

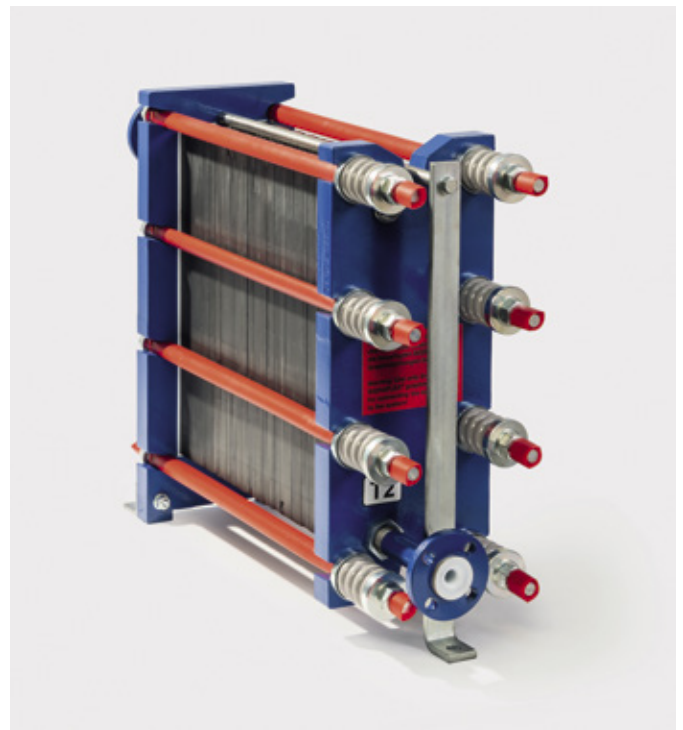
## SICABON<sup>®</sup> silicon carbide plate heat exchanger

With more than 3000 installed DIABON<sup>®</sup> plate heat exchangers, SGL Carbon has now expanded its range of equipment solutions even further by introducing the SICABON plate heat exchanger.

SICABON silicon carbide [SiC] is a ceramic material offering the widest range of corrosion and abrasion resistance. This, combined with its high thermal conductivity, makes SICABON an ideal material for heat exchange applications in the harshest and most challenging process conditions. Exceptionally designed to maintain the highest process purity, SICABON offers a clear advantage for electronic and food grade applications.

These unique SICABON plate heat exchangers not only provide our customers the most modern and efficient heat exchange technology currently available on the market, but also offer a technical concept of the highest degree in modularity and flexibility.

By combining SGL Carbon's SICABON material and its proven plate heat exchanger technology, our customers will receive a benchmark setting equipment solution. Particularly important when process requirements challenge other materials like exotic metals or graphite beyond their limits, e.g. in multi-purpose or pharmaceutical applications.



↑ Type P05 SICABON plate heat exchanger

### Customer benefits

- **Extensive corrosion resistance**

Nearly unlimited corrosion resistance at product and service side due to the use of SICABON material even at elevated temperatures up to 200°C.

- **Unmatched process flexibility**

With a wide range of chemical resistance, SICABON is the most suitable material for multi-purpose applications.

- **High purity applications**

No interaction of SICABON with process products and no release of particles into the product.

- **Fast availability**

Individual parts of the complete heat exchanger are available on stock enabling quick turnaround ideal for emergency cases.

- **Robust design**

Construction and mechanical properties of SICABON material allow cyclic operation with rapid ramp-up times and abrasive media.

- **High modular flexibility**

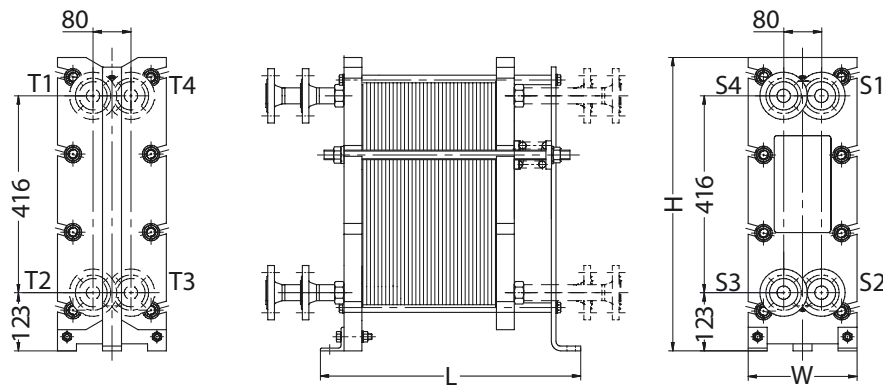
Plate package modular expandable up to 2.6 m<sup>2</sup> heat exchange area.

### Example applications

- Heat exchange for highly corrosive media, e.g. HF, HBr, concentrated H<sub>2</sub>SO<sub>4</sub> or for multi-purpose usage
- Electronic or foodgrade applications
- Useable in abrasive media
- Function: heating, cooling, condensation or heat recovery by interchanger

## Data of SICABON® silicon carbide plate heat exchanger

Technical specifications	Units	Type P05
Dimensions W x H x L	mm	230 x 620 x 350 – 850
Connections DIN/ANSI		DN25/1"
Plate gasket		PTFE
Max. working pressure ASME/PED	barg	7/8
Max. test pressure	barg	12
Lining of frames		PTFE
Plate material		SICABON
Max. number of plates		64
Max. exchange area	m <sup>2</sup>	2.56
Exchange area per plate	m <sup>2</sup>	0.04
Max. design temperature	°C	200
Weight	kg	100 – 250
Standard painting		One priming coat with two components, polyamide-adduct cured epoxy paint, 100 µm, One intermediate coat ditto, 100 µm One topcoat with two components, polyurethane coating, 60 µm – final color RAL 5002 medium blue
Available pressure codes		PED 2014/68/EU, D2000-Merkblatt, ASME conform



↑ Type P05



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