technotrans

power to transform

The high.line

The Individuals!

high.line

Efficient technotrans temperature controllers

Appreciated around the globe:

our product portfolio.

Cold-water temperature controllers

Compact water chillers

Industrial cooling equipment

Free cooling systems

Central cooling systems

Water treatment systems

Mold cleaning

Cooling and water supply systems

HotCooled solutions –

in a unique temperature spectrum.

Innovative, efficient, sustainable.

Flexible Installation

directly installed at the consumer. Visualization on the device.

Process monitoring with vortex or Ultrasonic measurement

factory fitted to the temperature control unit (also retrofittable)

water distributor

Temperature control units

Basic standard temperature controllers

Innovative standard temperature controllers

Highly efficient premium temperature controllers

Temperature controllers with water distributors

Customised premium temperature controllers

Temperature control machines

Customised premium temperature control machines

Temperature control systems

Variothermal temperature control systems

We have the perfect solution for you!

Our temperature control units are divided into four product lines: **base.line, high.line, eco.line** and **flex.line**. These temperature control units differ essentially in their operating concept with regard to comfort, analysis functions, and the efficiency technology that is being applied.
The temperature controller series of the **base.line, high.line** and **eco.line** is largely preconfigured with extensive features and can be customized with individual options.
The performance range of the preconfigured temperature controllers includes units with a heating capacity of up to 36 kW, a flow rate of up to 230 l/min and a media temperature of up to 180 °C.
In the **flex.line** series, the temperature controller can be individually and flexibly configured on request with extensive features and numerous options.

The performance range of the flexible temperature controllers includes units with a heating capacity of up to 72 kW, a flow rate of up to 350 l/min and a media temperature of up to 350 °C.

A special feature of almost all standard technotrans temperature control units is the longlife heater with zero-loss heat transfer. Together, all four product lines and both degrees of individualisation stand for high quality and reliability, as well as the "**MADE IN GERMANY**" label.

The "longlife" stainless steel heating cartridges used in the **high.line** and **eco.line** come with an additional 10-year long-term guarantee.

Our product lines and their key features!

base.line

The inexpensive ones!

In terms of its efficiency and user-friendliness, the **base.line** series is in line with the current „simpler" market standard which is based on peripheral pumps.

high.line

The individual ones!

In terms of its efficiency and user-friendliness, the **high.line** series is in line with the current „more sophisticated" market standard which is based on peripheral or centrifugal pumps.

eco.line

The efficient ones!

The **eco.line**, with its peripheral impeller and highly efficient centrifugal pumps, in combination with speed control, sets new standards in the market in terms of efficiency and ease of use.

flex.line

The flexible ones!

The **flex.line** allows a high degree of freedom in unit configuration. Customer requirements can be met individually from a comprehensive modular system.

Efficient
Reduced energy and operating costs through the use of high-efficiency pump designs, performance-controlled pump drives, and optimized heat transfer.

Sustainable
Both customers and the climate benefit in the long term from resource- saving operation – efficient cooling and tem-perature control solutions not only reduce operating costs, but also protect the environment.

Reliable
High process and operational reliability – in combination with proven technology – ensure high quality, availability, and reproducibility; for example, extremely precise tem- perature control ensures reliable processes.

Innovative
Efficient cooling and temperature control systems ensure consistent performance and extend the service life of the processes. Low-vibration, smooth-running, and efficient solutions reduce the CO2 footprint.

Features of the product lines!

The devices, designed in a modern industrial design, stand for high-quality but affordable technology, high availability, ease of operation and ease of service.

The temperature control units of the base.line are our investment-cost-optimized standard units for an economical temperature control with water at temperatures up to 180 °C and flow rates up to 200 l/min. The base.line unit with its simple operation via a membrane keypad with 7-segment display is the preferred solution for many applications.
preferred solution for many applications with an excellent price/performance ratio. The
basic equipment includes the microprocessor control technotrans basicControl with display of set and actual temperatures, automatic replenishment, automatic mold draining, an energy-saving continuous heating control and much more.

For individualization, among other things, different interfaces, individual coloring and labeling, mounting on rubber buffers or rails instead of rollers and other useful options are offered.

