Inspired by **temperature**

Temperature Control Solutions

for the semicon industry

huber

Precise solutions for the **Semicon industry**

Temperature control for the semicon industry

In today's semicon industry, precise temperature control is critical. Whether in wafer fabrication, materials testing, or process development, the demands for accurate and stable temperature regulation are exceptionally high. As a leading manufacturer of temperature control systems, we understand the unique challenges of the semicon sector and provide solutions tailored to meet the highest industry standards.

Our innovative temperature control systems are designed to deliver consistent and precise temperatures—essential for a wide range of applications in R&D, testing, and quality assurance. From thermal testing of advanced semicon materials to simulating extreme process conditions and supporting climate-sensitive cleanroom operations, our systems enable engineers and technicians to work under optimal conditions.

A key aspect of our approach is close collaboration with semicon manufacturers, research institutions, and testing laboratories. Through ongoing dialogue with industry experts, we continuously refine our products and adapt them to the latest technological developments and sector-specific requirements. This ensures our solutions not only meet current needs but are also future-ready.

Our temperature control technology is distinguished by its high energy efficiency, reliability, and user-friendly operation. With a comprehensive range of units designed for various temperature ranges and applications, we offer flexible, scalable solutions that integrate seamlessly into existing semicon production systems. Sustainability and responsible resource use are also central to our philosophy—supporting environmental protection while meeting the stringent demands of the semicon industry.

Empowering excellence and innovation

Applications

Wafer testing

In wafer testing, semicon structures are electrically characterised directly on the wafer. Since electrical properties are highly temperature-dependent, precise and stable temperature control is essential. Our temperature control units ensure exactly reproducible test conditions across a wide temperature range, enabling manufacturers to verify the performance and reliability of their devices at an early stage in the production process.

Etching

Etching is a critical process step in semicon manufacturing, used to create highly precise structures on wafers. The quality and repeatability of etching processes strongly depend on accurate temperature control of process chambers and chemical baths. Our temperature control units ensure stable and reproducible conditions, improving process reliability, minimising defects, and supporting consistent high-yield production.

High bandwidth memory (HBM) testing

High Bandwidth Memory (HBM) chips are crucial for next-generation applications such as AI, high-performance computing, and graphics processing. Their performance and reliability are highly dependent on stable thermal conditions during development and testing. Our temperature control units provide precise and reproducible temperature regulation, enabling accurate characterisation of HBM devices under real-world operating conditions. This ensures consistent quality, supports faster development cycles, and helps manufacturers meet the demanding requirements of advanced semicon applications.

Thin film deposition – CVD & PVD

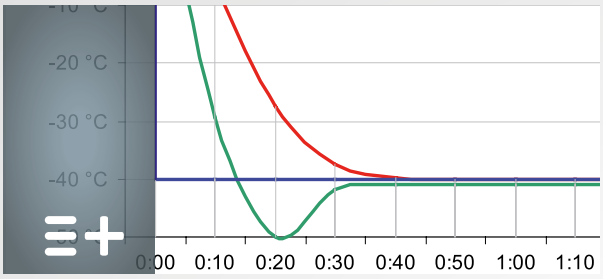
Thin film deposition processes such as Chemical Vapour Deposition (CVD) and Physical Vapour Deposition (PVD) are fundamental steps in semicon manufacturing. Both methods require highly accurate and stable temperature control to ensure uniform layer thickness, reproducible results, and superior film quality. Our temperature control units provide consistent thermal conditions for deposition chambers and substrates, enabling reliable and efficient CVD and PVD processes. This supports defect-free coatings, optimised device performance, and high-yield semicon production.

Empowering excellence and innovation

Our advantages

24/7 operation

Our systems are engineered for continuous, round-the-clock operation, delivering reliable performance in demanding semiconductor environments. Built for robustness and durability, they ensure uninterrupted processes and maximum uptime, even under high loads and critical conditions.



