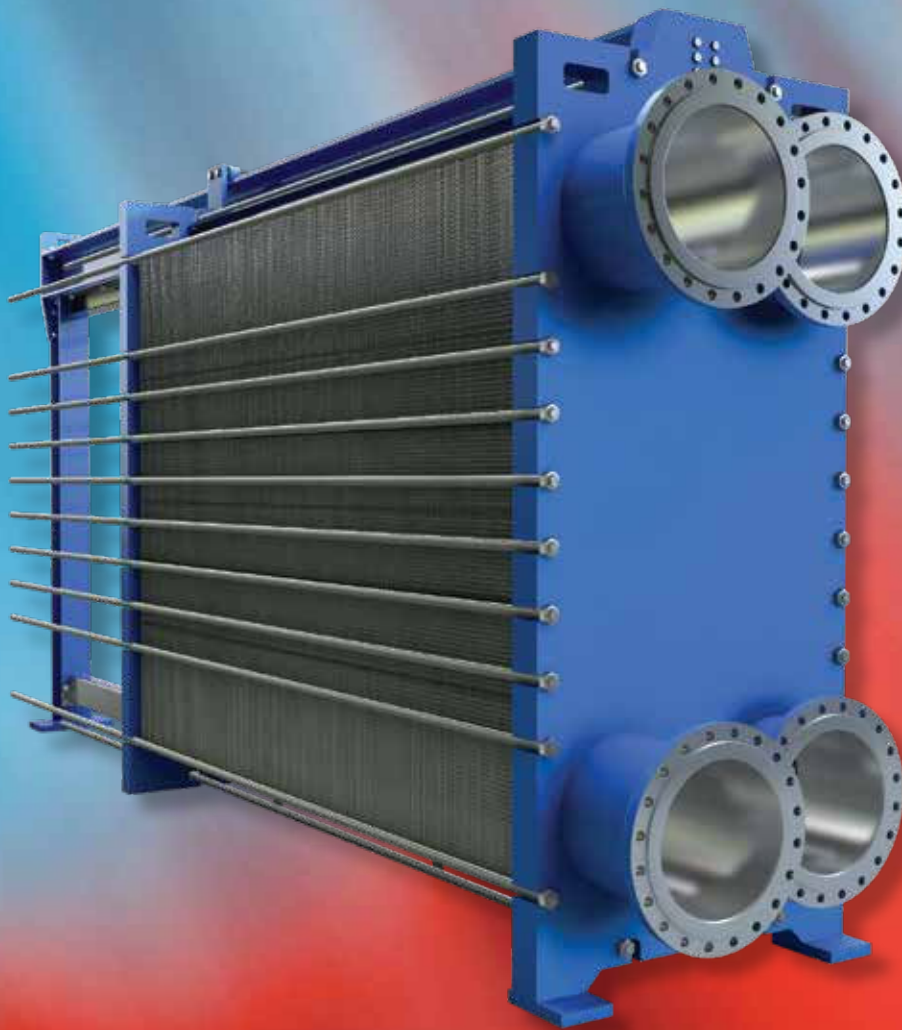


SCHMIDT® SIGMA PLATE HEAT EXCHANGERS





With more than 40 variants, the Schmidt® SIGMA plate heat exchanger has proven itself more than 100,000 times in practically all applications and under the harshest operating conditions—from vacuums to 25-bar operating pressure and temperatures from -30 °C to 250 °C.

Markets and applications

Our long-standing experience in sophisticated applications allows us to provide our clients with custom-tailored, cost-effective solutions. Our SIGMA plate heat exchangers offer industry leading solutions for a variety of thermal process applications in practically any market.

Markets Served:

- Automotive industry
- Beverage industry
- Chemical and Petrochemical industries
- Engine manufacturing
- Food industry
- HVAC
- Industrial engineering
- Marine & Offshore
- Metal processing
- Pharmacy and Life Science
- Power generation
- Pulp & Paper industry
- Refrigeration technology
- Renewable energies
- Steel mills and cooking plants
- Surface technology



Modular components of SIGMA plate heat exchangers

APPLICATION RANGE	
Operating pressure	up to 25 bar for standard units
Operating temperature	up to 170 °C for standard units

higher values on request

PLATES	
Materials	AISI 304, AISI 316L, AISI 316Ti, alloy 926, AISI 904L, SMO 254®, nickel, nickel alloys, titanium grade 1, titanium grade 11

GASKETS	
Materials	Elastomers (nitrile, EPDM, FKM / Viton® and others) PTFE-enveloped elastomers (SIGMACOAT), Aramid fibers, materials for industrial and foodstuff applications.
Fixing	Gasketed plates: - with mechanically fixed gaskets (SIGMAFIX) - with glued gaskets Semi-welded modules (SIGMADUAL): - with mechanically fixed gaskets (SIGMAFIX) - with glued gaskets

