

*advanced quality
customized designs
made in europe*

**UNIVERSAL[®]
HYDRAULIK**



Your Partner for coolers and systems

Oil water coolers

advanced quality
customized designs
made in europe

Oil water coolers

Hybrid design

**HYBRID
COOLING**

EKM/SKM, ECM



Straight tubes (3 diameter)
Greatly enlarged heat exchange surface (fins)
9 sizes: 2 - 2.000 kW cooling capacity
Optional:
- sea water with certifications
- compressed air applications
- special design upon request

UKM - UKTM



U-tubes (2 diameter)
In-tank or on-tank solution
Greatly enlarged heat exchange surface (fins)
4 sizes: 2 - 500 kW cooling capacity
Optional:
- sea water with certifications
- compressed air applications
- special design upon request, e.g. only cooling cartridge (UKC) with end cap

**HYBRID
COOLING**

This heat exchanger combines the advantages of plate heat exchangers with the benefits of shell & tube heat exchangers.

The design of this cooler is as compact as a plate exchanger as it has a greatly enlarged heat exchange surface on the oil side. This is achieved by fins (plates) which are routed over the water tubes, forming a metallic bond with these tubes.

It also retains the advantages of the shell & tube heat exchanger on the water side, as the large, smooth pipes keep it almost entirely clean, whereas the ribbed design of the plate heat exchanger tends to get clogged up easily on the water side.

Further advantages include its greater robustness and the unique opportunity to build in an internal bypass valve.

Bare tube design

CM, AM



Straight- or U-tubes
5 sizes: 2-500 kW cooling capacity
Optional:
- different material options
- special design with **ASME, TEMA** or **API**-codes upon request
- sea water

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 1/2" or G 2"
cooling surface: 0,05 - 0,9 m²
Optional: customized lengths

Fail safe cooler

**FAIL SAFE
COOLING**

CM/FS



Fail safe cooler by double-tube design with overpressure protection and electronic control
Basis AM/CM-Coolers
Optional:
- sea water
- different material options

Electrical oil pre-heater

**ELECTRICAL
HEATING**

EDH



Electrical oil pre-heater to control the heating of fluids
3 sizes
heat capacity: 0,5 - 12 kW (60 kW)
surface load: 0,8 - 2 W/c m²
Optional:
- Thermostat, adjustable 0°-90°C
- Limiter at 100°C

Plate cooler

PWT



Brazed plates in stainless steel, copper or nickel brazed
variable in sizes and amount of plates
Optional:
- brackets
- insulations

TL



Screwed-Plates in stainless steel
Different plate materials
variable in sizes and amount of plates
easy cleaning by modular system
Optional:
- sea water

IC-Fluid Power, Inc.