The temperature control units of the high.line are also investment-cost-optimized standard units for economical and at the same time particularly convenient temperature control with water at temperatures up to 180 °C and flow rates up to 250 l/min.
The high.line and eco.line series with the innovative technotrans compactControl controller is equipped with a fast 32-bit processor.
This features the independent, self-developed logotherm display and operating unit with 7-inch multitouch display, intuitive user interface and user-friendly menu navigation.

high.line

Typ	Medium	Temperature range [°C]	Heating capacity [kW]	Cooling capacity [kW]	Pump capacity Modulating duty [l/min / bar]
direct cooling (cd)					
teco cd 95 high 60	water	95	9	140	60 (4,7)
indirect cooling (ci)					
teco ci 95 high 60	water	95	9	23 (75)	60/3,8 (60)
teco ci 140 high 60	water	140	9	120	60/ 6,0
teco ci 160 high 60	water	160	9	120	60/ 6,0
teco ci 180 high 60	water	180	9	120	60/6,0
teco ci 95 high 125	water	95	9/ 18/ 27/36	250	125/5,3
teci ci 95 high 230	water	95	9/18/27/36	250	230/5,7
teco ci 95 high 60 itd^{evo}	water	95	9	75	60/3,8 (6,0)
teco ci 95 high 125 itd^{evo}	water	95	9/18/27/36	250	125/5,3
teco ci 95 high 230 itd^{evo}	water	95	9/18/27/36	250	230/5,7
teco ci 140 high 60 itd^{evo}	water	140	9	120	60/ 6,0
teci ci 160 high 60 itd^{evo}	water	160	9	120	60/ 6,0

***with factory-mounted itd^{evo} distributor**

Our temperature control units at a glance!

high.line

Page 9

teco cd high
(direct cooling)
Temperature control unit [Water]
95 °C

Page 10

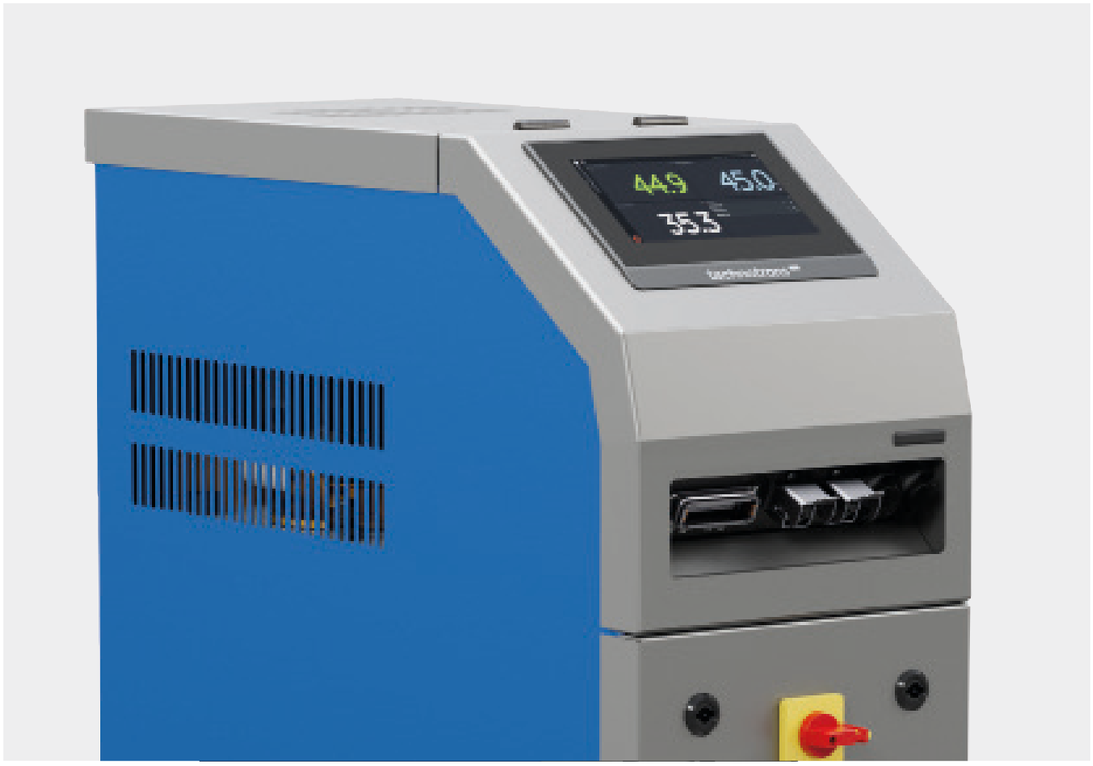
teco ci high
(indirect cooling)
Temperature control unit [Water]
95 °C, 140 °C, 160 °C, 180°C

