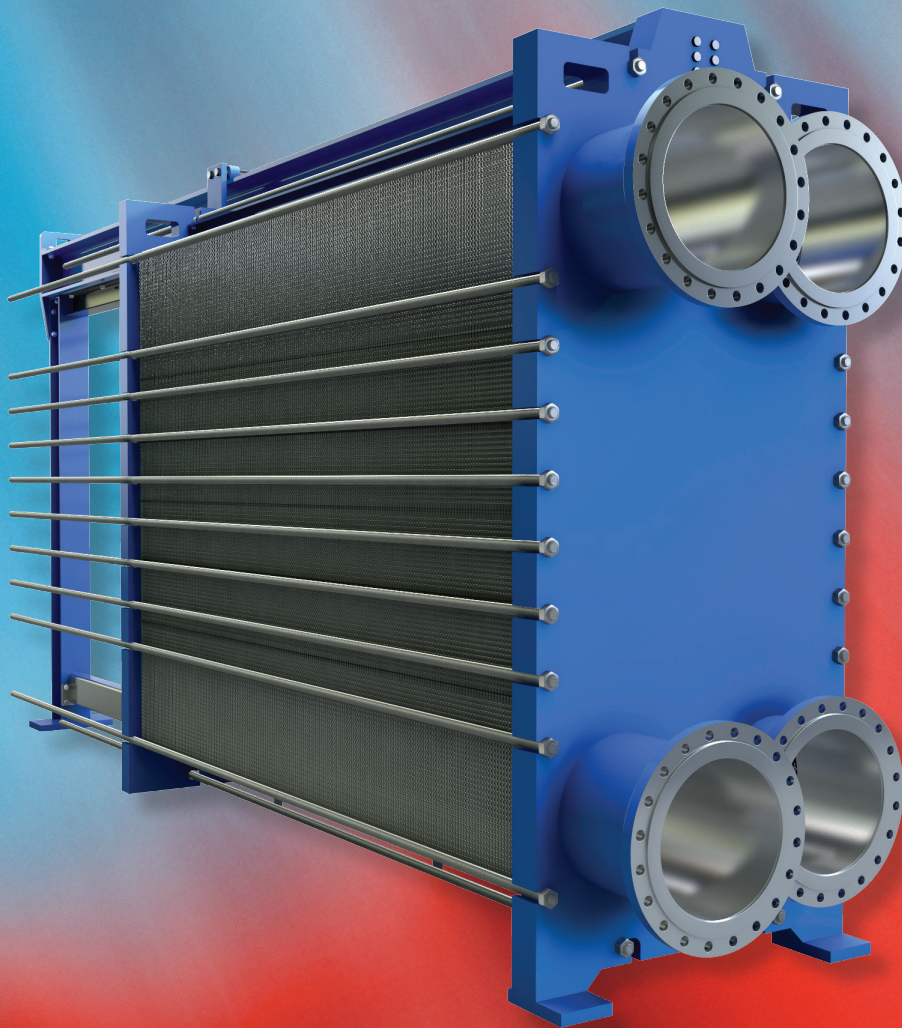


SCHMIDT® SIGMA PLATE HEAT EXCHANGERS





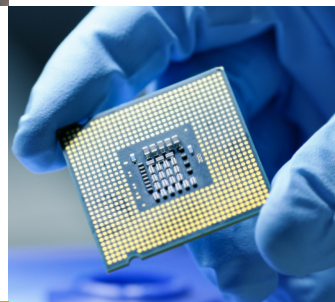
With more than 40 variants, the Schmidt® SIGMA plate heat exchanger has proven itself more than 100,000 times in practically all applications and under the harshest operating conditions—from vacuums to 25-bar operating pressure and temperatures from -30 °C to 250 °C.

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
- Data Centers
- Food Industry
- HVAC
- Industrial
- Marine and Offshore
- Metal Processing
- Pharmacy and Life Science
- Power Generation
- Pulp & Paper Industry
- Refrigeration Technology
- Renewable Energies
- Steel Mills and Cooking Plants
- Semiconductors and Integrated Chip Manufacturing



