

Made for Motion



## WITHSTANDING THE PRESSURE

Components for Mobile and Stationary Hydraulics

- Hydraulic Components
- Cooling Systems



# Staying on target – with our new hydraulic components.

For almost **50 years** our business field of hydraulic components has provided for a continuously increasing range of hydraulic components from our in-house development and production, including complex system modules for thermal management such as combined coolers and tank heaters.

This makes us a full-liner supplying the hydraulic industry with bellhousings, foot flanges, damping elements, coolers and oil tanks cooperating closely with our customers. This starts with project planning already: here we are using 3D models which our customers' data records are integrated in. Afterwards the complete power packs can be assessed and optimized, if necessary, via virtual reality methods.



## Bellhousings Aluminium/cast iron PSG for servo hydraulics

- Connecting IEC motors IMB35 with hydraulic pumps
- Optimum alignment of motor and pump shaft to each other
- Bellhousings available in aluminium, cast or nodular iron and steel
- Available for a power from 0.25 to 1.000 kW
- Increasing the service life of the coupling
- Designing by finite element analysis allows for maximum loading capacity with minimum weight



## Damping element Noise-reducing

- D 150 to D 330 with locking accepting high loads
- Used between bellhousing and pump
- DT 160 to DT 800 with locking accepting high loads
- Used between bellhousing and tank wall
- DT rings with locking (DTV rings without locking)
- Damping rods are mounted under the motor or foot flanges
- Elastic flanges: "ERD"
- All damping elements serve for structure-borne noise separation



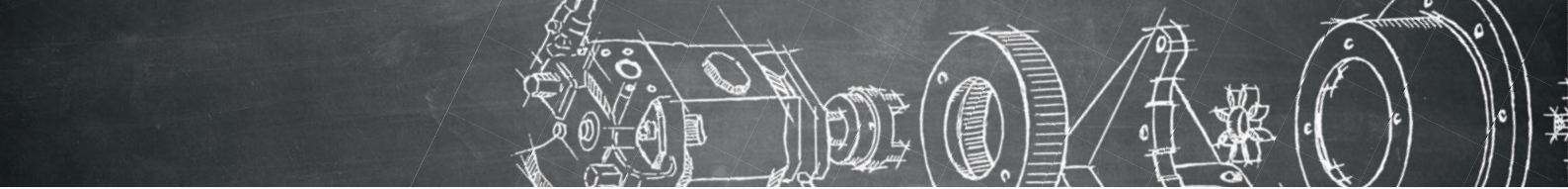
## Foot flanges PTFL/PTFS/aluminium/nodular iron



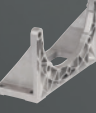




























- PTFL/PTFS made of aluminium/nodular iron
- PTFL foot flange in a light-weight version for small stationary power packs up to 15 kW
- PTFS foot flange made of aluminium in a heavy-weight version for bigger drives up to 45 kW
- PTFS foot flange made of nodular iron in a heavy-weight version for severe operating conditions and environments with high demands such as servo hydraulics, surface mining, mining, marine applications



## Aluminium tanks Oil tanks made of cast aluminium

- Aluminium tank with an effective volume from 10 to 100 litres
- Tanks are stackable
- Available from stock
- Oil collecting groove RSO-xx-NBR can be retrofitted for tank BAK 27, 40 and 63



Products Applications						
	Bell housings	Damping elements	Foot flanges	Aluminium tanks BAK	Steel tanks	Oil sump pans
Power pack manufacture						
Wind power						
Nylon-processing industry						
Industrial gears						
Press manufacture						
Shipbuilding						



### Accessories for tanks

- Oil level sight glasses in different versions available from stock
- Level and temperature switches in different versions available from stock
- Level and temperature switches as an electronic version
- 4 programmable switch outputs that can randomly be assigned as level and temperature switches



### Tank heater

- Tank heater type EH for horizontal mounting
- Tank heater cartridge type EHP for horizontal mounting
- Type EHP allows for replacing the heater cartridge without oil drain
- Tank heaters available with and without thermostat
- Tank heaters with magnets "TEHM" suitable for retrofitting



### Steel tanks Standard and special tanks

- Standard tank types BSK, BEK, BNK
- All standard tanks are welded on both sides
- Special tanks as per customer specifications up to 130,000 litres
- Internal corrosion protection via approved oil-resistant paint
- Cover coat available on request
- 100 % tightness test, if required with report
- All tanks available in material stainless steel