Page 12

teco cd / ci high with itd^{evo}
(direct/indirect cooling)
Temperature control unit [Water]
95 °C, 140 °C, 160 °C

high.line

The product line high.line



The temperature control units of the **high.line** are, in addition to the **base.line**, also standard units for economical and at the same time particularly convenient temperature control with water at temperatures up to 180 °C and flow rates up to 200 l/min.

The **high.line** series is equipped with the innovative technotrans compactControl controller with a fast 32-bit processor and a 7“ multi-touch display.

»Intuitive user interface and user-friendly menu navigation«

high.line

teco cd high – temperature control units with direct cooling in 95 °C version

- Convenient operation via gesture-enabled logotherm 7“ multi-touch display
- compactControl micro controller
- Stainless steel „longlife“ heating cartridge with long-term guarantee
- Long-life and highly efficient centrifugal pump
- „Tankless“ unit for minimum oxygen consumption
- Clean room class acc. to ISO 6
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in front panel (e.g. for optional interface analog, serial, Profibus, Profinet or OPC UA)
- Optional external sensor connection
- Housing and hood: RAL 7012 basalt gray
- Side panels: RAL 260 40 45 LED blue
- Customised paint on request

• = standard / ◦ = option

	Model teco	95 °C cd 95 high 60
Technical data	Medium	water
	Temperature max. [°C]	95
	Pump capacity max. [l/min / bar]	60 / 4,7
	Pump mode	constant
	Heating capacity [kW] 3)	9
	Cooling	direct
	Cooling capacity [kW] 1)	140
	Weight [kg]	70
	Circulating medium supply and return connections	G 3/4“
	Cooling water supply and return connections	G 1/2“
	Dimensions without attachment parts in mm [D x W x H]	807x280x611
Equipment/Options	7“ logotherm multi-touch display	•
	Stainless steel „longlife“ heating cartridge with long-term guarantee	•
	Continuous heating control via solid state relays	•
	Automatic filling and replenishment	•
	Clean room acc. to class 6	•
	Strainer in cooling water connection	•
	Strainer in the circulation medium return	◦
	Shut-off valves in the circulating media and cooling water circuits	◦
	Wetted parts made of corrosion-resistant materials	•
	Acoustic alarm	•
	Mold draining	◦ 2)
	Low maintenance flow measurement	•
	Return temperature indication	•

1) at 15 °C cooling water temperature and 90 °C or 130 °C flow temperature.
2) with compressed air into the cooling water return line
3) depending on voltage

Technical modifications reserved.

high.line

teco ci high – temperature control units with indirect cooling in 95°C, 140°C, 160°C and 180°C version

- Convenient operation via gesture-enabled logotherm 7“ multi-touch display
- compactControl micro controller
- Stainless steel „longlife“ heating cartridge with long-term guarantee
- Long-life and highly efficient centrifugal pump
- „Tankless“ unit for minimum oxygen consumption
- Clean room class acc. to ISO 6
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in front panel (e.g. for optional interface analog, serial, Profibus, Profinet or OC UA)
- Optional external sensor connection
- Housing and hood: RAL 7012 basalt gray
- Side panels: RAL 260 40 45 LED blue
- ICustomised paint on request

