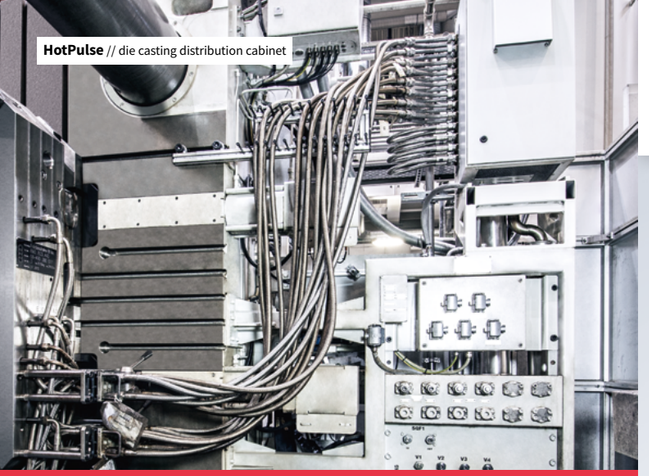

HotPulse // die casting distribution cabinet

ONI Temperiertechnik RHYTEMPER®

PRECISE TEMPERATURE MANAGEMENT

Central individual connection unit //
VA welded, thermally insulated

Here you can learn more about the RHYTEMPER®-impulse tempering technology – die casting

DIE CASTING

FlowWatch // FlowControl // HotPulse
Temperature control units
Central individual connection unit

ONI Temperiertechnik RHYTEMPER®

TEMPERATURE CONTROL UNITS
Mold draining and Preheating

An innovative technology that pays off in shortest time appreciates both – the technical and the commercial responsible persons of your company.

More than 1,300 satisfied customers worldwide trust our products and daily benefit from our technology.
Due to the great saving potentials of our technology **usually amortization times of far less than 1 year** can be achieved.

REFERENCES

Audi, Mercedes-Benz, ŠKODA, VOIT AUTOMOTIVE, FAGOR, BÜHLER, STIHL, +GF+, TCG UNITECH AUTOMOTIVE COMPONENTS

Do you have any questions?
Contact us: +49 35952 41100

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REDUCING CYCLE TIMES
IMPROVING QUALITY
CUTTING COSTS PER UNIT

TEMPERING FOR DIE CASTING

MADE IN GERMANY

Temperature control units 6 – 72 kW

Series and special temperature control units with the circulating medium ‚water' are available in the temperature range from 20 – 160 °C.

TECHNICAL FEATURES

- high delivery volume up to 35 m³/h
- high pump pressure up to 12 bar
- large connection widths up to 2 inches
- stainless steel tubing
- optional: pneumatic mold draining
- pump according to latest energy standards

CENTRAL INDIVIDUAL CONNECTION UNIT

TECHNICAL FEATURES

- central feed line temperature- and pressure measurement
- switchover to diverse medium temperatures
- central filtering of the flow for a consistently high water quality with constant flow performance
- optional: pressure boosting pump for constant pressure
- optional: electronic filter monitoring system

ELECTRONIC WATER BATTERY
FlowWatch

Flow and temperature monitoring

The RHYTEMPER® FlowWatch is a compact water distribution system made of corrosion-resistant materials for flow and temperature monitoring of each individual mold circuit.

TECHNICAL FEATURES

- low-maintenance brass block system
- mold-related installation
- space-saving machine integration in protected distribution cabinet
- individual circulation labeling
- flow calibration of all mold circuits
- optional: flow regulation of each individual circuit by manual regulation valve
- incl. SPS visualization unit Profi
- flow measurement by turbine measuring system in the feed line
- optional: flow difference measurement of each individual circuit in feed line and return line
- incl. inclined seat magnetic filter in the feed line to the distribution cabinet
- expandable to the FlowControl or HotPulse control systems

SPECIFICATIONS I TECHNICAL DATA

FlowWatch	
circuit control	manual regulation valve
measuring principle	turbine
measuring range flow	0,3 – 40 l/min
max. medium temperature	160 °C
measuring medium	water
connection of main medium flow	1 ½ inch inner thread
connection of consumer circuit	½ inch inner thread
max. permissible operating pressure	16 bar at 160 °C

VISUALIZATION UNIT

TECHNICAL FEATURES

- 10.4-inch-TFT-Touchscreen with colour display
- clear visualization of all process data
- USB- and Ethernet-connection
- multilingual user guidance
- process data recording and passing on the process data to control central systems
- individual process deactivation and fault message to the die casting machine
- mold data management with process data logging
- various diagnostic functions
- change history with individual user rights
- timer for preheating

CONTROL SYSTEMS
FlexControl // HotPulse // FlowControl

ONI Temperiertechnik RHYTEMPER®

Multi-circuit temperature control

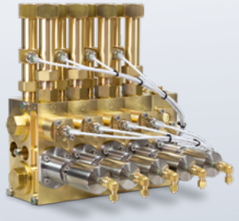
The self-optimizing systems of RHYTEMPER® multi-circuit temperature control regulate the heat content of each individual temperature control zone of the die casting mold.
The goal is to continuously distribute the same amount of heat per cycle. This guarantees shortest cycle times as well as a permanently consistent quality of the die casting products.

TECHNICAL FEATURES

- optional: fully automatic blow-out function
- for each mold circuit
- low-maintenance brass block system
- incl. visualization unit Profi
- mold-related installation
- space-saving machine integration
- individual circulation labeling
- heat level and flow rate monitoring of an unlimited number of temperature circuits
- automatic adjustment of the cooling impulses to
- the current die casting process (self-optimizing control)
- interruption of heat extraction during injection,
- the mold filling phase and the mold movement
- maximum cooling performance with 1 ½ inch large water connection
- media supply via temperature control unit, technical heat source or central cooling network is possible
- single-circuit calibration of the flow
- constant connection situation and compressive strength for all expansion stages

FlexControl // magnetic valve

HotPulse // pneumatic valve



FlowControl // proportional valve

SPECIFICATIONS I TECHNICAL DATA

FlexControl **multi-circuit temperature control**		
circuit control	magnetic valve	
measuring principle	**turbine**	
measuring range flow	0,3 – 40 l/min	
max. medium temperature	130 °C	
measuring medium	water	
connection of main medium flow	1 ½ inch inner thread	
connection of consumer circuit	½ inch inner thread	
max. permissible operating pressure	16 bar at 130 °C	

HotPulse **impulse tempering control**		
circuit control	magnetic valve	pneumatikventil
measuring principle	**turbine**	**turbine**
measuring range flow	0,3 – 40 l/min	0,3 – 40 l/min
max. medium temperature	130 °C	160 °C
measuring medium	water	water
connection of main medium flow	1 ½ inch inner thread	1 ½ inch inner thread
connection of consumer circuit	½ inch inner thread	1 ½ inch inner thread
max. permissible operating pressure	16 bar at 130 °C	16 bar at 160 °C

FlowControl **continuous temperature and flow control**	
circuit control	proportional valve
measuring principle	**turbine** or **vortex**
measuring range flow	0,3 – 40 l/min
max. medium temperature	160 °C
measuring medium	water
connection of main medium flow	1 ½ inch inner thread
connection of consumer circuit	½ inch inner thread
max. permissible operating pressure	16 bar at 160 °C