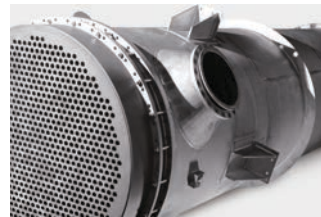


Process technology for the phosphoric acid industry – made by SGL Carbon

We cover the entire supply chain, from the manufacturing of graphite materials to complex systems including a comprehensive range of equipment and services.

Process solutions

- Concentration of H_3PO_4
- Purification of H_3PO_4
- Dilution of H_2SO_4



Equipments

Graphite heat exchangers

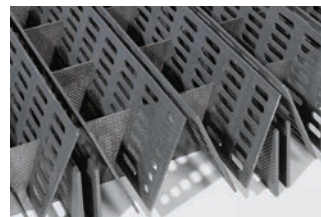
- DIABON® shell & tube heat exchanger
- DIABON block heat exchanger (cylindrical, cubical, mono block)
- DIABON plate heat exchanger

Graphite and PTFE lined columns, reactors, vessels

- DIABON graphite columns
- POLYFLURON® PTFE lined columns

Graphite, carbon and exotic metal pumps

- DIABON/DURABON® or exotic metals (titanium, zirconium, nickel alloys) centrifugal and axial pumps
- standardized designs acc. ISO 2858 with back pull-out available



Parts and assemblies

PTFE lined piping, expansion bellows and parts

- POLYFLURON piping system, linings and lining services
- POLYFLURON expansion bellows

Column internals (feed pipes, grids, liquid distributors, trays, packings etc.)

- DIABON graphite and PTFE internals
- SIGRABOND® carbon fiber based high-performance internals

DIABON rupture disks



Services

Services by SGL Carbon – more than just repairs. We provide comprehensive services throughout the entire lifecycle

- Start-up Services (commissioning, installation, trainings, etc.)

- Operation Services (OEM spare parts, maintenance and repairs, emergency procedures, inspection, etc.)
- Upgrade Services (debottlenecking, equipment harmonization, spare parts concepts, etc.)
- End of use Services (conservation, revamping, re-use, end of life, etc.)

Global production network for process technology

Strongsville | USA
Grenoble | France
Meitingen | Germany
Limburg | Germany

Pune | India
Shanghai | China
Karaham | Korea
Yamanashi | Japan



Did you know ...

SGL Carbon is the global market leader¹⁾ in graphite based process technology

We've been a trusted partner of the phosphoric acid industry for more than 35 years. Solutions like CARBOGUARD® carbon fiber protection have been developed specifically for the industries requirements.

SGL Carbon provides graphite tubes with highest heat conductivities on the market at up to 130 W/mK [longitudinal] and 70 W/mK [radial]

DIABON tubes for shell & tube heat exchanger allow much more compact heat exchanger and can reduce the tendency of fouling significantly, resulting in longer lifetimes and up to four times less cleaning cycles. With our fully-graphitized tubes and the optional CARBOGUARD protection tube breakage [e.g., during water jet cleaning] can be reduced up to 20x.

SGL Carbon manufactured the largest graphite columns in the world

A diameter of 3 m and trouble free operation since more than 10 years is our proof for the high quality promise.

SGL Carbon provides process solutions including performance warranties

By combining our high performance equipment for corrosive applications, state-of-the-art (simulation) software and a long time experience in process design we can offer you full systems with essential benefits like:

- highest efficiency by perfectly aligned components
- in many cases including performance warranties
- at minimum TCO (Total Cost of Ownership)

SGL Carbon introduces innovative carbon fiber based engineered solutions

We are the first supplier worldwide applying modern carbon fiber based materials (SIGRABOND) in a broad range for process equipment and parts. Your benefits are state-of-the-art products setting a new benchmark in performance and handling at economic prices.

¹⁾ Acc. Global Graphite Heat Exchanger Report 2015, QY Research Center



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