### Oil sump pans made of steel for aluminium and steel tanks

- Oil sump pans for aluminium tanks type "BAKW" available from stock, also following Water Resources Act (WHG)
- Oil sump pans for tank series BSK, BEK, BNK with Water Resources Act certificate, if requested
- All oil sump pans available in material stainless steel, if requested
- Welded on both sides, high-quality and oil-resistant corrosion protection
- 100 % tightness test, if required with report
- Special oil sump pans made of steel and stainless steel as per customer specifications available



					
Accessories for tanks	Tank Heater	Oil/air cooler OAC	Oil/air cooler OPC	Oil/water cooler PHE	Oil/water cooler TAK/T
■	■	■	■	■	■
■	■	■		■	■
■	■	■		■	■
			■	■	■
■	■	■	■	■	■
■		■	■		■



### Oil/air cooler OAC

#### Cooling system

- Available in 12 sizes: OAC100 – OAC2000
- Cooling capacity up to 360 kW
- Available with pressure and thermal bypass
- Marine and ATEX versions available



### Oil/air cooler OPC

#### Cooling system

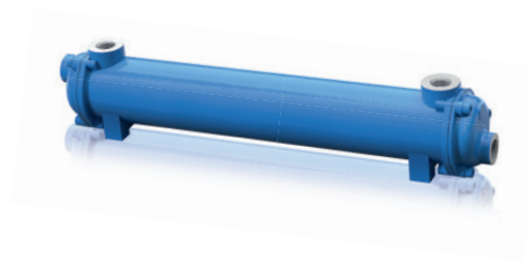
- Available in 9 sizes: OPC200 – OPC1000
- Available with pressure and thermal bypass
- Marine and ATEX versions available



### Oil/water cooler PHE

#### Soldered plate heat exchangers

- High-performance plate heat exchangers
- Stainless steel plates with copper solder
- Various sizes available from stock



### Oil/water cooler TAK/TP

#### Tube bundle heat exchanger

- TAK/T is designed as a three-way cooler
- This saves both water and costs
- Also available as a seawater version
- Tube bundle can be replaced



# Multimedia coolers and oil/air coolers for mobile and stationary hydraulics

## Oil cooling via ambient air

**Separate oil circuit ensures lubrication without cooling**

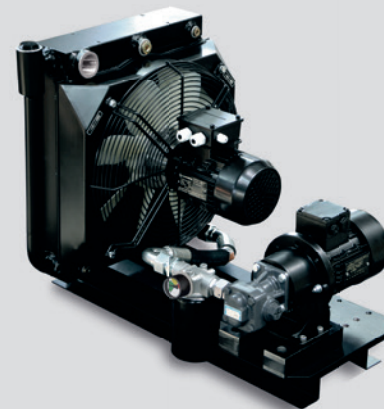
The **OPC oil cooler** unit is a system specifically developed for cooling in the bypass flow. The independent unit consists of cooler, fan, electric motor and pump and can be supplemented by a filter or bypass upon request.

### Applications:

- Gearboxes
- Machine tools
- Elevator engineering
- Test benches
- Supplementary cooling
- Bypass cooling

### Applicable for cooling of:

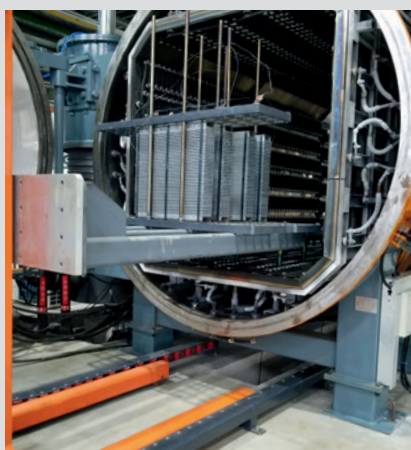
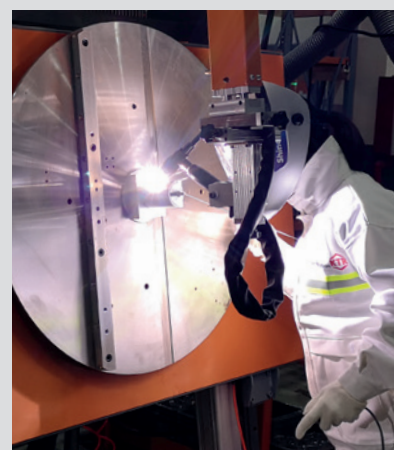
- Hydraulic oil
- Gear oil
- Lubricating oil
- Water glycol (50 % glycol at the minimum)



## Manufacturing expertise in our own plant

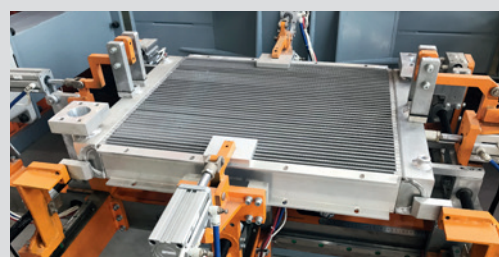


In our new cooler manufacturing plant in Jiaxing/China we manufacture high-quality cooling systems for mobile and stationary hydraulics on a usable surface of 9,000 m<sup>2</sup>. For this purpose we invested in state-of-the-art machinery allowing to manufacture small quantities at a high degree of automation and consequently at a consistently high quality level. The cooling systems are developed at KTR's headquarters in Rheine, Germany.



