high dimensional stability (required, for instance, for pump impellers and housings), high chemical resistance even to acid substances, and good retention of mechanical properties over time even when exposed to high temperatures (>200°C).
- **Water management and household appliances:** Raditeck® P offers excellent hydrolysis resistance, dimensional stability and mechanical properties, as well as excellent creep resistance.
- **Electrical / electronics:** PPS boasts intrinsic flame retardancy and practically zero moisture absorption.

After launching its Radilon XTreme product line and introducing Radilon® Aestus T (PPA) at the K fair in 2016, RadiciGroup has expanded its high-performance polymer offering with new PPS-based products, thus continuing to build its reputation as a reliable partner in the implementation of its customers’ innovative projects.



“Another aspect we are particularly proud of,” Mr. Spini concluded, “is our collaboration with our customers providing support in the development of their projects starting from the very beginning phases. We like to call ourselves a ‘solution provider’: besides giving assistance in choosing the right materials, we can also provide advanced structural calculation support. This simulation approach allows for

obtaining a model of the structural component, typically made with fibre-reinforced material, that take into account all variables that affect processing and part performance, including most importantly the glass fibre orientation. In this way we establish a relationship between the ‘local’ mechanical characteristics of the part and its morphology influenced by the parameters of the moulding process used. It is, thus, possible to evaluate, among other properties, the change in the mechanical resistance of the component as a function of the position of the injection gate(s), with the part geometry left unchanged. We have concluded that this new approach provides a noticeable improvement in the reliability of virtual calculations, with a consequent reduction in the

design costs caused mostly by errors in the initial stages. We've made sizeable investments in the advanced characterization of our materials – both new and standard ones – that are often used for metal replacement in innovative applications.”

All the above topics will be covered during the presentation, “*RadiciGroup Performance Plastics’ vision: new materials and innovative calculation approaches for today's and tomorrow's applications*”, given by Erico Spini at Fakuma 2017, in the **Exhibitor Forum, at 9.40 a.m. on Thursday, 19 October** (Foyer East, Gallery Europa Lounge), which **the press is kindly invited to attend**.

In the RadiciGroup exhibitor space at Fakuma (**Hall A1 Stand 1106**), the laser marking of a RadiciGroup specialty polyamide, optimized for this kind of processing, can be observed. This demonstration is made possible through a collaboration with **EVLASER**, a company specializing in the design and production of laser equipment for industrial, aesthetic and medical applications.

RADICIGROUP – With approximately 3,000 employees, sales revenue of EUR 946 million in 2016 and a network of production and sales sites located throughout Europe, North America, South America and Asia, RadiciGroup is one of the world's leading producers of a wide range of chemical intermediates, polyamide polymers, engineering plastics, synthetic fibres and nonwovens. These products – the result of the Group's outstanding chemical expertise and vertically integrated polyamide production chain – have been developed for use in a variety of industrial sectors, such as: AUTOMOTIVE – ELECTRICAL AND ELECTRONICS – CONSUMER GOODS – APPAREL – FURNISHINGS – CONSTRUCTION – HOUSEHOLD APPLIANCES – SPORTS. The basis of the Group's strategy is a strong focus on innovation, quality, customer satisfaction and social and environmental sustainability. With its business areas - **Specialty Chemicals, Performance Plastics and Synthetic Fibres & Nonwovens** (Performance Yarn, Comfort Fibres and Extrusion Yarn), RadiciGroup is part of a larger industrial group that also includes textile machinery (ITEMA), energy (GEOGREEN) and hotel (SAN MARCO) businesses.
