

# Process technology for chlor alkali facilities – made by SGL Carbon

## Process solutions

- **HCl syntheses** (top and bottom burner design for HCl acid and gas production, optionally with heat recovery, i. e., hot water or steam generation)
- **Absorption of HCl gas**
- **Desorption of HCl acid**
- **Azeotropic shifter systems** (dual pressure and extractive distillation)
- **HCl recovery units** (evaporation/concentration/purification of HCl acid)

## Equipments

### Graphite heat exchangers

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

### Graphite and PTFE lined columns, reactors, vessels

- DIABON graphite columns
- POLYFLURON® PTFE lined columns

### Graphite, carbon and exotic metal pumps

- DIABON/DURABON® centrifugal pumps with standardized designs acc. to ISO 2858 (magnetic coupling, single or double mechanical seal)
- Exotic metals (titanium, zirconium, nickel alloys) centrifugal and axial pumps

## Parts and assemblies

### PTFE lined piping, expansion bellows and parts

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

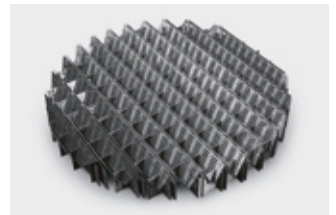
### Column internals (feed pipes, grids, liquid distributors, trays, packings, etc.)

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

### DIABON rupture disks

### Other

- Tayson-Klett safety tape for flanges



## 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 provides process solutions including performance warranties**

By combining our high performance equipment for corrosive applications, state-of-the-art (simulation) software and our extensive experience in process design we can offer you total systems with essential benefits such as:

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

#### **SGL Carbon is recognized as the most innovative producer of HCl synthesis units with regard to safety and performance**

Since the early 1980s SGL was the first producer to equip our synthesis units with a fully automatic ignition incl. safety interlock system. Since then our integrated safety system for safe automatic startup and safe shutdown of the unit has been continuously improved acc. to the state-of-the-art rules and provides the highest safety standard for this technology available today (safety system SIL2).

SGL units are always designed with focus on safe and easy operation.

#### **SGL Carbon has the most comprehensive portfolio for HCl generation**

SGL Carbon offers bottom-burner and top-burner technology for HCl acid and gas generation, with options to include steam generation at high pressure from the synthesis unit for improved economics. Additionally, we provide porous reactors to generate HCl from Chlorine and Methane in case Hydrogen is not available.

#### **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.



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#### **TIS chlor alkali.00**

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