## Customer benefits at a glance

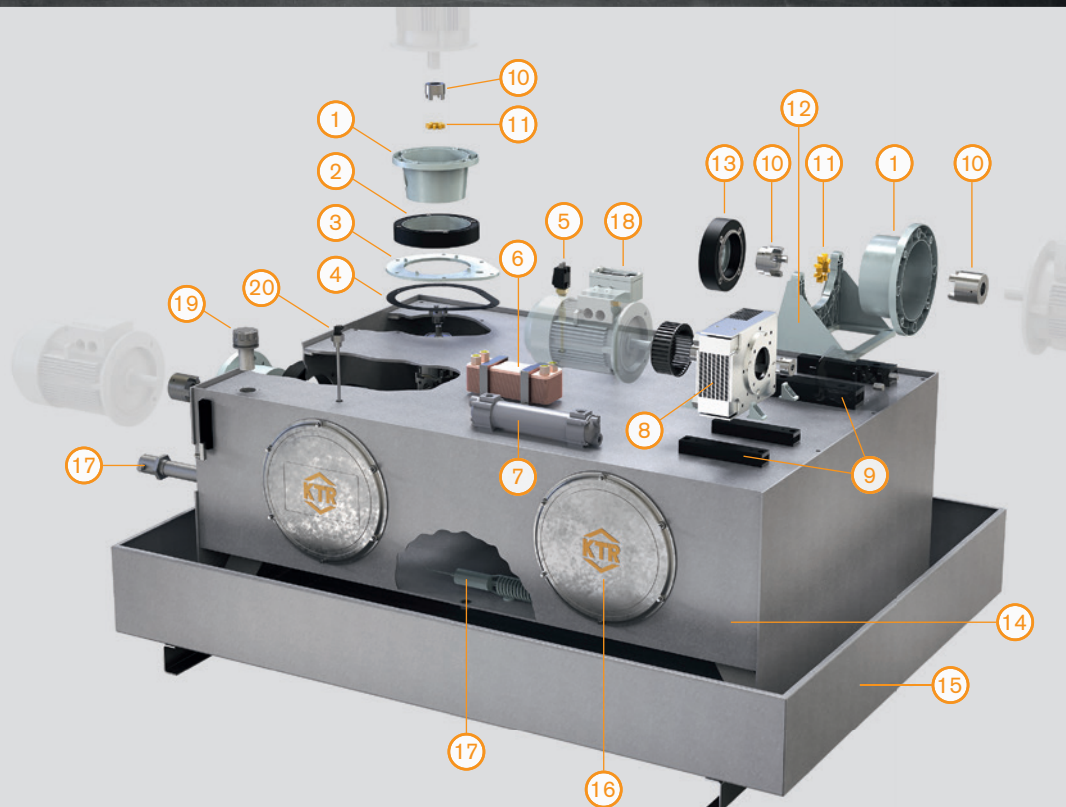
- **Higher capacity**  
Guaranteed availability by expansion of production capacity
- **Optimised delivery times**  
Setting up customized delivery times by individual production planning and production capacity
- **Optimised quality access**  
Latest production lines, robotic welding systems along with our specialist personnel ensure a high quality level
- **Future-oriented engineering**  
By combining project management, development, designing and manufacturing we unite all process steps in one location





## Accurate selection, high-quality machining, quick availability

1. Bellhousing
2. DT ring
3. ZO flange
4. Gasket DZ for ZO flange
5. NVT-E
6. Plate heat exchanger
7. TAK/TP tube bank cooler
8. PIK
9. Damping rods
10. ROTEX hub
11. ROTEX spider
12. Foot flange
13. Damping ring type „D“
14. Steel tank
15. Oil sump pan
16. Cleaning cover
17. Tank heater
18. Industrial controller
19. Filler with breather filter
20. Level and breather filter



## Online tool for oil/air coolers type OAC



### Exclusively for oil/air coolers type OAC

Based on the data you entered such as ambient and oil temperatures, installation height and the requested fan drive the tool quickly calculates the right cooler.

In addition we provide you with clear data processing and an illustrated 3D model along with links to our online shop.

[otools.ktr.com](http://otools.ktr.com)

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