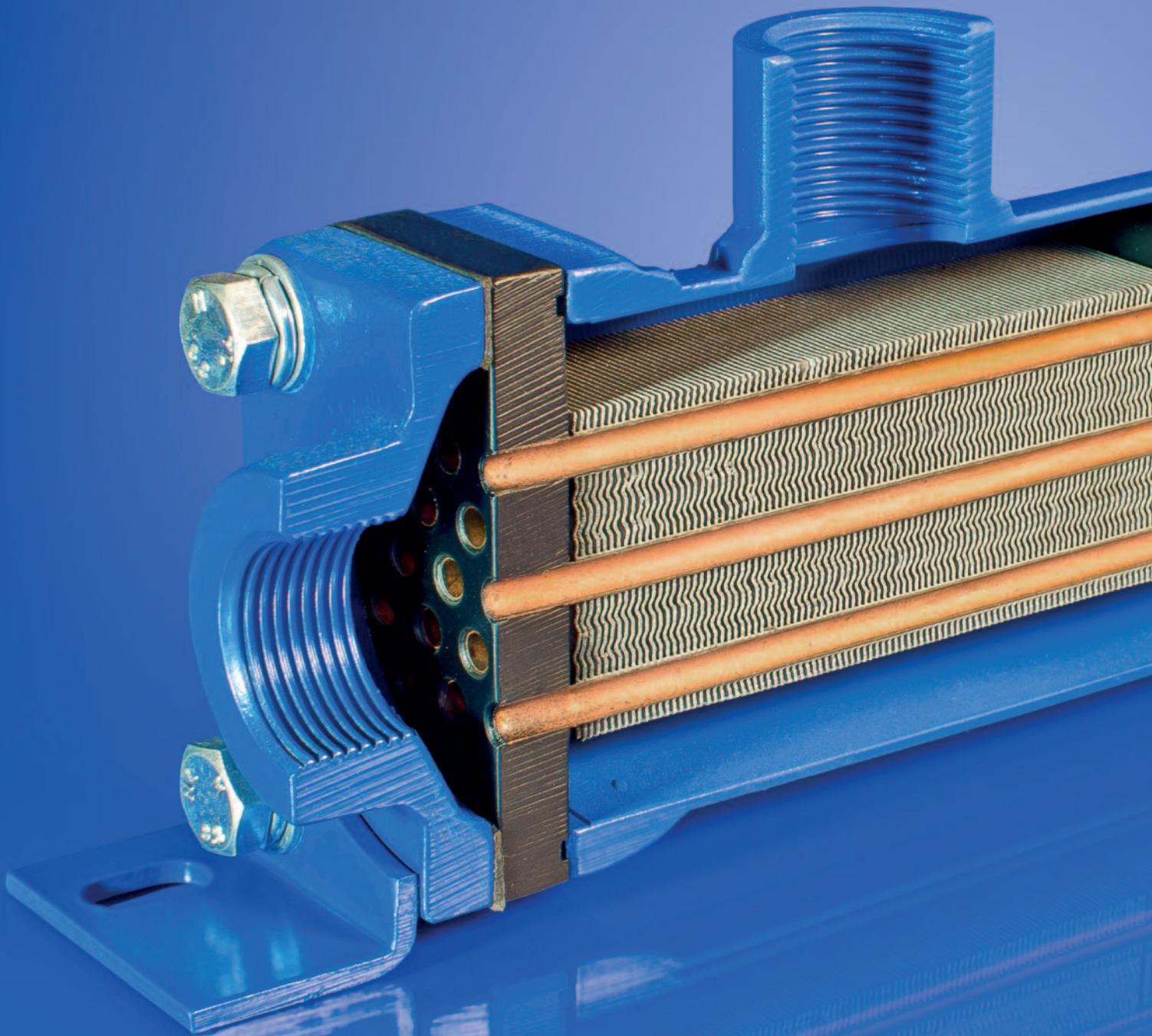


HYBRID COOLING



**UNIVERSAL
HYDRAULIK**®



Your Partner for coolers and systems

advanced quality
customized designs
made in europe and usa

Heat Exchanger

Hybrid-Design (with fins)

HYBRID COOLING

HYBRID FAIL SAFE COOLING

EKM/SKM, SCM



Straight or bent water tubes (U-tubes), fixed or removable, On-Tank or In-Tank version available.

8 different sizes with 2 - 5.000 kW Heat Load
3 tube diameter

Optional:

- Sea water with Marine-certificates (GL, DNV, etc.)
- Compressed-air version
- Stainless steel or titan version
- Bypass-Valve integrated (100% opened)
- special design upon request

UKM - UKTM



SCM-FS



Predictive Maintenance 4.0

Fail Safe cooler in Hybrid-Design.

Much bigger cooling performance.

Double-tube design with 100% electrical leakage control. 5 Unit sizes.

Basis SCM-Series

Optional:

- Sea water with Marine-certificates
- Stainless steel / titan version
- Bypass-Valve integrated (100% opened)

Advantages Hybrid-Design:

- **Shell side (e.g. Oil):** High performance due to additional fins (plates). Similar performance and size as plate heat exchangers.
- **Water side:** Long life time due to plain tubes instead of formed plates. Easy to clean even with bad water quality.

Standard Shell & Tube Design (without fins)

CKM



Straight- or U-tubes

8 sizes: 2. - 1.500 kW cooling capacity

Optional:

- different material combinations (e.g. Stainless steel)
- Sea water (with marine certificates)
- TÜV-approvals
- Special designs by request possible

UKC-G



Screw-in Heat Exchanger for installation in hydraulic tanks, gear boxes or piping systems (e.g. install in existing threads instead of heating elements)

Threadings: G 1 1/4", G 1 1/2" or G 2"

cooling surface: 0,05 - 0,9 m²

Optional:

- Stainless steel version
- Seawater version

Fail safe cooler

FAIL SAFE COOLING

CKM-FS



Predictive Maintenance 4.0

Fail safe cooler: double-tube design with 100% electrical leakage control, 6 sizes: Basis CKM-series

Optional:

- Sea water (with marine certificates)
- Atex- or TÜV-approvals
- Different material combinations (e.g. Stainless steel)

Electrical oil pre-heater

ELECTRICAL HEATING

EDH



Electrical oil pre-heater

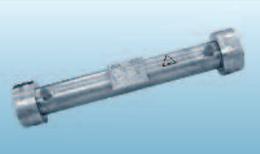
5 sizes 0 - 100 kW / no calculation software necessary. All relevant data on data sheet available.

Optional:

- indiv. electronical control solutions
- Insulation (different material)
- Surface load: 1W/cm²
- Water and water mixtures

Special designs

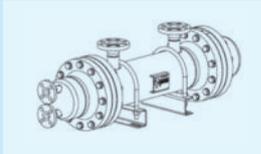
eg. HIGH-PRESSURE



We develop many different special solutions for special markets by customer requests:

- High pressure cooler (up to 500 bar)
- Gas - cooler/ heater
- Compressed-Air cooler
- Gear box oil cooler - in-tank
- Air Pre-heater
- Slurry (mud water) oil-cooler

ASME-CODE



ASME-code

Basis: Standard or hybrid-design cooler produced according to ASME code.

- TEMA-C design available
- Various sizes
- Different options by request



Plate cooler

PWT



Brazed plates in stainless steel, copper or nickel brazed

variable in sizes and amount of plates

Optional:

- Different connections
- Different brackets
- Insulations (e.g. PU hard foam)

TL



Screwed-Plates in stainless steel

variable in sizes and amount of plates

easy cleaning by modular systems

Optional:

- Sea water (titan)