Rapid heating and cooling

Our products provide exceptionally fast heating and cooling rates, allowing processes to reach target temperatures quickly without compromising stability. This reduces cycle times, improves throughput, and ensures reproducible, high-quality results.

High heating/cooling ramps

Designed for aggressive temperature ramps, our systems accelerate process cycles while maintaining precise control and stability. This capability enables higher productivity without sacrificing accuracy or repeatability.

High temperature stability

Our systems maintain precise and consistent temperatures across all operating conditions. Exceptional stability ensures reproducible processes, minimal variation, and superior product quality for semiconductor manufacturing.

Precise temperature control

Advanced control technology allows exact management of target temperatures, supporting tight tolerances required in semiconductor processes. Precise control enhances reproducibility and process reliability across multiple production cycles.

Process reproducibility

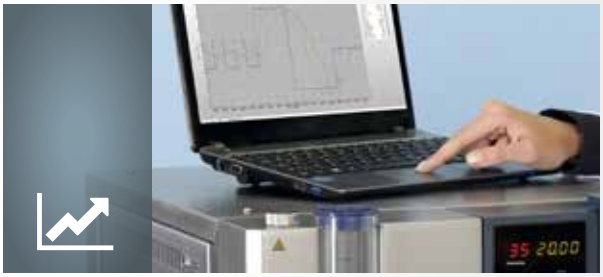
Our systems ensure consistent performance across repeated cycles, which is critical for high-precision semiconductor applications. Reliable reproducibility minimises defects and supports stringent quality standards.

Cleanroom compatibility

Low particle emission and cleanroom-suitable design reduce contamination risks, meeting the strict requirements of semiconductor fabrication. Stainless steel construction and optimised airflow ensure hygiene and process integrity.

Global service network

Our global service network provides fast, reliable support worldwide, with local experts available to minimise downtime and optimise operations. Assistance is always close at hand, wherever your processes operate.



Remote trouble shooting

Advanced remote diagnostics allow rapid identification and resolution of issues without delay. This reduces production interruptions and ensures that operations continue smoothly, even in geographically dispersed locations.

Automation integration

Our systems are designed for seamless integration into automated production lines. Easy connectivity and compatibility with control systems support high-volume semiconductor manufacturing with minimal manual intervention.

Stainless steel housing

Durable stainless steel construction ensures long-term reliability, ease of cleaning, and resistance to corrosion. Ideal for cleanroom and demanding industrial environments, it protects the system and extends operational lifetime.

Energy efficiency

Optimised energy consumption reduces operational costs and supports sustainable manufacturing practices. Our systems deliver high performance while minimising environmental impact, meeting both economic and ecological goals.

Our products

Unistats® - series 800

Natural Refrigerant

Unistats of the 800 series are characterised by low-end working temperatures down to -85 °C with compact dimensions. These devices are suited mainly for temperature applications with moderate cooling capacity requirements.

Unistats "P" are equipped with high pressure pumps and are suited for applications with high pressure drops.