PRESSURE FRAMES	
Materials	Carbon steel, painted Carbon steel, stainless steel-cladded Stainless steel, solid
Codes (PED)	AD 2000-Merkblatt, ASME Sec. VIII Div. 1, GL, ABS, DNV and others
Connections	Studded bolts acc. to DIN 2501, EN 1092-1, ANSI Flanges acc. to DIN, EN 1092-1, ANSI Threaded connections Aseptic and foodstuff connections

OPTIONAL ACCESSORIES

- Insulation
- Tie rod protection
- Inline-strainer and automatic filter

Plate Corrugation Patterns

H-CORRUGATION

- Fish bone plate profile
- Highest heat transfer coefficients



W-CORRUGATION

- Fish bone plate profile
- Minimized pressure loss at optimized heat transfer



Y-CORRUGATION

- Patented fish bone corrugation pattern
- Increased heat transfer at lowest pressure loss



F-CORRUGATION

- Free flow plate profile with some stamped spacers



Lifting lug

Studded bolts connection with metallic liner



Name plate showing max. operating conditions and tightening dimensions

Movable cover pressure plate movable cover

Slot for removing of the tie rod at the side

Plate packet

Tie rod

Support column

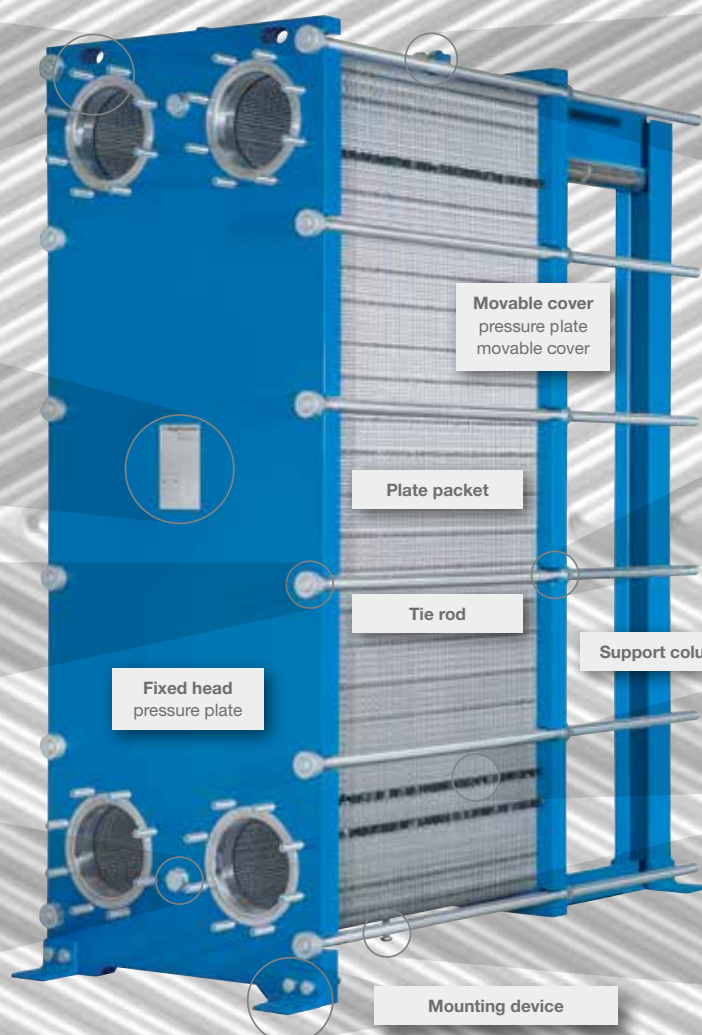
Gasket identification tag visible with closed PHE

