

Press Release

Wiesbaden, October 15, 2018

SGL Carbon at the trade fairs Fakuma, IZB and HärtereiKongress

- Innovative material solutions made of composite material and graphite for different applications around automobile mobility
- Both business units of SGL Carbon represented

In the coming days, SGL Carbon will be presenting material solutions and latest trends in the field of composite materials as well as graphite-based components for very different applications in the automotive industry at a trade fair tour. The fair program includes the Fakuma, international trade fair for plastics processing, in Friedrichshafen, the International Suppliers Fair (IZB) in Wolfsburg and the HärtereiKongress (Heat Treatment Congress) in Cologne. All three events will start on October 16, 2018.

The trade fair highlights of SGL Carbon at the Fakuma and the IZB:

In the field of **lightweight construction** with composite materials, SGL Carbon demonstrates reinforced thermoplastic profiles from a mixture of SIGRAFIL® 50k carbon fibers and Polyamid matrix, which are ideally suited for use in the automotive industry. One example are structural components in skeleton construction consisting of continuous, local fiber reinforcement and injection molding. The advantages of these profiles are, among other things, the application of automated processes without a preconsolidation step and the near-net shape production with minimal intersection. These characteristics enable cycle times of less than 75 seconds.

In addition to the well-known SIGRAFLEX® materials for the sealing technology, SGL Carbon presents the new graphite product range to support **thermal management** in passenger cars with SIGRATHERM® ePCM material, a graphite/phase change material with particular protection against leakage of the phase change material.

The graphite-based SIGRAFINE® materials, in turn, offer a wide range of possibilities for the efficiency improvement of **coolant, fuel and vacuum pumps** due to their low friction. Components and application examples are shown.

The additives based on expanded graphite called SIGRATHERM® GFG offer self-lubricating properties, thermal and electrical conductivity as well as temperature resistance. In addition, the material provides the advantage of electromagnetic shielding. At the Fakuma, SGL shows a wide range of graphite-based conductive additives from the SIGRATHERM® brand.

No electromobility without storage: In the field of application of **energy storage**, SGL Carbon provides graphite powders as high-quality raw materials for the anodes in lithium-ion batteries as well as SIGRACELL® electrodes and bipolar plates for redox flow systems. A selection of active materials and a redox flow battery stack with SGL components will be on display at the IZB

The main focus of the SGL Carbon trade fair presence on the HärtereiKongress:

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The production of many automotive components often requires **high-temperature processes**. In this area, SGL Carbon offers mainly carbon fiber-reinforced ceramics for furnace lining. The linings and insulations of SGL are also used in furnaces for heat treatment of metals. The newly developed material solution SIGRATHERM® HIP, with which high-pressure sintering furnaces can be equipped with a particularly durable and high-performance insulation, will be presented, among other things. To this end, SGL Carbon shows the material SIGRABOND® Sinter at the fair, from which optimized charging systems with particularly slender designs are produced to increase the process of sinter production.

In addition, SGL Carbon has expanded its capacity for the SIGRASIC® Performance and SIGRASIC® Standard material qualities for oil quenching. These carbon fiber-reinforced silicon carbide ceramics enable automation processes to be realized more easily and cost-effectively than with metal-based charging components.

The new range of services offered by SGL Carbon in the field of FEM (Finite Elements Method) simulations is also presented for the first time, which assists customers in optimizing their processes in the mechanics and computational fluidic modeling. The services also include the collection of exact material characteristics up to very high temperatures via the SGL-own central laboratory.

We look forward to seeing you at one or more of these fairs. You will meet us in the following halls:

Fakuma Hall B3, Booth B3-3132 IZB Hall 6, Stand 6134 HärtereiKongress Hall 4.1, stand e-061

About SGL

Carbon

SGL Carbon is a technology-based company and world leader in the development and production of carbon-based solutions. Its high-quality materials and products made from specialty graphite and composites are used in industrial sectors that determine the future: automotive, aerospace, solar and wind energy, semiconductor and LEDs as well as in the production of lithium-ion batteries and other energy storage systems. In addition, SGL Carbon develops solutions for chemical and industrial applications.

In 2017, SGL Carbon generated sales of around 860 million euros. As of December 31, 2017, the company had approximately 4,200 employees worldwide in 34 locations in Europe, North America, and Asia.

Materials, products and solutions from SGL Carbon are embedded in the major topics of the future: sustainable mobility, new energies and cross-industry digitization. Further developments in these areas demand more intelligent, more efficient, networked and sustainable solutions. This is where the entrepreneurial vision of SGL Carbon evolves around: contributing to a smarter world.

Further information on SGL Carbon can be found in the Newsroom of SGL Carbon at

www.sglcarbon.com/press and at www.sglcarbon.com.

Important note:

To the extent that our press release contains forward-looking statements, the latter are based on information that is available at present and on our current forecasts and assumptions. Forward-looking statements, by their very nature, entail known as well as unknown risks and uncertainties that may lead to actual developments and events differing substantially from the forward-looking assessments. Forward-looking statements must not be understood to be guarantees. Instead, future developments and events depend on a large number of factors; they comprise various risks and imponderables and are based on assumptions that may possibly turn out not to be appropriate. These include unforeseeable changes to fundamental political, economic, legal and societal conditions, particularly in the context of our main customers' industries, the competitive situation, interest and exchange rate trends, technological developments as well as other risks and uncertainties. We perceive additional risks e.g. in pricing developments, unforeseeable events in the environment of companies acquired and Group member companies as well as in current cost savings programs from time to time. The SGL Carbon assumes no obligation and does not intend to adjust or otherwise update these forward-looking statements either.

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