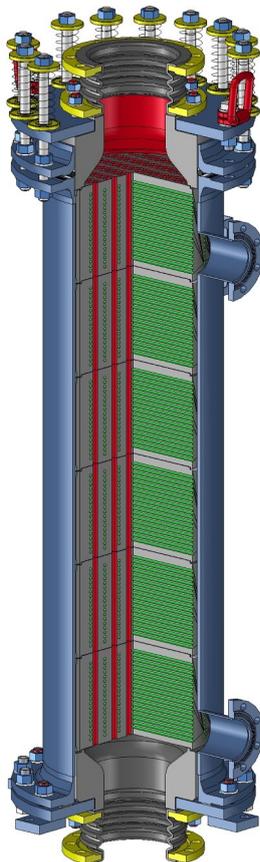


Graphite Block Heat Exchanger GE/GZ Series

Product Information (BL-3)

Graphite Block Heat Exchanger

- Impregnated graphite heat exchanger for a broad range of applications
- Resistant against virtually all leaches, acids, solvents and halogens
- Applications as: cooler, heater, evaporator (thermo syphon or falling film), condenser and absorber
- Single and double row product passages (GE and GZ series) fitted to different media combinations
- Various installation modes possible (vertical, horizontal, inclined)



Design

- Cylindrical standardised graphite blocks with ID 9 mm and ID 16 mm (0.35" and ID 0.63") holes
- Other diameters upon request (e.g. 25 or 30 mm (1" or 1.2"), comparable to graphite tubes)
- Modular design
- Standardised PTFE gaskets between blocks
- Thermal length compensation using gliding sealing system and helical springs
- Multi-pass setup (optional)
- Axial bellows on shell side (optional)
- Detachable header for easy mechanical cleaning (optional)
- Heat transfer area: up to 200 m² (2150 ft²)
- Block diameter: up to 900 mm (36")

Graphite block heat exchanger (cross section)

Potential Applications

- Heating processes for steel pickling applications
- Cooling of galvanic baths for metal processing
- Condensing and cooling of hydrochloric acid for adiabatic absorption processes
- Falling film evaporation of organic solvents and (in-)organic acids
- Thermo syphon evaporation of column sump

Features

Optimal corrosion resistance

Single and double row holes on product side

Fitted for application

Low pressure drop

Robust design

Modular setup

Easy assembly

High operational safety

Easy mechanical cleaning

Low cost alternative to shell & tube exchangers for small and medium-sized transfer areas

Low maintenance and spare part cost

Design parameters

-1 bar to +6 (+10) bar max. allowable pressure

Full vacuum to 90 psig (150 psig)

-10 (-60)°C to +180 (+200)°C
14°F (-74°F) to 356°F (392°F)
max. allowable temperature

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Materials Used and Material Options

Graphite	phenolic formaldehyde resin-impregnated graphite GAB GPX1 / GPX1T resp. GAB GPX2 with low resin content (optional)
Gaskets	PTFE (Standard)
Steel parts	shell, flanges and pressure plates: carbon steel rods, nuts, springs: stainless steel

Design and Inspection

- Block heat exchangers are designed, manufactured, tested and inspected according to AD 2000-Regelwerk (in compliance with the European Pressure Equipment Directive, PED)
- Other design and manufacturing standards upon request



Specifications and Price Quotes

For a detailed offer, please provide the following data:

- Quantity and physical properties of the process and service medium
- Required inlet and outlet temperatures
- Operational pressure and allowed pressure drops
- Further process details (optional)
- Please fill out our questionnaire: WS 1550.

Graphite block heat exchanger GZ41-05-9-1

Additional information

- Data sheet BL-3 includes information on terminology and main dimensions.
- Further precisions and complementary information (brochures, corrosion resistance charts, product information, data sheets,...) are available for download at www.gab-neumann.de.

Advantages

- Robust design
- Modular setup
- Easy assembly
- High operational safety
- Easy mechanical cleaning

Technical Perfection

Application preferred in single-purpose and mono plants

Optimal thermal performance at compact dimensions

Long lifetime

Economically Outstanding

Low-cost alternative to shell & tube exchangers for small and medium-sized transfer areas

Low maintenance and spare part cost

Competitive pricing

Short lead times