Down to -85 °C
Working temperature

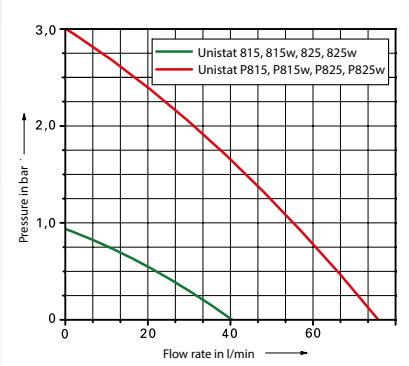
Up to 2,4 kW
Cooling power

Up to 67 l/min
Pump capacity

Pilot ONE
Touch screen controller

Unistat 825

Unistat P815



Pump curve
according to DIN 12876 with water at 20 °C

Model	Working temperature range (°C)	Pump max. VPC (l/min)	(bar)	Heating power (kW)	Cooling power (kW) at (°C) 250	0	-20	-40	-80	Dimensions W x D x H (mm)	Cat.No.	G
Unistat 815	-85...250	40	0,9	2,0	1,3	1,5	1,5	1,4	0,2	460x620x1678[1]	1053.0050.01	35
Unistat 815w	-85...250	40	0,9	2,0	1,5	1,5	1,5	1,4	0,2	460x620x1678[1]	1053.0051.01	35
Unistat 825	-85...250	40	0,9	3,0	2,3	2,2	2,0	2,0	0,3	460x620x1678[1]	1079.0028.01	4
Unistat 825w	-85...250	40	0,9	3,0	2,3	2,4	2,4	2,4	0,3	460x620x1678[1]	1079.0029.01	4
Models with high pressure pump												
Unistat P815	-85...250	67	3,0	2,0	1,3	1,3	1,5	1,2	0,2	460x620x1678[1]	1053.0052.01	35
Unistat P815w	-85...250	67	3,0	2,0	1,5	1,5	1,5	1,2	0,2	460x620x1678[1]	1053.0053.01	35
Unistat P825	-85...250	67	3,0	3,0	2,3	2,3	2,2	1,4	0,3	460x620x1678[1]	1079.0034.01	4
Unistat P825w	-85...250	67	3,0	3,0	2,3	2,3	2,2	1,3	0,3	460x620x1678[1]	1079.0037.01	4