Display and control unit logotherm with gesture-compatible 7“ multitouch display

• = standard / ◦ = option

Technical data / Equipment/Options	95 °C			
Model teco	ci 95 high 60		ci 95 high 125	cd 95 high 230
Medium	water	water	water	water
Temperature max. [°C]	95	95	95	95
Pump capacity max. [l/min / bar]	60/ 3,8	60/ 6,0	125/ 5,3	230/ 5,3
Pump mode	constant	constant	constant	constant
Heating capacity [kW] 3)	9	9	9/ 18/ 27/ 36	9/ 18/ 27/ 36
Cooling	indirect	indirect	indirect	indirect
Cooling capacity [kW] 1)	23	75	250	250
Weight [kg]	49	49	94	98
Circulating medium supply and return connections	G 1/2”	G 1/2”	G1“	G1 1/2”
Cooling water supply and return connections	G 1/2”	G 1/2”	G 3/4”	G 3/4”
Dimensions without attachment parts in mm [D x W x H]	662x280x611	662x280x611	849x399x752	849x399x752
7” logotherm multi-touch display	•	•	•	•
Stainless steel „longlife“ heating cartridge with long-term	•	•	•	•
Continuous heating control via solid state relays	•	•	•	•
Automatic filling and replenishment	•	•	•	•
Clean room acc. to class 6	•	•	•	•
Strainer in cooling water connection	•	•	•	•
Strainer in the circulation medium return	◦	◦	•	◦
Shut-off valves in the circulating media and cooling water	◦	◦	•	◦
Wetted parts made of corrosion-resistant materials	•	•	•	•
Acoustic alarm	•	•	•	•
Mold draining	•2) 3)	•2) 3)	◦2)	◦2)
Low maintenance flow measurement	•	•	•	•
Return temperature indicationy	•	•	–	–

1) at 15 °C cooling water temperature and 90 °C or 130 °C flow temperature.
2) with compressed air into the cooling water return line
3) depending on voltage

Technical modifications reserved.

• = standard / ◦ = option / – = not available

Technische Daten / Ausstattung/Optionen	140 °C	160 °C	180 °C
Model teco	ci 140 high 60	ci 160 high 60	ci 180 high 60
Medium	water	water	water
Temperature max. [°C]	140	160	180
Pump capacity max. [l/min / bar]	60 / 6,0	60 / 6,0	60 / 6,0
Pump mode	constant	constant	constant
Heating capacity [kW] 4)	9	9	9
Cooling	indirect	indirect	indirect
Cooling capacity [kW] 1)	120	120	120
Weight [kg]	62	62	62
Circulating medium supply and return connections	G 1/2”	G 1/2”	G 1/2”
Cooling water supply and return connections	G 1/4”	G 1/4”	G 1/4”
Dimensions without attachment parts in mm [D x W x H]	807x280x611	807x280x611	807x280x611
7“ logotherm multi-touch display	•	•	•
Stainless steel „longlife“ heating cartridge with long-term	•	•	•
Continuous heating control via solid state relays	•	•	•
Automatic filling and replenishment	•	•	•
Integrated backfeed pump	–	–	–
Strainer in cooling water connection			
Strainer in the circulation medium return	◦	◦	◦
Shut-off fittings in the circulating media and cooling water circuit	◦	◦	◦
Wetted parts made of corrosion-resistant materials	•	•	•
Acoustic alarm	•	•	•
Mold draining	◦2) 3)	◦2) 3)	◦2) 3)
Leakage stop function	•4)	•4)	•4)
Sealless, magnetically coupled stainless steel pump	•	•	•

1) at 15 °C cooling water temperature and 130 °C flow temperature 2) by reversing the direction of pump rotation
3) not in conjunction with leak stop function 4) not in conjunction with mold drainage
4) depending on voltage

Technical modifications reserved.

high.line

teco cd/ci itd evo temperature control units with direct or indirect cooling ...

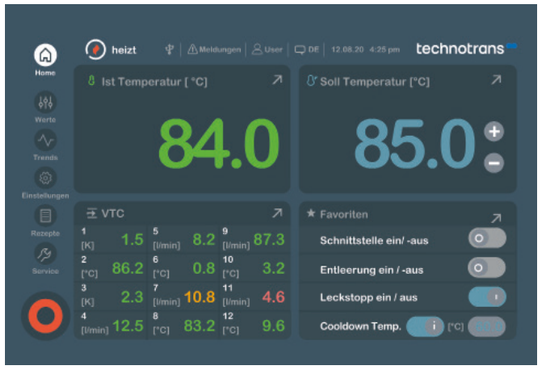
The itd evo multiple distribution system is specially designed for control integration in technotrans temperature control units with 7“ logotherm multitouch display. The water distributor can be attached to the temperature control unit or directly to the consumer, e.g. injection mold or machine clamping plate.

