

# COLD – COMFORTABLE WITH US.

Intelligent solutions for cooling systems

Intelligent cooling and filtering systems – worldwide www.hoffmann-filter.de

HOFFMANN Maschinen- und Apparatebau GmbH

PAODUCT OF OURING

## **Engineering** A team of 40 in-house engineers and technicians will plan and construct the ideal system solution for your plant. Manufacturing Made in Germany on over 30.000 sgm of production facilities: all plants and components are manufactured in-house, under strict quality control. Commissioning A wide network of reliable partners guarantees that your plant will be commissioned on schedule. Maintenance + Service Specially trained technicians are dedicated 24/7 to the professional maintenance of your plant. Prompt - Precise - Punctual. Accessories Our original accessories are manufactured in-house to complement your plant, thus creating a perfectly coordinated system solution.



#### At home worldwide.

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# FULL SERVICE UNDER ONE ROOF

## HOFFMANN system solutions for filtration and cooling of cooling lubricants.

You will find our conveying, filtering and cooling systems virtually everywhere, worldwide. HOFFMANN has a presence wherever cooling lubricants are used in the manufacturing of toothed gears, condensers, camshafts, crankshafts, turbine blades and in many other industrial applications. We are not only supporting global corporations, but also ambitious medium-sized enterprises and exciting start-ups in industry. What all of these have in common is their high demand for quality, reliable supply and precision. It is good that our engineers are merciless in their pursuit of reliability, raising their standards day by day. The result is tailored and state-of-the-art quality solutions – the reason that we have been the prime contact partner for the filtration and cooling of cooling lubricants for many years.

How may we assist you?

### Variety with micrometre precision.

The scope of our product range is unique, ranging from conveyor systems via pre-separators to the micro and clear filtration of cooling lubricants. We can offer you both, high-quality standard solutions as well as turnkey systems that are perfectly tailored to suit your requirements for any imaginable industrial application. In numbers, this means: filter fineness from 100  $\mu$  down to 1  $\mu$ , filtration capacities from 50 l/min to > 20.000 l/min and cooling capacities from 3 kW to > 1.500 kW. HOFFMANN systems and

components bring abundant performance to bear on little space; they are extremely reliable performers, user-orientated and require low maintenance. As a result of planning, being constructed and manufactured in-house and using state-of-the-art facilities wear and consumption are low. To you, this means tailored manufacturing using high-performance and robust components which will perform reliably even under maximum stress – and all that with just one contact partner.

## EFFICIENT SYSTEM SOLUTIONS

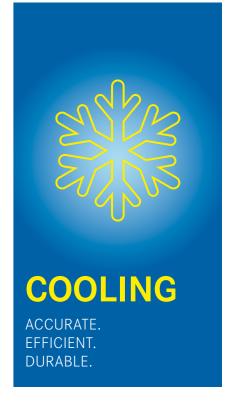
#### Professional. Precise. Punctual.



Conveyor systems for machining, tailormade for series manufacturing, complementing systems for downstream filtering and cooling systems.



Filter systems for many different cooling lubricants: oils, emulsions and synthetic solutions for machining, single and central supply from 50 l/min to > 20.000 l/min.



Cooling systems for liquid media in all industrial sectors, series and special plant engineering from 3 kW to > 1.500 kW cooling capacity.

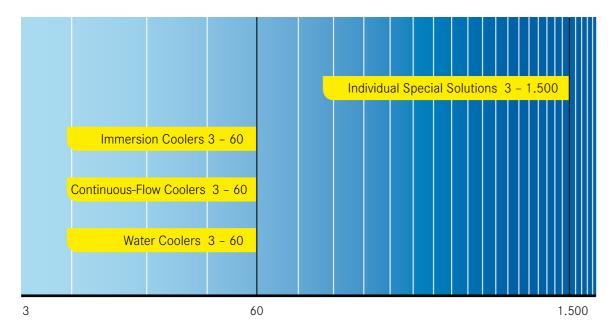


# Exceptional quality, expert support and a pinch of passion.

To us, the "Made in Germany" label means more than just quality. With this mark, we associate not only our obligation to build state-of-the-art, high-performance and durable systems and components, but also the obligation to optimally support our customers from start to finish. This ranges from consultation, via development, manufacturing and commissioning down to after sales service and support. This means worldwide, on-schedule and with top competency. This is why we are particularly proud when our customers reward our efforts by naming HOFFMANN supplier of the year.