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

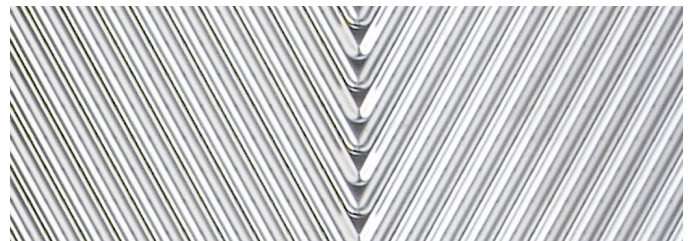
H-CORRUGATION

- 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



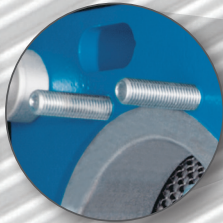
F-CORRUGATION

- Free flow plate profile with some stamped spacers



Lifting lug

Studded bolts connection with metallic liner



API Heat Transfer

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

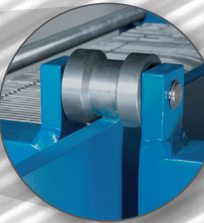


Plate packet

Tie rod

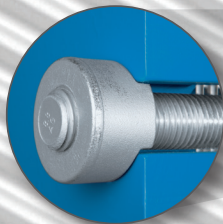
Support column

Gasket identification tag visible with closed PHE

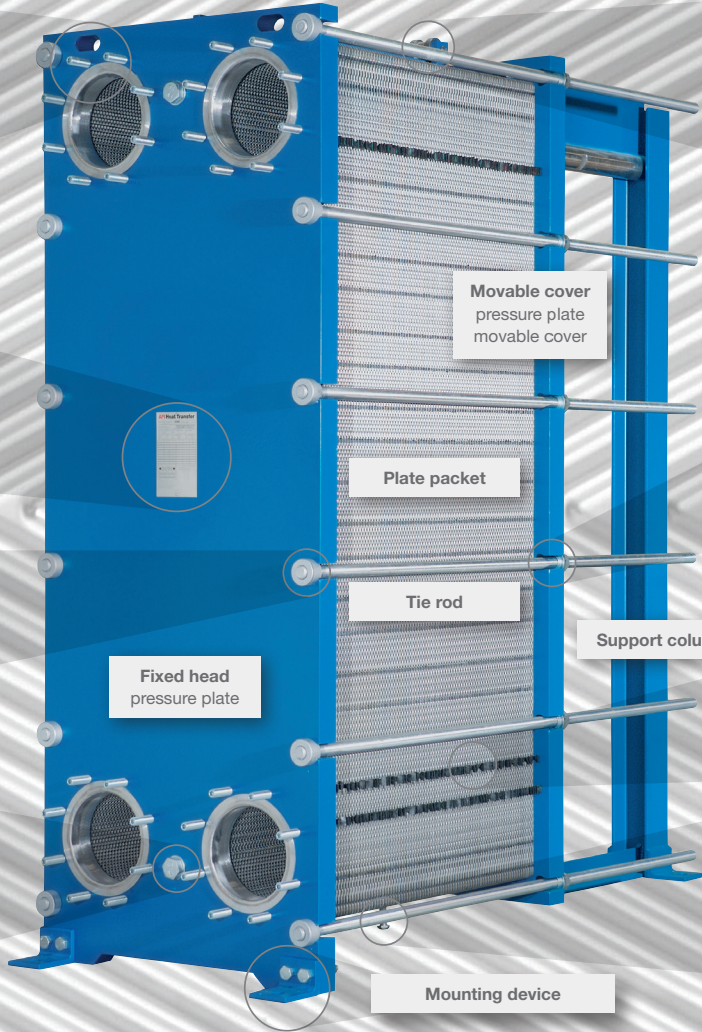
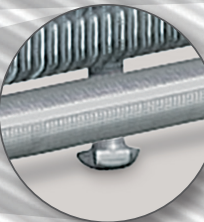
Fixed head pressure plate