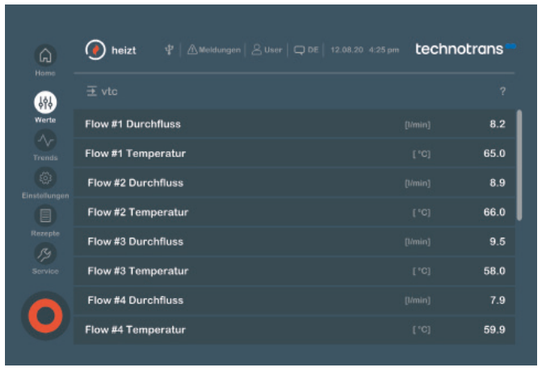
The visualization of the measured values provided at the water manifold, such as flow rate and temperature, takes place on the temperature control unit display. The water distribution systems on the market up to now water distribution systems on the market is therefore no longer required.

An adaptive system with many possibilities!

The flow rate and the return temperature of each individual circuit is recorded and transmitted to the temperature control unit.
Two alternative measuring methods are available for flow rate measurement: The low-maintenance vortex measurement and the maintenance-free ultrasonic flow measurement.
Manual valves provide hydraulic balancing and control of the individual circuits.

Coordinated with each other:
Temperature control unit and water distributor





Display and operating unit logotherm with 7“ multi-touch display

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... kombiniert mit manuell regelbaren 4- und 6-fach Wasserverteilern

- Simple attachment to temperature control units up to a maximum of 6 circuits
- Display, communication, operation via the 7“ touch screen of the temperature control units
- Continuous, low-maintenance or maintenance-free
- Insensitive to contamination flow rate measurement per distribution circuit
- Common temperature measurement and display in the flow
- Separate temperature measurement in the return distribution circuit
- Display and monitoring of flow rate per distribution circuit
- Limit value setting for flow/temperature per distribution circuit
- Flow measurement according to the vortex principle
- Optional: flow measurement according to the ultrasonic principle
- Throttle valve for regulation of the volumetric flow rate and hydraulic balancing for each distribution circuit return
- Shut-off ball valve per distribution circuit flow
- Corrosion resistant materials

Example of installation integration at the consumer with maintenance-free ultrasonic sensors