# COMPREHENSIVE RANGE OF STANDARD AND SPECIAL COOLERS

Your wish is our command.



Cooling capacity [kW]

## READY TO FACE ANY CHALLENGE

## Our all-rounders in the industry.

HOFFMANN manufactures high-quality coolers in individual and series production. Our special and standard coolers are designed to meet the requirements of customers in all industry sectors.

HOFFMANN coolers are used to cool any type of fluid. We offer our customers consultations, development, engineering, manufacturing, commissioning and a worldwide service - and all that at no risk: Professional. Precise. Punctual. HOFFMANN welcomes you!



## COOLING

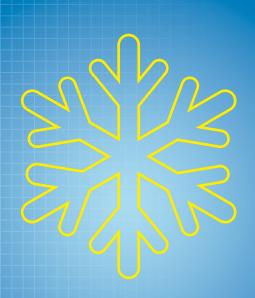
- For installation in a tank
- Stainless steel tube-coil immersion heat exchanger
- Compact

**Immersion Cooler** 

Continuous-Flow Cooler

Water Cooler

**Special Solutions** 



ACCURATE. EFFICIENT. DURABLE

# **ERK**THE TIRELESS ONE

**HOFFMANN Immersion Coolers ERK** are entry level models for cooling all kinds of pre-filtered and slightly soiled fluids. They are mounted on a cooling lubricant tank, with no need for additional space. The Immersion Coolers are comprised of a housing and a stainless steel tube-coil evaporator (1.4301) underneath, which is immersed into the fluid to be cooled. The evaporator is low maintenance and easy to clean. A circulation pump is standard with all immersion coolers allowing better heat transfer. Waste heat is vented into ambient air via an air-cooled condenser. The coolant temperature is adjustable, with accuracies of +/- 1 K. Standard HOFFMANN Immersion Coolers are designed for ambient temperatures of up to + 40°C.





#### AREAS OF APPLICATION

#### e.g

- Grinding, drilling and hydraulic oils
- Emulsions
- Water
- Other fluids

#### **ADVANTAGES**

- Little space required
- High efficiency
- Stainless steel tube-coil evaporator
- High-quality components from leading manufacturers
- A product of quality MADE IN GERMANY

#### **OPTIONS**

- Split system version
- Outdoor installation of the cooler
- Water-cooled condensers
- Higher ambient temperatures up to 50°C - tropical version
- Version with increased efficiency;
   e.g. with frequency-controlled compressors
- Accuracy of regulation adjustable to +/- 0,5 K
- Choice of housing colour (RAL)
- Special voltages
- Special and customer specifications can be accommodated
- Other options possible

VERSION	COOLING CAPACITY*	RATED POWER	MAX. CURRENT	HOUSING DIMENSIONS
Model	in kW	in kW	in A	I x w x h in mm
ERK 30	3,0	1,8	3,5	700 × 700 × 1000
ERK 60	6,0	3,5	6,0	700 x 700 x 1200
ERK 90	9,0	3,8	6,5	900 x 900 x 1500
ERK 120	12,0	6,0	14,0	900 X 900 X 1300
ERK 150	15,0	8,0	16,0	
ERK 200	20,0	12,0	23,0	1500 x 900 x 1500
ERK 250	25,0	14,0	25,5	1500 X 900 X 1500
ERK 300	30,0	14,0	30,0	
ERK 400	40,0	17,0	34,0	2200 x 900 x 1500
ERK 500	50,0	19,0	37,5	2650 x 900 x 1550
ERK 600	60,0	21,0	40,5	2000 X 900 X 1000

\* Cooling capacity at an 32°C ambient temperature and a 25°C medium inlet temperature for oil with a viscosity of 20 mm²/s at 40°C

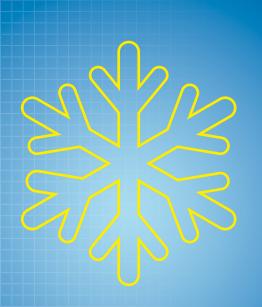
Capacity data for other media on request. Other cooling capacities on request.