[1] Preliminary dimensions

w = water-cooled | P = high pressure pump

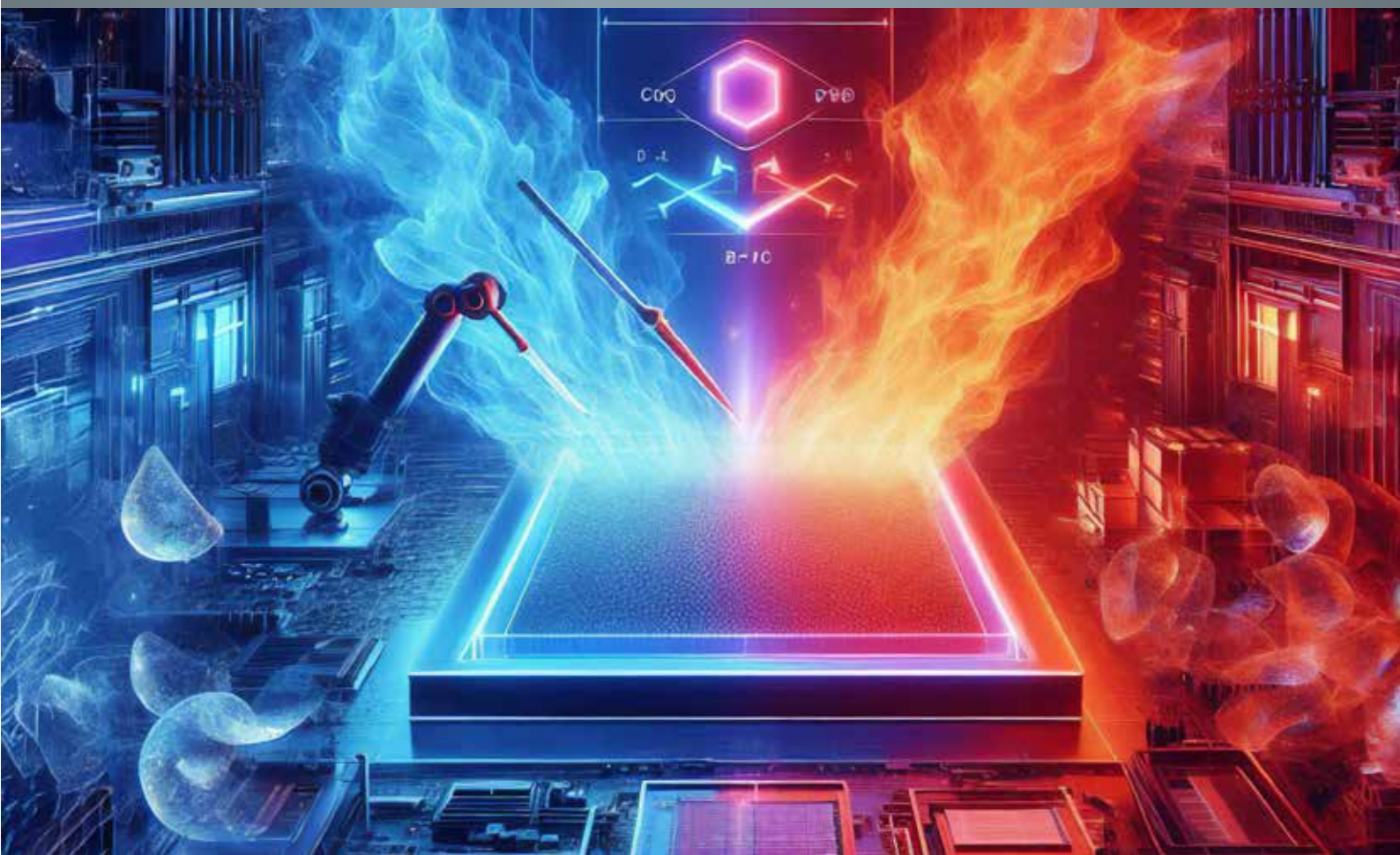
Applications in semicon manufacturing

Unistat temperature control systems are widely used across the semicon industry, providing the precision, stability, and reproducibility required for advanced manufacturing and testing processes. In **thermal chuck systems for wafer probing**, Unistats ensures accurate and consistent temperatures, allowing engineers to characterise devices reliably under varying thermal loads and guaranteeing high-quality performance data from the earliest stages of production.

In **environmental chambers**, Unistat systems provide exact temperature control to simulate extreme operating conditions, including both high and low temperature stress scenarios. This enables manufacturers and research facilities to conduct accelerated stress testing, validate device durability, and optimise designs for long-term reliability.

For **thermal analysis and testing**, Unistats deliver precise and reproducible temperature regulation across a wide range. This supports detailed examination of material and device behaviour, ensuring that thermal properties are thoroughly understood and accounted for in the design and qualification of semicon components.

With fast response times, exceptional stability, and the ability to operate across broad temperature ranges, Unistat systems offer a flexible and reliable solution for a variety of semicon applications. By integrating these systems, manufacturers can enhance product quality, improve process efficiency, and meet the stringent standards of the semicon industry, all while ensuring reproducible, high-precision results at every stage of development and production.



Our products

Unistats® - series 900

The Unistats of 900 series are optimised for low temperature applications down to -90 °C. These devices are suited for temperature syntheses as well as material tests and temperature simulations with very low temperatures.

Unistats "P" are equipped with high pressure pumps and are suited for applications with high pressure drops.