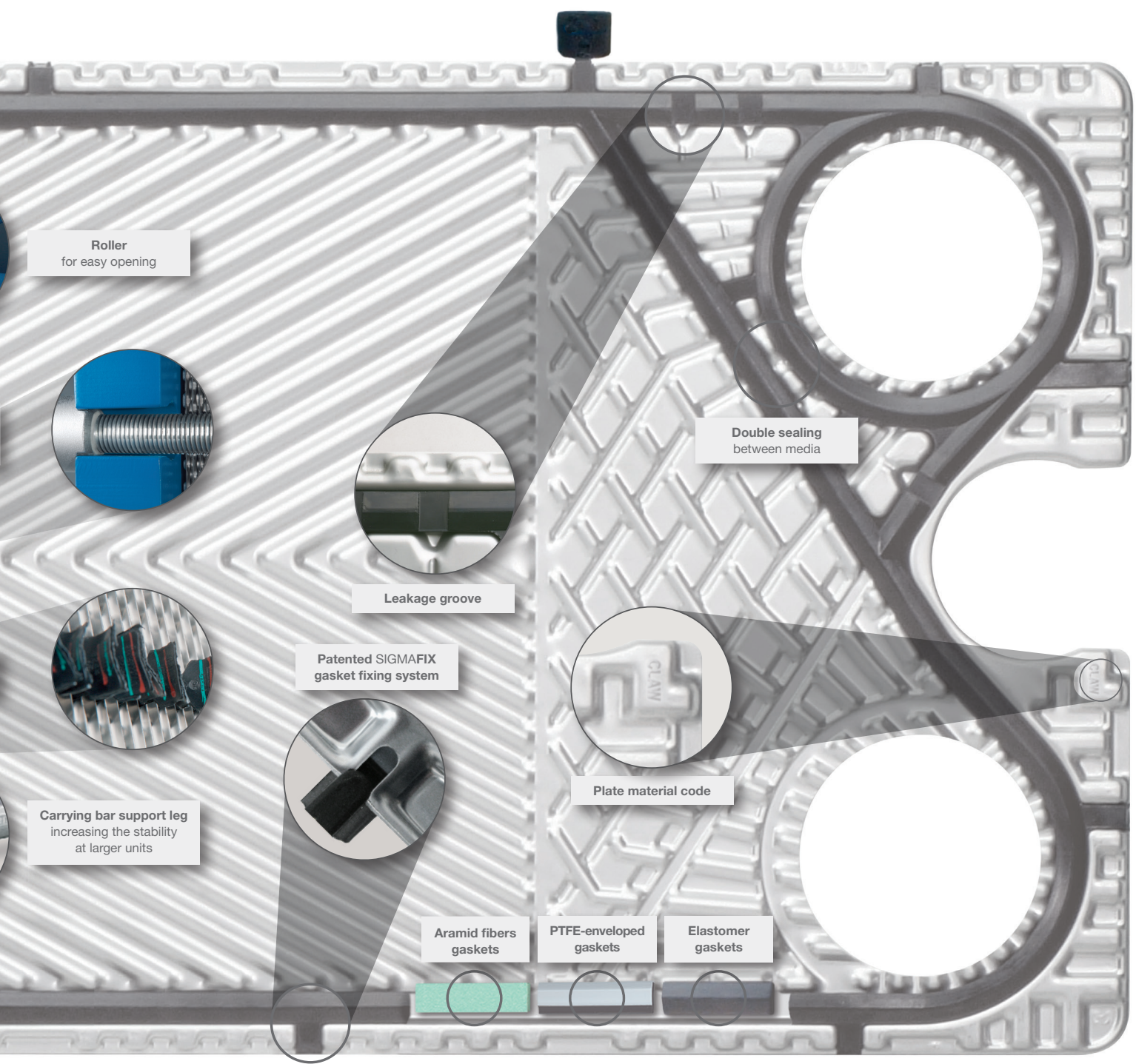
Mounting device

Anchor bolt as anti-rotation device

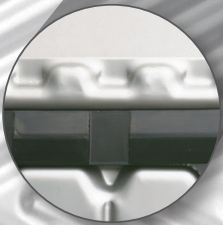
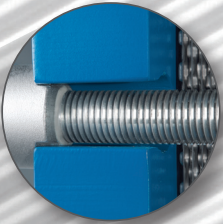


Removable carrying bar fixing

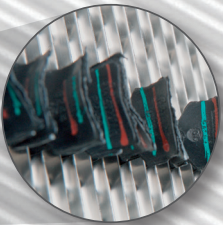




Roller
for easy opening



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



AV 12



API Heat Transfer, a family of high-performance brands

High-performance heat transfer.

It's who we are and what we do. It's part of our 140-year heritage designing and delivering world-class heat transfer products for nearly every industry. It's bolstered by our worldwide network of manufacturing facilities that provide sales, service, and support. And it's ingrained in a process that has helped customers around the world for nearly a century and a half.

When you work with us, you'll find the performance of our technologies sets the bar for heat transfer products, and our relentless drive to find and create custom heat transfer solutions to meet any industry challenge sets us apart.



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

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