



SGL Carbon

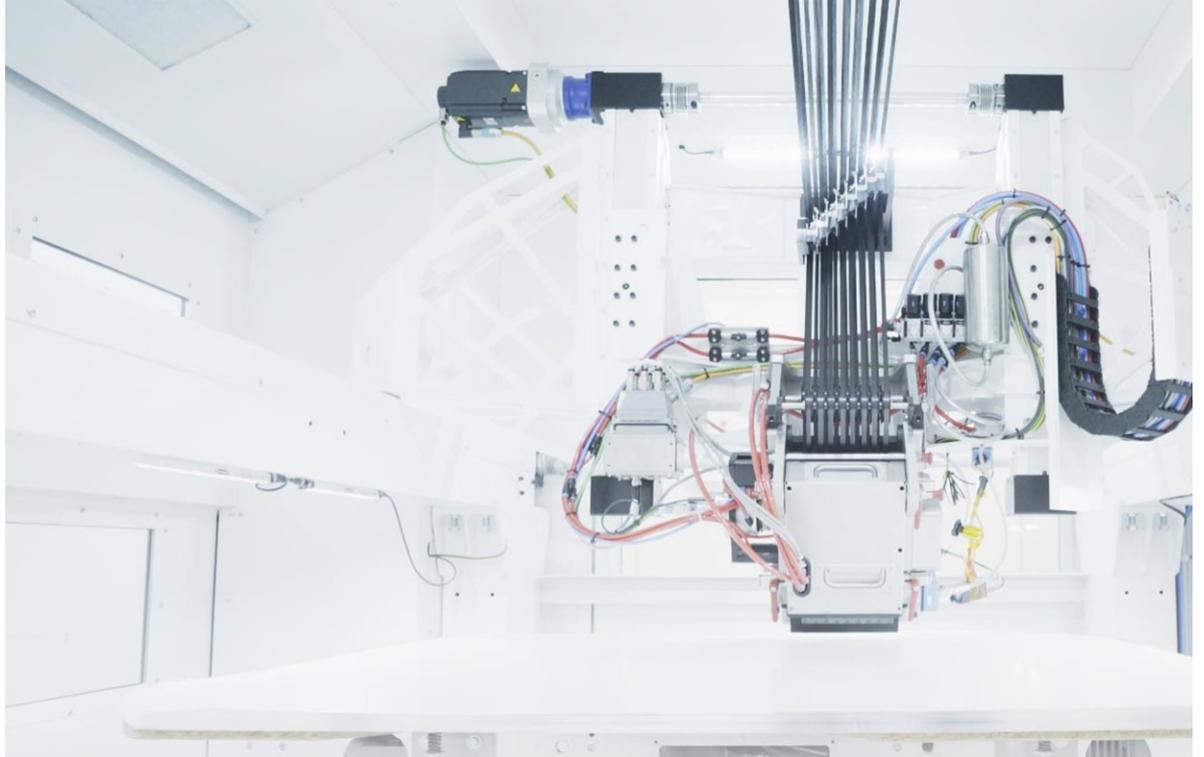
Company Presentation



SGL Carbon

We are a technology-based company and world leader in the development and production of carbon based solutions. Our high-quality materials and products made from specialty graphite and composites are used in industrial sectors that shape the future:

automotive, aerospace, solar and wind energy, semiconductors and LEDs as well as in the production of lithium-ion batteries and fuel cell components. In addition, we develop solutions for many chemical and industrial applications.



Key figures: Fiscal year 2020

SALES

€919.4m

FY 2019: €1,087m

EBIT

BEFORE NON-RECURRING ITEMS

€50.2m

FY 2019: €48.4m

Operating EBIT

BEFORE NON-RECURRING
ITEMS AND ONE-OFF EFFECTS

€19.5m

FY 2019: €46.6m

Global presence with 31 sites



8 productions sites
North America

16 production sites
Europe

5 production sites
Asia

Milestones in our Company's history

1878

„Gebr. Siemens & Co.“
Start carbon production

1985

SIGRI GmbH
Merger Siemens Plania
and Hoechst AG,
Griesheim

SIGRI GmbH
Merger with
Ringsdorf, Bonn

1989

SIGRI Great Lakes
Carbon GmbH
Founding of SGL
through merger with
Great Lakes Carbon, USA

1992

SGL Carbon SE
Transformation AG into a
Societas Europaea (SE)

SGL Carbon AG
Initial Public Offering in
Frankfurt/Main

1995

Joint Venture
with Benteler
Development and serial
production of lightweight
composite components
for the automotive industry

2008

Joint Venture
with BMW Group
Serial production of carbon
fibers in the automotive
industry

Joint Venture
with Brembo
Serial production of
carbon ceramic
brake discs

2009

Strategic Realignment
Focus on innovative
and growth sectors

2015

Sale of former core business
Performance Products
Strengthening of capital structure