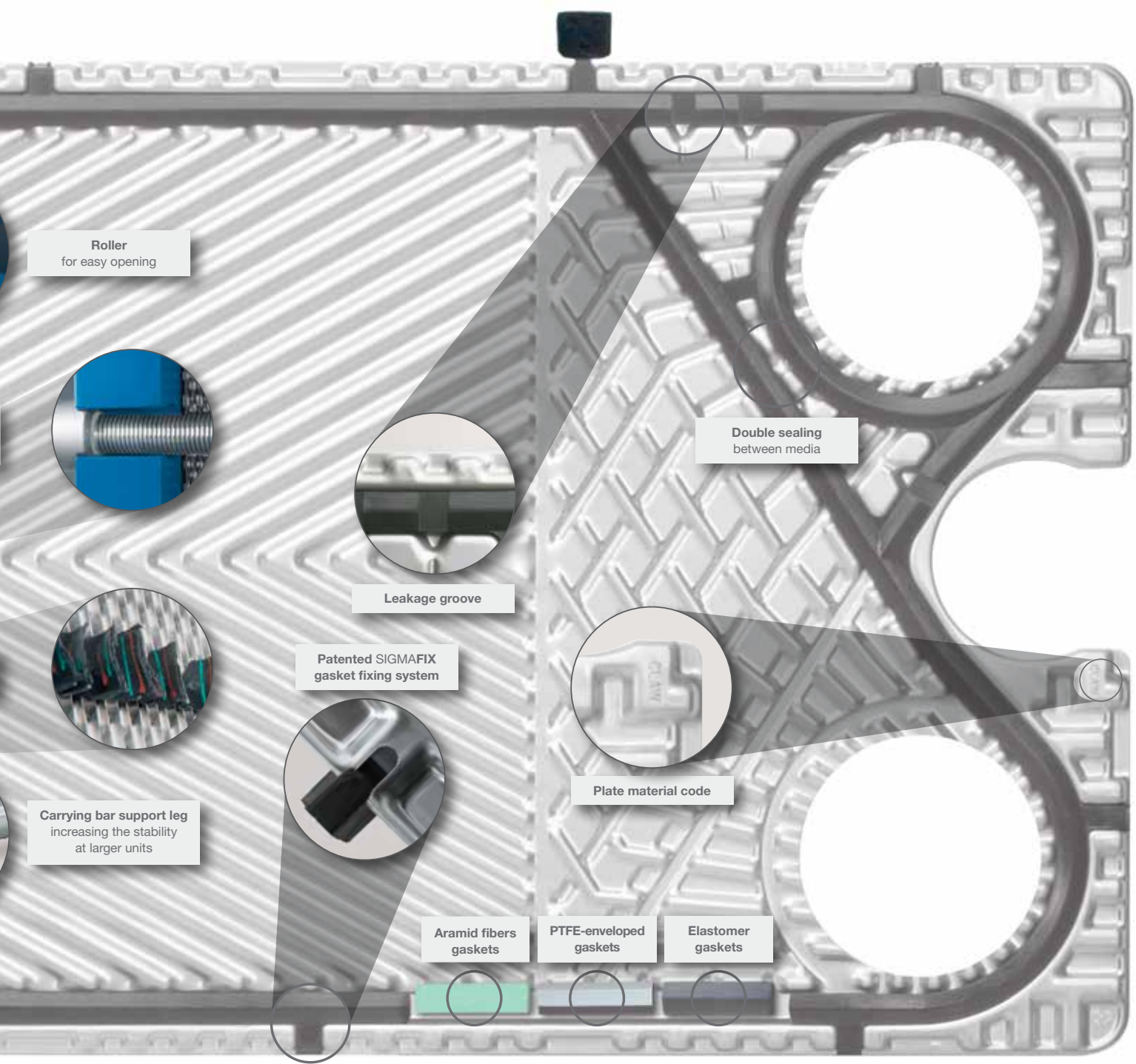
Anchor bolt as anti-rotation device

Fixed head pressure plate

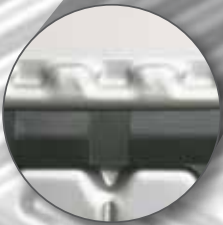
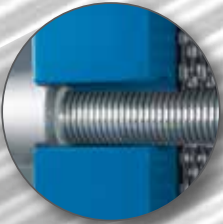
Mounting device

Removable carrying bar fixing





Roller
for easy opening



Leakage groove

Patented SIGMAFIX
gasket fixing system



Carrying bar support leg
increasing the stability
at larger units



Plate material code

Double sealing
between media

Aramid fibers
gaskets

PTFE-enveloped
gaskets

Elastomer
gaskets



A world of heat transfer solutions

API Heat Transfer's global presence includes manufacturing facilities, R&D locations, and sales support throughout the world, all focused on one goal—to better serve our customers.



For more information about our heat transfer products, contact our API Heat Transfer sales representative or visit apiheattransfer.com or apiheattransfer.de

Germany

API Schmidt-Bretten GmbH & Co. KG

Langenmorgen 4
75015 Bretten
Germany

+49 7252 530

USA

API Heat Transfer Inc.

2777 Walden Avenue
Buffalo, NY, 14225
USA

+1 716 684 6700

China

API Heat Transfer

156 Qingqiu Street, 3rd District
Suzhou Industrial Park
Suzhou, Jiangsu 215126
China

+86 512 8816 8000

GLOBAL HEADQUARTERS

2777 Walden Avenue | Buffalo, NY 14225 USA | +1.716.684.6700 | sales@apiheattransfer.com

apiheattransfer.com



PERFORMANCE IS EVERYTHING