63 Dixie Hwy · Rossford, OH 43460 · Tel: +1.419.661.8811
E-Mail us@icfluid.com · www.icfluid.com



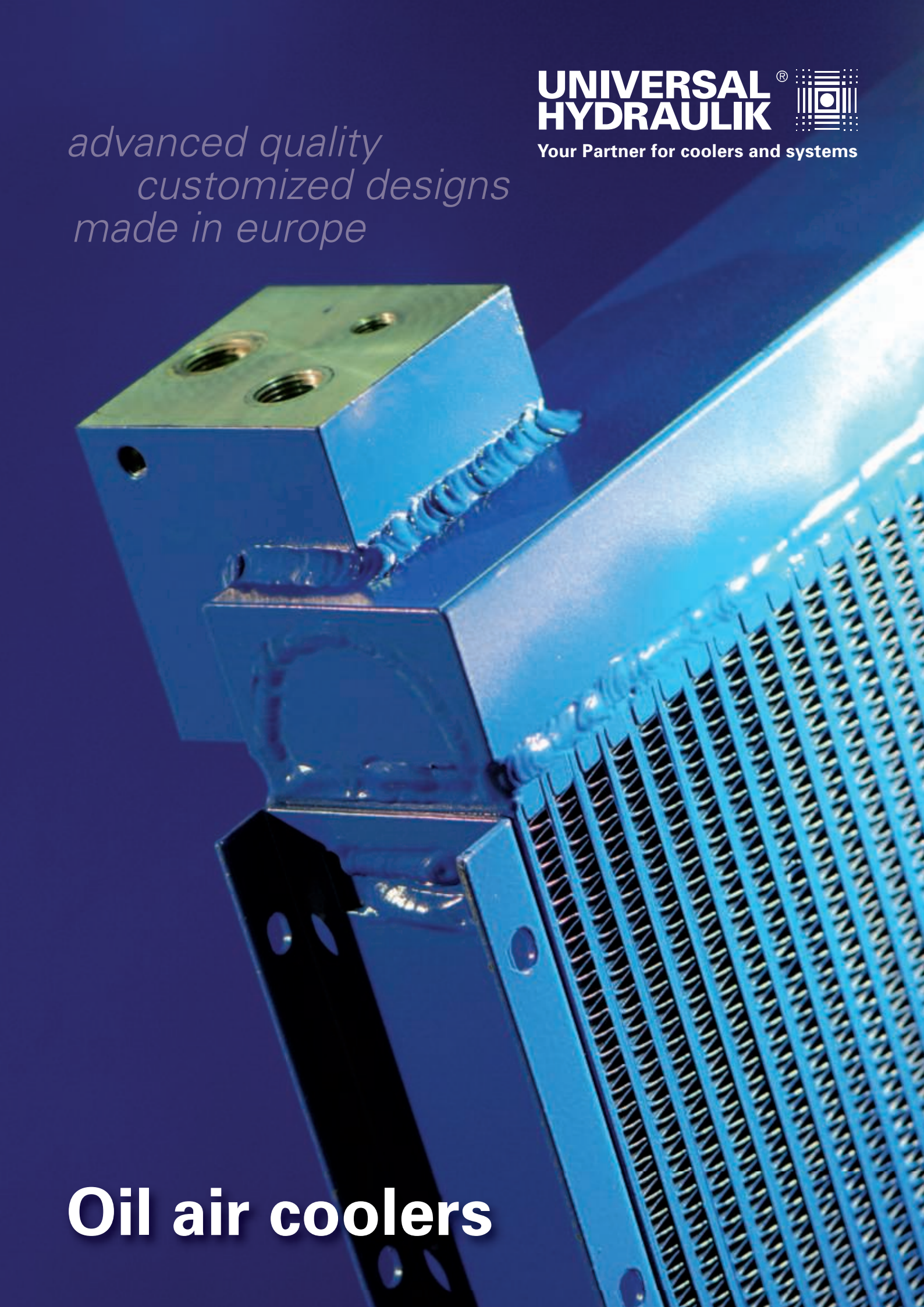
**UNIVERSAL
HYDRAULIK**®



Your Partner for coolers and systems

*advanced quality
customized designs
made in europe*

Oil air coolers



advanced quality
 customized designs
 made in europe

Oil air coolers

Industry

LKI



Drive: 400 V Motor
 10 sizes: 2-150 kW cooling capacity
 Optional:
 - Off-Shore design
 - 40 bar Test pressure
 - special design upon request

TFS/A



Bypass cooling
 Installation beside the hydraulic system
 extremely silent
 Drive: 400 V Motor
 3 sizes: 8-20 kW cooling capacity
 Optional:
 - filter, thermostat, hoses, etc.
 - other mounting options

Mobile

LKM



Drive: 12 V-, 24 V- Motor
 Basis LKI Series
 special design upon customer demands
 Optional:
 - 40 bar Test pressure
 - screw-in thermostat, etc.

LKM-special



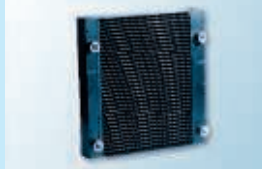
Drive: 12 V-, 24 V- Motor
 Basis LKM Series
 individual designs of sizes and drives
 Optional:
 - two or more drives
 - heat performance can be tested

LKI-HYD



Drive: Hydraulic-Motor with collar bearing
 Basis LKI Series
 special design upon request
 Optional:
 - without hydraulic motor
 - other motors upon request

LKK



Special Design without drive upon customer demands, e.g. multiple combined coolers (oil, charge air, water) in Side-by-Side design.
 Optional:
 - 40 bar Test pressure
 - housing, fan supplied separately

Cooling solutions

COOLING SYSTEMS

Cooling systems



We mount several standard coolers together on a rack to increase the cooling performance (from 2 to 16 coolers).

COOLING SYSTEMS

Cooling-Filter systems



We can extend every standard cooler to a compact bypass-cooling filter unit for your hydraulic system.

Universal Hydraulik GmbH

Siemensstr. 33 · D-61267 Neu-Anspach · Tel: 0 60 81/94 18-0 · Fax 0 60 81/96 02 20
 eMail info@universalhydraulik.com · www.universalhydraulik.com

IC-Fluid Power, Inc.

63 Dixie Hwy · Rossford, OH 43460 · Tel: +1.419.661.8811
 E-Mail us@icfluid.com · www.icfluid.com