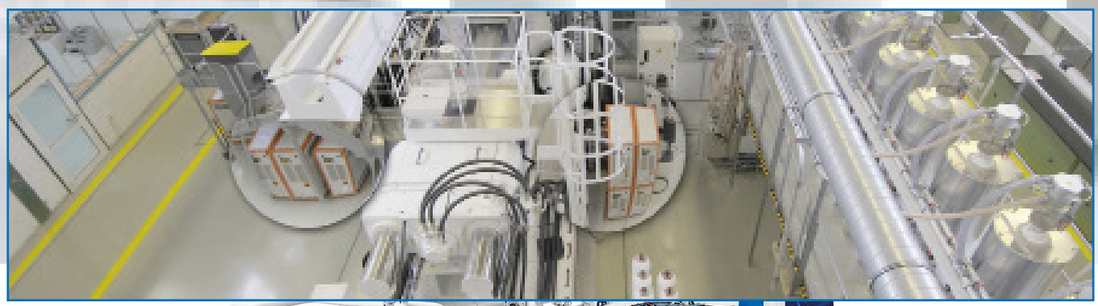
Technical data

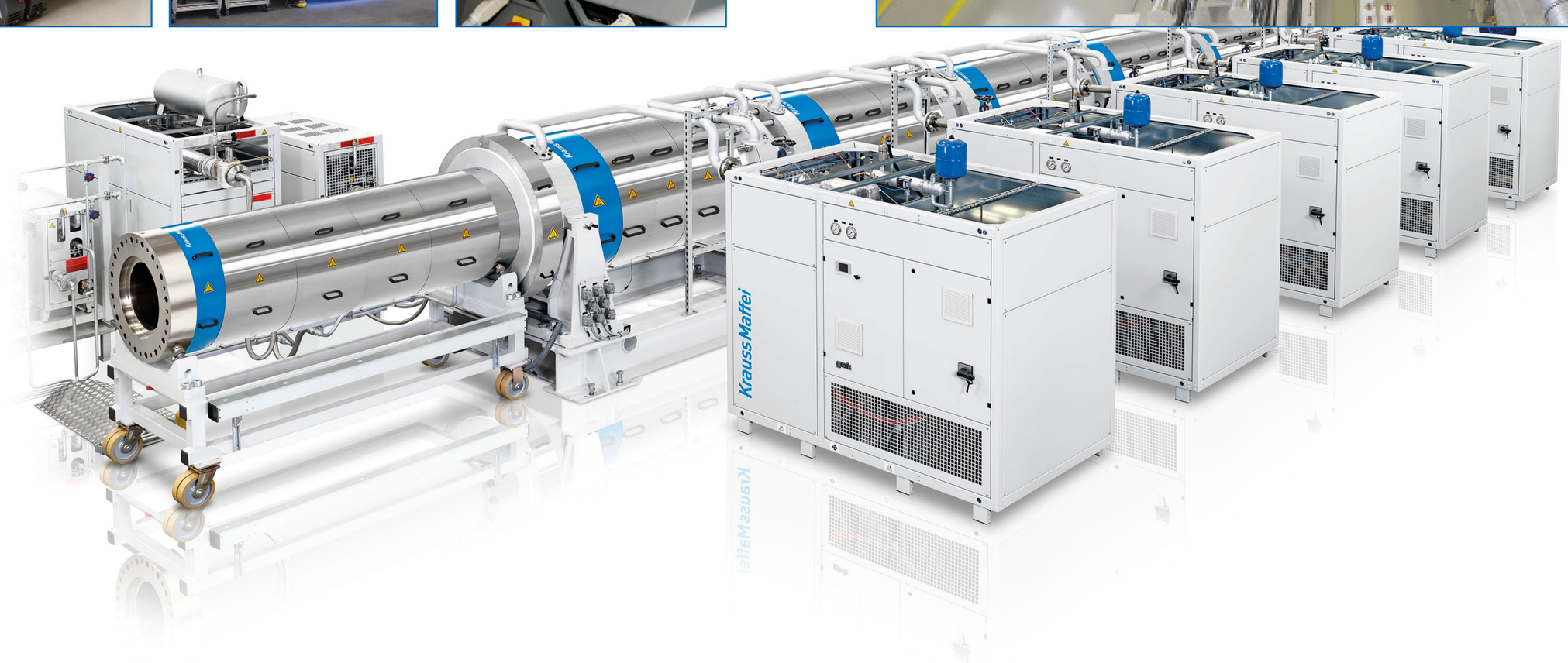
	95 °C						140 °C		160 °C
Model teco	ci 95 high 60^{itd} VB	ci 95 high 60^{itd} UB	ci 95 high 125^{td} VB	ci 95 high 125^{td} UB	ci 95 high 230^{itd} VB	ci 95 high 230^{itd} UB	ci 140 high 60^{itd} VB	ci 140 high 60^{td} UB	ci 160 high 60^{itd} VB
Medium	water	water	water	water	water	water	water	water	water
Temperature max. [°C]	95	95	95	95	95	95	140	140	160
Pump capacity max. [l/min / bar]	60 / 6,0	60 / 6,0	125 / 5,3	125 / 5,3	230 / 5,3	230 / 5,3	60 / 6,0	60 / 6,3	60 / 6,3
Pump mode	constant	constant	constant	constant	constant	constant	constant	constant	constant
Heating capacity [kW]	9	9	9/18/27/36	9/18/27/36	9/18/27/36	9/18/27/36	9	9	9
Flow measurement	vortex	ultrasonic	vortex	ultrasonic	vortex	ultrasonic	vortex	ultrasonic	vortex
Flow measuring range	2-40	0,3-60	2-40	0,3-60	2-40	0,3-60	2-40	0,3-60	2-40
Quantity of individual circles	4	4	6	6	6	6	4	4	4
Circulating medium supply and return	4x G 1/2”	4x G 1/2”	6x G 1/2”	6x G 1/2”	6x G 1/2”	6x G 1/2”	4x G 1/2”	4x G 1/2”	4x G 1/2”
Dimensions without attachment parts in mm [D x W x H]	662x280x910	662x280x910	849x399x910	849x399x910	849x399x910	849x399x910	662x280x910	662x280x910	662x280x910

Subject to technical changes.

Efficient technotrans temperature controllers

Impressions





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