## COOLING

**Immersion Cooler** 

Water Cooler

Special Solutions



ACCURATE. EFFICIENT. DURABLE

- Suitable for single and multiple circuit systems
- Tube heat exchanger
- Compact

**Continuous-Flow Cooler** 

## **DRK**THE POWERFUL ONE

**HOFFMANN Continuous-Flow Coolers DRK** are the powerful solution to cool clean fluids. Their compact design minimises installation space requirements. The units are suited for single or multiple circuit systems and are universally suitable for simple and complex applications. Continuous-Flow Coolers have a pump to transport the fluid to be cooled into the evaporator of the cooler. Depending on the application, the evaporator may be a plate or a tube heat exchanger. The inflowing fluid is cooled by transferring its heat to the environment via the air-cooled condenser. The coolant temperature is adjustable, with accuracies of +/- 1 K. Standard HOFFMANN Continuous-Flow Coolers are designed for ambient temperatures of up to + 40°C.





#### AREAS OF APPLICATION

e.g.

- Grinding, drilling and hydraulic oils
- Emulsions
- Water
- Other fluids

#### **ADVANTAGES**

- · Little space required
- High efficiency
- Easy to clean tube heat exchanger
- High-quality components from leading manufacturers
- A product of quality MADE IN GERMANY

#### **OPTIONS**

- Split system version
- · Outdoor installation of the cooler
- Water-cooled condensers
- Higher ambient temperatures up to 50°C - tropical version
- Version with increased efficiency;
   e.g. with frequency-controlled compressors
- Accuracy of regulation adjustable to +/- 0,1 K
- Choice of housing colour (RAL)
- Special voltages
- Special and customer specifications can be accommodated
- Multiple circuit systems for highly complex applications
- Other options possible

VERSION	COOLING CAPACITY*	RATED POWER	MAX. CURRENT	HOUSING DIMENSIONS
Model	in kW	in kW	in A	l x w x h in mm
DRK 30	3,0	1,8	3,5	700 700 1000
DRK 60	6,0	3,5	6,0	700 x 700 x 1200
DRK 90	9,0	3,8	6,5	000 × 000 × 1500
DRK 120	12,0	6,0	14,0	900 x 900 x 1500
DRK 150	15,0	8,0	16,0	
DRK 200	20,0	12,0	23,0	1500 × 000 × 1500
DRK 250	25,0	14,0	25,5	1500 x 900 x 1500
DRK 300	30,0	14,0	30,0	
DRK 400	40,0	17,0	34,0	2200 x 900 x 1500
DRK 500	50,0	19,0	37,5	2450 × 000 × 1550
DRK 600	60,0	21,0	40,5	2650 x 900 x 1550

Cooling capacity at an 32°C ambient temperature and a 25°C medium inlet temperature for oil with a viscosity of 20 mm²/s at 40°C Capacity data for other media on request. Other cooling capacities on request.

## COOLING

Immersion Cooler

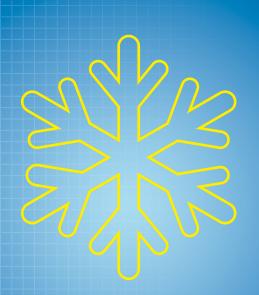
Continuous-Flow Cooler

- Open or closed water circle
- Soldered plate heat exchanger
- Compact

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**Water Cooler** 

**Special Solutions** 



## **WRK** THE UNIVERSAL ONE

**HOFFMANN Water Coolers WRK** are suited for all applications requiring cold water. The equipment produces cold water in open or closed circuits, which is then used in downstream heat exchangers. HOFFMANN Water Coolers are renowned for their high efficiency and compact design. A pump transports the water into the evaporator for cooling. The evaporator is a soldered plate heat exchanger which transfers the heat from the introduced water to ambient air via an air-cooled condenser.

The water temperature is adjustable, with accuracies of +/- 1 K. Standard HOFFMANN Water







#### **AREAS OF APPLICATION**

• All applications needing cold water

#### **ADVANTAGES**

- · Little space required
- High efficiency
- High-quality components from leading manufacturers
- · A product of quality -MADE IN GERMANY

#### **OPTIONS**

- Split system version
- Outdoor installation of the cooler
- Water-cooled condensers
- Higher ambient temperatures up to 50°C - tropical version
- Version with increased efficiency; e.g. with frequency-controlled com-
- Accuracy of regulation adjustable to +/-0,1 K
- Choice of housing colour (RAL)
- Special voltages
- Special and customer specifications can be accommodated
- Multiple circuit systems for highly complex applications
- Other options possible