Down to -90 °C
Working temperature

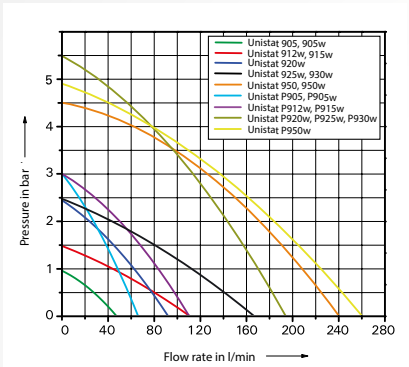
Up to 36 kW
Cooling power

Up to 240 l/min
Pump capacity

Pilot ONE
Touch screen controller

Unistat P905w

Unistat 915w



Pump curve
according to DIN 12876 with water at 20 °C

Natural Refrigerant

Unistat 905

Unistat 912w

Model	Working temperature range (°C)	Pump max. VPC (l/min)	(bar)	Heating power (kW)	Cooling power (kW) at (°C) 250	100	0	-60	-80	Dimensions W x D x H (mm)	Cat.No.	G
Unistat 905	-90...250	48	0,9	6,0	4,0	3,8	3,6	2,2	0,7	540x670x1712[1]	1054.0019.01	4
Unistat 905w	-90...250	48	0,9	6,0	4,5	4,5	4,5	2,5	0,7	540x670x1712[1]	1054.0020.01	4
Unistat 912w	-90...250	110	1,5	6,0	7,0	7,0	7,0	3,5	0,9	630x720x1726[1]	1055.0027.01	4
Unistat 915w	-90...250	110	1,5	6,0	6,5	11,0	11,0	4,2	1,3	630x720x1726[1]	1080.0033.01	4
Unistat 920w	-90...200	90	2,5	12,0	–	11,0	11,0	8,0	2,0	954x1504x1622[1]	1061.0022.01	4
Unistat 925w	-90...200	168	2,5	12,0	–	16,0	16,0	13,5	3,5	954x1504x1622[1]	1081.0013.01	4
Unistat 930w	-90...200	168	2,5	24,0	–	19,0	20,0	15,0	5,0	1504x954x1622	1082.0011.01	5
Unistat 950	-90...200	240	4,0	36,0	–	30,0	30,0	24,0	10,0	3400x2000x3100[1]	1065.0009.01	5
Unistat 950w	-90...200	240	4,0	36,0	–	36,0	36,0	25,0	10,0	2630x1700x1995[1]	1065.0008.01	5
Models with high pressure pump												
Unistat P905	-90...250	65	3,0	6,0	3,6	3,6	3,6	2,0	0,4	540x670x1712[1]	1054.0017.01	4
Unistat P905w	-90...250	65	3,0	6,0	4,2	4,2	4,4	2,3	0,5	540x670x1712[1]	1054.0018.01	4
Unistat P912w	-90...250	110	3,0	6,0	7,0	7,0	7,0	3,5	0,9	630x720x1726[1]	1055.0026.01	4
Unistat P915w	-90...250	110	3,0	6,0	6,5	11,0	11,0	4,2	1,3	630x720x1726[1]	1080.0036.01	4
Unistat P920w	-90...200	191	5,5	12,0	–	11,0	11,0	8,0	2,0	954x1504x1622[1]	1061.0027.01	4
Unistat P925w	-90...200	191	5,5	12,0	–	16,0	16,0	13,5	3,5	954x1504x1622[1]	1081.0015.01	4
Unistat P930w	-90...200	191	5,5	24,0	–	19,0	20,0	15,0	5,0	954x1504x1622[1]	1082.0013.01	5
Unistat P950w	-90...200	260	4,8	36,0	–	36,0	36,0	25,0	10,0	2630x1700x1995[1]	1065.0012.01	5

[1] Preliminary dimensions

w = water-cooled | P = high pressure pump

Our products

TC® immersion coolers

Natural Refrigerant

Immersion coolers are a flexible solution for the fast cooling of liquids and for counter-cooling of heating circulator. The devices are available without control for continuous cooling and as variant with type addition “E” with temperature control (accuracy ±0.5 K), Pt100 sensor connection (sensor in the scope of delivery) and LED temperature display with setpoint input. All models either with spiral or flexible immersion cooling probe made of stainless steel. Special evaporators for thermal analysis devices from Mettler, Perkin Elmer, Gerstel etc. available on request.

Down to -100 °C
Working temperature

Up to 0,3 kW
Cooling power

Special evaporators
e.g. for thermal analysis

Evaporator in special design or customised on request.

