Immersion cooler OBK-Series

The OBK immersion cooler series is used for cooling water, emulsion or oil e.g. from CNC machines. The units are placed on the container and immersed in the liquid. The cooling is usually done by compressor cooling. Water-cooled devices are also possible. Temperature range of the medium between 13.5 and 28°C. Immersion coolers are placed on the vessel and immerse their evaporator into the liquid. The evaporator has a very flat design, therefore it is suitable for very flat vessels.Ein eingebauter Temperaturfühler regelt die Mediumstemperatur. Es sind verschiedene Reglungen möglich: * Nach einer festeingestellten Mediumstemperatur, * Nach der Umgebungstemperatur, oder * nach der Maschinenbetttemperatur.

The performance data refer to water with 5% oil content. If oil is to be cooled, the cooler must be specially designed for this purpose. Cooling takes place against circulating air. Air inlet to the right, air outlet to the left.

If you need special requirements, we manufacture special designs for your very special application. How can our OBK immersion cooler support you? Talk to us!

Highlights

- Plug-in unit, easy to install
- Compact design due to micro-channel technology
- Small footprint: up to 80 kW cooling capacity
- Energy efficient: reduced energy consumption
- Quiet in operation: suitable for indoor installation
- Environmentally friendly: up to 60% less refrigerant required

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Technische Daten

- Power 5 kW - 80 kW
- Completely ready to plug in
- Space saving construction
- Version with 50/60 Hz possible
- Also available for aggressive media
- Complete electrical control
- Available with different sensors
- Base frame: Covered on all sides for mounting on the tank. Painted with DD-pressure paint pebble gray similar to RAL 7032. Other paint on request. Filter in front of the condenser as option.
- Refrigeration circuit: Refrigeration compressor with coil evaporator stainless steel 1.4301. Air-cooled condenser, expansion valve, dryer, high and low pressure switch (component tested) sight glass, refrigerant receiver, oil and refrigerant service charge.
- Agitator(s): to obtain an optimal heat transfer in the tank even when there is no flow in the tank.
- Electrical control cabinet in completely enclosed, dust-tight design, internally completely wired according to EN 60 204-1 and UVV/VBG4 with all switching, control and monitoring devices, control voltage 24 V AC.
- Safety chain with high and low pressure pressostat and motor protection switches. LEDs for indication of operation, high and low pressure fault in the control cabinet. Adjustable electronic digital thermostat, external lamp for collective fault indication, complete electrical control.

Additional equipment: ambient temperature control, condenser filters, water-cooled condensers, heat recovery, special voltages. Special designs according to factory specifications. CSA etc. available. Please inquire.

Performance table / specifications

Temperature		OBK 5	OBK 7	OBK 9	OBK 13	OBK 16	OBK 18	OBK 22	OBK 28	OBK 34	OBK 42	OBK 52	OBK 56	OBK 67	OBK 80			
Environment	Cooling medium	for oil cooling capacity in kW																
32 °C	20°C	4,4	6,6	8,2	11,9	14,3	17,3	20,7	26	30,6	37,7	46,2	52,1	61,3	75,5			
	25°C	4,9	7,3	9,1	13	15,8	19	22,4	28,7	34,2	42,2	52,5	57,4	68,5	84,5			
Environment	Cooling medium	for emulsion cooling capacity in kW																
32 °C	15°C	4,4	6,6	8,2	11,9	14,3	17,3	20,7	26	30,6	37,7	46,2	52,1	61,3	75,5			
	20°C	4,9	7,3	9,1	13	15,8	19	22,4	28,7	34,2	42,2	52,5	57,4	68,5	84,5			

Further information on cooling capacity at 37°C or 42°C available on request. Subject to technical changes.