SGL Carbon
New brand and start
of new SGL

2017

Full consolidation of the Benteler-SGL
Joint Venture and acquisition in
stages of the 49% stake in the Joint
Venture with BMW
Completion of CFM value chain

2018

Restructuring
„Formula Carbon“

New Organization enhances transparency, management rigor and efficiency



Graphite Solutions

- Graphite specialties
- Graphite anode material (Lithium-ion batteries)
- Materials for fuel cells

Process Technology

- Process solutions
- Equipment for corrosive applications
- Components & Assemblies
- Parts & Services

Carbon Fibers

- Precursor & acrylic fibers
- Carbon fibers
- Non-crimp & woven fabrics
- Pre-impregnated materials

Composite Solutions

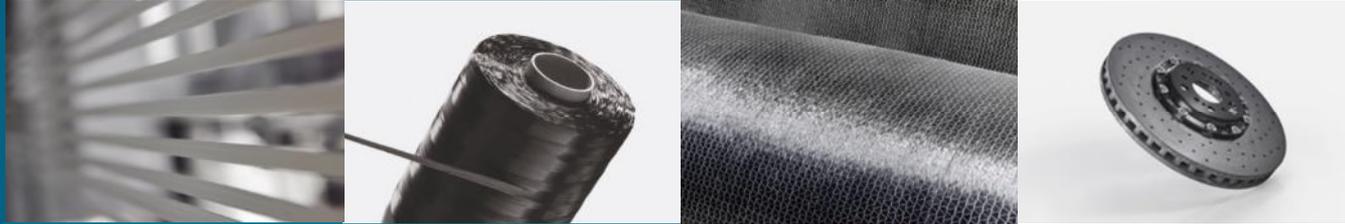
- Composite parts (large & small series)
- Wet friction
- Insulation materials

Corporate Functions

Central functions & services

Commanding the entire value chain: Advantages in cost, quality and differentiation

Carbon fibers

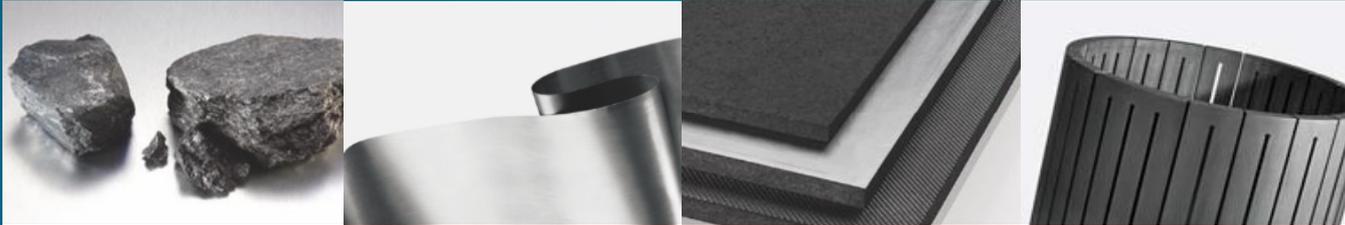


Raw materials

Intermediate stages

Semi finished products

Solutions & components



Graphite specialties

- Focus on **customer requirements**
- **Tailor-made solutions**
- Differentiation through **integration**

„Formula Carbon“ – Guideline for successful economic activity



Business first

In everything we do, our focus is on running our business safely and profitably.

Keep it simple

We no longer afford the luxury of doing things that are not absolutely necessary. We reduce complexity wherever possible.

Deliver on promises

We set ourselves realistic goals, keep our promises and expect the same from our colleagues.

Act fast, think different

We act quickly and solution oriented. And are always open to new approaches.

Formula Carbon

Mobility

Progress in the mobility industry has been incremental for many decades, but is now replaced by disruptive innovations. Composites and graphite based solutions play a central role in this mobile future, as materials and as entire components.

Automotive

We develop and manufacture in series lightweight components based on composites. Our portfolio ranges from skin & structural parts to leaf springs, battery cases and high performance carbon ceramic brake disks. Our specialty graphite solutions are applied, e.g., in vacuum and water cooling pumps.



Aerospace

Materials and components must be reliable and safe under extreme conditions. Fuel consumption must be reduced through lightweight design. These demands can be met with our carbon- and glass fiber reinforced composites. We offer the right solutions for primary and secondary structures, sub-systems or internal fittings.



Energy

No industry is changing as quickly as energy. New business opportunities are expanding the scope of application for our graphite and composite based solutions, from solar and wind energy to heat recovery, energy storage, battery and fuel cell solutions.

Battery and other energy

Our synthetic graphite as anode material in lithium-ion batteries, our battery felts and bipolar plates in stationary energy storage devices, our gas diffusion layer for fuel cells as well as our specialty graphite solutions in lead-acid batteries contribute to higher performance and efficiency of energy storage systems. Overall, our materials also make an important contribution to electromobility and energy transition.



Solar

For the production of multicrystalline and monocrystalline silicon, we are developing essential components for the highly sensitive process of crystal growth. These include heaters, crucibles and heat shields of high-purity fine grain graphite or carbon fiber reinforced carbon as well as insulation components made of graphite felts.