Model	Working temperature range (°C)	Cooling power (kW) at (°C) 0	-20	-30	-90	Dimensions W x D x H (mm)	Cat.No. standard	Cat.No. with flexible cooling probe	G
TC45	-45...100	0,24	0,18	0,1	–	190 x 295 x 360	3003.0043.00	3003.0044.00	2
TC45E	-45...100	0,24	0,18	0,1	–	190 x 295 x 360	3003.0002.99	3003.0004.99	2
TC50	-50...50	0,3	0,26	0,2	–	260 x 330 x 415	3004.0019.00	3004.0020.00	2
TC50E	-50...50	0,3	0,26	0,2	–	260 x 330 x 415	3004.0002.99	3004.0004.99	2
TC100	-100...40	0,16	0,15	0,14	0,07	295 x 500 x 570	3005.0158.00	3005.0160.00	2
TC100E	-100...40	0,16	0,15	0,14	0,07	295 x 500 x 570	3005.0044.99	3005.0046.99	2

Options on request: various other special cooling probes available

[1] Preliminary dimensions

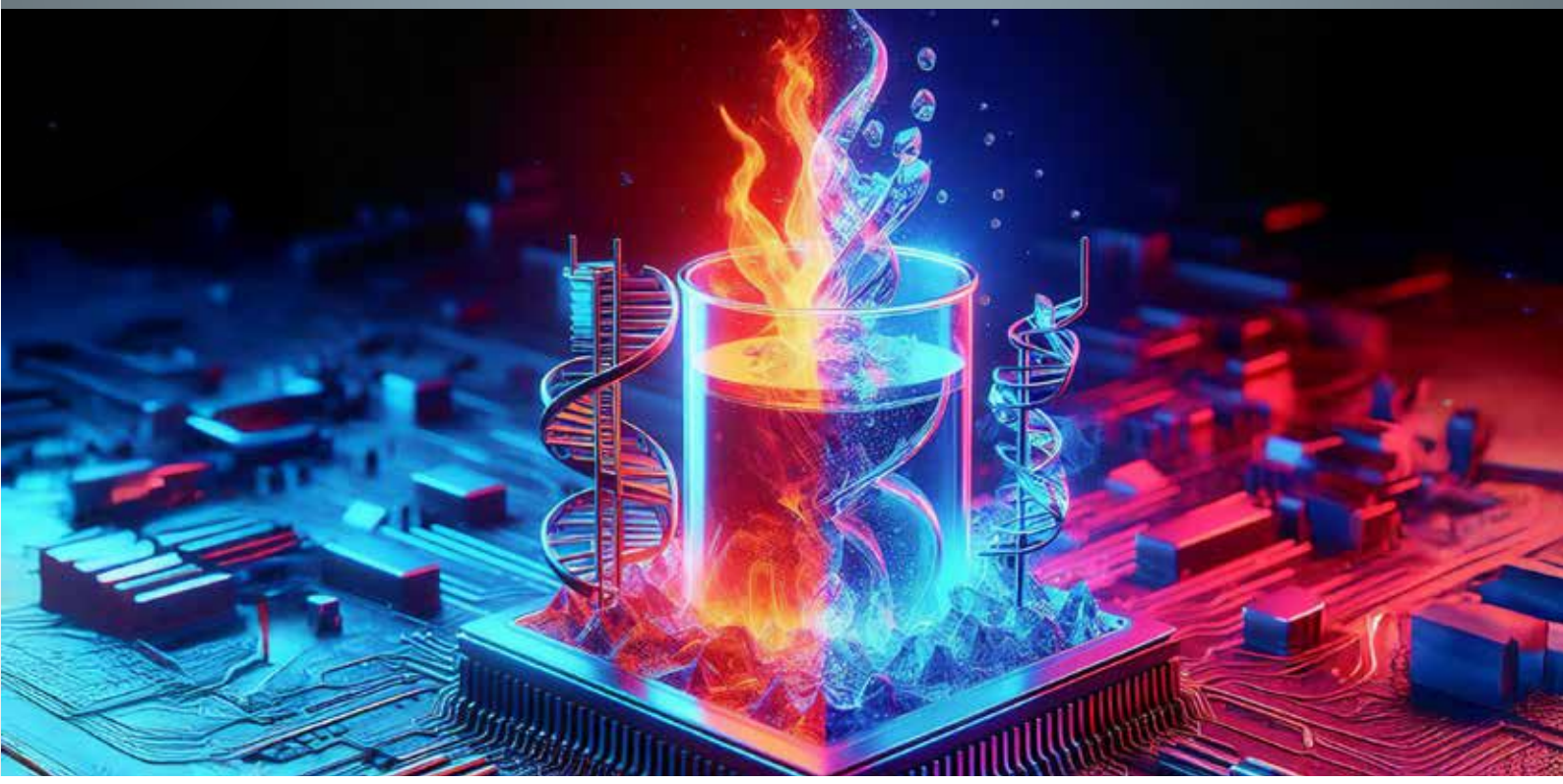
Applications in semicon manufacturing

The TC immersion coolers provide a flexible and reliable cooling solution for demanding applications in the semicon industry. They are designed for simple operation, universal use and continuous, unattended performance, making them ideally suited for the precise and rapid cooling of process fluids.

Typical areas of application include **wafer and chuck testing**, where stable and reproducible cooling is essential during thermal cycling, characterisation and reliability tests, as well as **component testing**, where accurate temperature control of electronic devices and semicon components under varying conditions is required. In these fields, immersion coolers represent an environmentally friendly and resource-efficient alternative to dry ice or mains water cooling, while at the same time ensuring contamination-free operation in sensitive environments.