VERSION	COOLING CAPACITY*	RATED POWER	MAX. CURRENT	HOUSING DIMENSIONS
Model	in kW	in kW	in A	l x w x h in mm
WRK 30	3,0	1,8	3,5	700 x 700 x 1200
WRK 60	6,0	3,5	6,0	
WRK 90	9,0	3,8	6,5	900 x 900 x 1500
WRK 120	12,0	6,0	14,0	
WRK 150	15,0	8,0	16,0	1500 x 900 x 1500
WRK 200	20,0	12,0	23,0	
WRK 250	25,0	14,0	25,5	
WRK 300	30,0	14,0	30,0	
WRK 400	40,0	17,0	34,0	2200 x 900 x 1500
WRK 500	50,0	19,0	37,5	2650 x 900 x 1550
WRK 600	60,0	21,0	40,5	

Cooling capacity at an 32°C ambient temperature and a 15°C water inlet temperature Capacity data for other media on request. Other cooling capacities on request.

ACCURATE. EFFICIENT. DURABLE

## COOLING

Immersion Cooler

Continuous-Flow Cooler

Water Cooler

- Cooling capacities of up to 1.500 kW
- Individual customised solutions
- Project planning and consulting

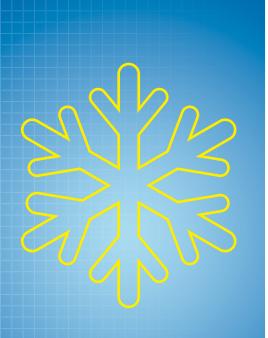
**Special Solutions** 

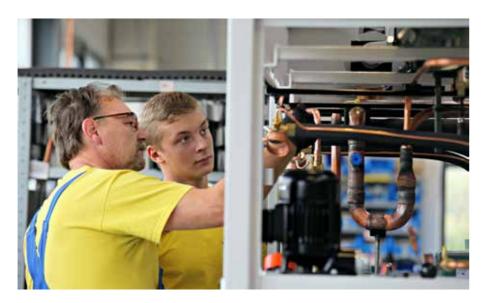
# CONTINUOUS-FLOW COOLER FOR OIL

#### With heat recovery.

Continuous-Flow Cooler with a 120 kW cooling capacity to cool the soiled oil from a grinding machine for crankshafts. The cooler is an air-cooled type and the waste heat may be used to heat the production facility. Variable speed condensers and fans increase the efficiency of the cooler.









# **SPECIAL SOLUTIONS**CUSTOMISED COOLERS

HOFFMANN designs and manufactures coolers of all types to meet individual customer requirements and for special applications. Specific country regulations are naturally taken into account. Examples of available special solutions are:

- Multiple cooling circuits
- · Combined coolers
- Special energy saving designs
- Waste heat utilisation
- Heat recovery
- Plate heat exchanger stations
- Central cooling
- In-house manufactured continuous-flow heat exchangers
- In-house manufactured immersion heat exchangers
- Piping engineering

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# CONTINUOUS-FLOW IMMERSION COOLER

**Combined cooler** 

for several cooling circuits.

Combined cooler for cooling grinding oil and spindles. The grinding oil is cooled via a tube-coil heat exchanger immersed in the coolant tank. Separate spindle cooling is integrated into the cooler housing, with a separate tank and supply pump. The system may be configured open or closed and with additional cooling circuits.

ACCURATE.
EFFICIENT.
DURABLE

## WATER COOLER

## For multiple cooling circuits.

Water Cooler with 8 cooling circuits and a 136 kW cooling capacity for the supply of loads on a milling machine for gear cutting. The cooler has three scroll condensers and energy-efficient EC fans. All the cooling circuits are independently controlled by the PLC controller.





## COOLING-WATER SYSTEM

## 1.500 kW with free cooling.

1.500 kW cooling capacity cooling-water system and integrated free cooling for supplying a production line with more than 100 machine tools. HOFFMANN was in charge of planning, scheduling, manufacturing, installing and commissioning this turnkey project.

# OUR CUSTOMER SERVICE – TO YOU, WORLDWIDE

HOFFMANN offers its customers services worldwide. This ensures the reliable supply of original spare and wear parts, everywhere and at all times.





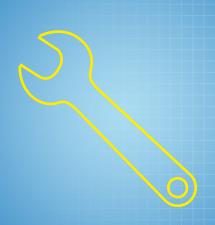
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Intelligent system solutions

## **SERVICE**



FAST.
WORLDWIDE.
DIRECT.





Intelligent solutions for

## **COOLING SYSTEMS**

# FULLY MATURE CONCEPT

All components from one source.

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