Wind

Our innovative specialty products are facilitating a generation of rotor blades that set new standards for performance efficiency, service life, and rotor dynamics. Our range includes carbon fibers and semi-finished products specifically developed for the production of rotor blades. We are also developing tailored solutions for carbon brushes, which are important functional components in wind turbine generators.

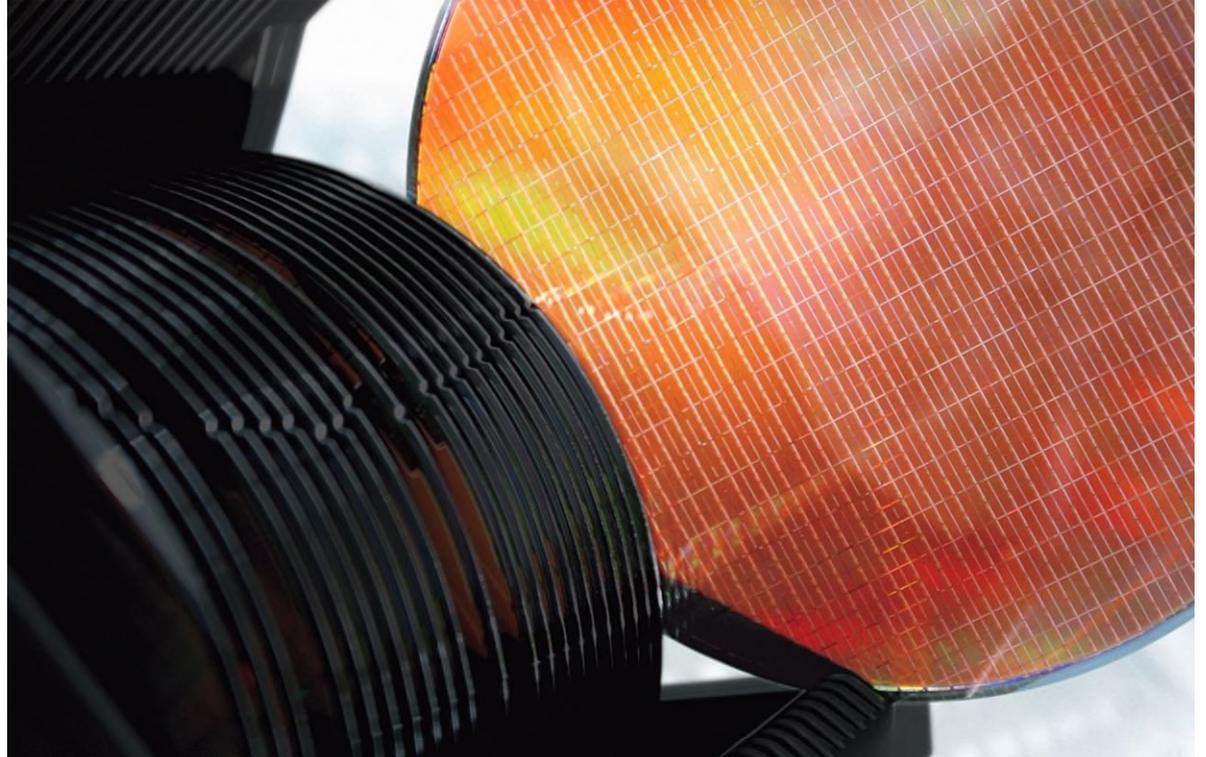


Digitization

Digitization enables and accelerates innovation. Semiconductors for high performance computer chips as well as for the production of LEDs are the technological basis of digitization. This is where our graphite components make the difference.

Semiconductors

Components made of specialty graphite are indispensable for processes in semiconductor production. Highest purity and absolute precision are required. We deliver graphite based solutions for the production of semiconductor crystals as well as for the processing of semiconductor wafers. We are one of the leading suppliers of silicon carbide (SiC) coated wafer carriers. We also offer products for the manufacturing of high-performance semiconductors based on single crystal SiC.



LED

LEDs generate the light in semiconductor layers. Their performance depends crucially on the quality of these semiconductors. Our isostatic graphite is fundamental for the production of compound semiconductor layers. Only this very pure, homogeneous graphite meets the high requirements in the coating process.



More industries

We offer a broad range of tailor-made solutions for a wide variety of industrial sectors. Whether in process technology, in chemistry, in mechanical engineering or in high-temperature processes, whether in construction, medical technology or sports – the applications based on graphite, composites, carbon or carbon fiber reinforced carbon (CFRC) meet the highest demands and are manifold.

Solutions for more than 30 industries



Process technology



Chemicals



Mechanical engineering



High-temperature applications



Civil engineering



Medical technology

Our contribution to a smarter world

Our materials, products and solutions 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 the focus of the entrepreneurial vision of SGL Carbon:

We contribute to a smarter world.





**More information at
www.sgllcarbon.com**