

# Silicon Carbide Plate & Frame Heat Exchanger CORRESIC<sup>®</sup>-SP Series

SP

## Product Information (SP-1)

### CORRESIC<sup>®</sup> - Silicon Carbide Plate & Frame Heat Exchanger

- Universally corrosion-resistant, pressureless sintered SiC (SSiC) plate material
- Universal corrosion resistance against all acids (HCl, H<sub>2</sub>SO<sub>4</sub>, HF, etc...), bases (NaOH, KOH, etc...), solvents, and oxidizing media (halogens, HNO<sub>3</sub>, etc ...)
- Very high thermal conductivity
- Very high heat transfer rates
- Low fouling, even at high velocities and with a high level of turbulence
- Compact, modular, and expandable design
- Easy to disassemble, clean, and reassemble
- Differential thermal expansion compensated for by helical springs
- 3 different plate sizes / series: B260 / B500 / B585
- Heat transfer area of up to 7.1 m<sup>2</sup> (75 ft<sup>2</sup>)

### Features

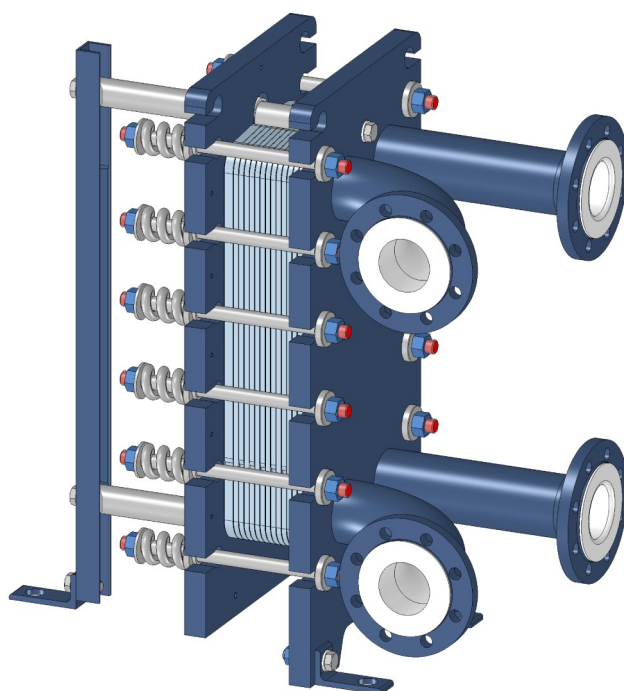
Universal corrosion resistance against acids, bases, solvents and oxidizing media

Excellent thermal conductivity

Great resistance to abrasion

Extremely high overall heat transfer coefficient

Good resistance to thermal shocks



CORRESIC<sup>®</sup>-SP plate & frame heat exchanger

### Applications

- Heating and cooling of ultra-corrosive liquids
- Heat recovery between two ultra-corrosive liquids
- Heating and cooling of ultra-pure liquids for electronics applications

### Design Parameters

Design pressure:  
-1 to +16 bar (FV to 240 psig)

Operating temperatures:  
-30 to +200°C (-22 to +392°F)

Nozzle sizes: DN25 / DN50 /  
DN80 PN16

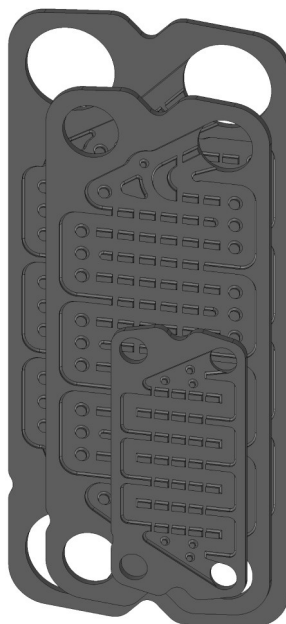
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## Materials Used and Material Options

Plates:	Sintered SiC (SSiC)
Frame:	Carbon steel
Gaskets:	PTFE
Nozzles:	PTFE lined steel
Tie rods, bolts, nuts	Stainless steel

## Design and Inspection

- CORRESIC® SP plate and frame heat exchangers are designed, manufactured, tested and inspected according to the European PED, ASME code, Chinese Pressure Vessel code and other national pressure vessel codes are available upon request.



CORRESIC® SP plates

## Additional information

- Data sheet SP-1 includes information on product range and main dimensions.
- Further information (brochures, corrosion resistance charts, product information, data sheets,...) is available for download at [www.gab-neumann.com](http://www.gab-neumann.com).

## Benefits

- Extremely high overall heat transfer coefficient
- High turbulence
- Low fouling
- Easy cleaning
- Modular design
- Long lifetime
- Short lead time
- Low operation and maintenance costs