

SGL Group expands material portfolio with high-performance and efficient carbon fiber for aerospace

- New “Advanced modulus” 50k carbon fiber
- Synergy of expertise in carbon fiber production and processing experience from various industries

Wiesbaden, February 23, 2018. SGL Group has developed and started serial production of an innovative carbon fiber, thus expanding its material portfolio. Bearing the name SIGRAFIL® C T50-4.8/280, the new fiber is characterized by a high Young’s modulus, making it ideal for aerospace applications. Pressure vessels, drive shafts, profiles, and sheet molding compounds (SMCs) are other applications, as the fiber meets high mechanical requirements thanks to its high stiffness and strength.

The high Young’s modulus based on a 50k fiber (50,000 individual filaments) is unique to the market. Previously, only fibers with lower numbers of filaments (e.g. 12k or 24k) achieved these high mechanical properties (4,800 MPa, 280 GPa). This classifies the new carbon fiber between standard modulus and intermediate modulus, with a property combination never exhibited before for 50k – in the “advanced modulus” range. Developed based on the 50k fiber used successfully in serial production in automotive projects, it is an excellent example of knowledge transfer within SGL Group made possible thanks to activities in various industries. The new fiber provides an efficiency boost during processing, helping to expand the range of applications for carbon fiber composites.

“With the new SIGRAFIL® 50k carbon fiber, we can now offer aerospace industry customers attractive material solutions for various component classes. At the same time, customers from many industries benefit from our bundled expertise along the entire value chain, from the fiber to the component,” explains Andreas Erber, Head of the Aerospace segment in the Composites – Fibers & Materials (CFM) BU of SGL Group.

At JEC World in Paris from March 6-8, 2018, the new carbon fiber will be presented to the public for the first time, and will then be available for delivery.

About the SGL Group – The Carbon Company

The SGL Group is a leading manufacturer worldwide of products and materials made from carbon. The extensive product portfolio ranges from carbon and graphite products, carbon fibers all the way through to composites. The SGL Group’s core expertise comprises the control of high-temperature technologies

as well as the deployment of many years' application and engineering know-how. This is used to exploit the company's wide materials base. These carbon-based materials combine a number of unique material properties such as very good conductivity of electricity and heat, resistance to heat and corrosion as well as lightweight construction coupled with high firmness. The level of demand for the SGL Group's high-performance materials and products is increasing due to the industrialization of the growth regions of Asia and Latin America and the ongoing substitution of traditional construction materials by new materials. The SGL Group's products are deployed in the automotive and chemicals industries as well as in the semiconductor, solar, LED industry segments and in the field of lithium-ion batteries. Carbon-based materials and products are also used in wind energy, aviation and space travel as well as in the defense industry.

With 32 production locations in Europe, North America and Asia as well as a service network in over 100 countries, the SGL Group is an enterprise with a global orientation. In the 2016 financial year, approx. 4,000 employees generated 769.8 million euros in sales revenue. Its Head Office is based in Wiesbaden / Germany.

Further particulars on the SGL Group can be found in the Newsroom of the SGL Group at www.sglgroup.com/press and at www.sglgroup.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 Group assumes no obligation and does not intend to adjust or otherwise update these forward-looking statements either.

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