The TC series offers versions with Pt100 sensors for exact process regulation. Models with the suffix "E" are equipped with an LED display, allow direct setpoint entry and regulate with an accuracy of ±0.5 K – a decisive advantage for quality-critical test procedures. A choice of spiral-shaped or flexible stainless steel immersion probes ensures compatibility with virtually all vessel types.

With their compact design, high-quality stainless steel housing and integrated carrying handles, TC immersion coolers combine robustness, mobility and long service life, making them an excellent choice for laboratory and production testing in the semicon sector.



Our products

Minichillers®

Natural Refrigerant

Minichillers are a cost-effective and environmentally-friendly cooling solution for many laboratory applications and routine tasks in research and industry. Due to the low purchase price, the investment pays off after just a few months. The OLÉ controller combines modern technology and easy operation with practice-orientated features including USB, RS232 and OLED display.

Down to -20 °C
Working temperature

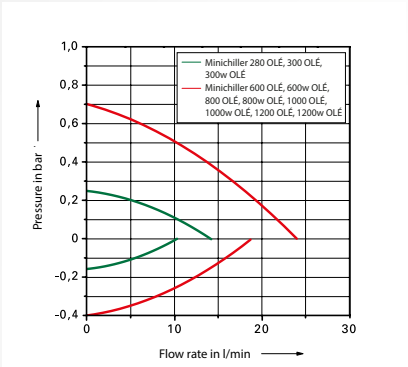
Up to 1,2 kW
Cooling power

Up to 24 l/min
Pump capacity

OLÉ controller
OLED display

Minichiller 600 OLÉ

Minichiller 280 OLÉ



Pump curve
according to DIN 12876 with water at 20 °C

Model	Working temperature range (°C)	Pump Data max. pressure (l/min)	(bar)	max. suction (l/min)	(bar)	Cooling power (kW) at (°C) 15	0	-10	-20	Dimensions W x D x H (mm)	Cat.No.	G
Minichiller 280 OLÉ	-5...40 (80)*	14	0,25	10,5	0,17	0,28	0,2	–	–	225 x 360 x 380	3065.0001.98	2
Minichiller 300 OLÉ	-20...40 (80)*	14	0,25	10,5	0,17	0,3	0,2	0,14	0,07	225 x 360 x 380	3006.0089.98	2
Minichiller 300w OLÉ	-20...40 (80)*	14	0,25	10,5	0,17	0,3	0,2	0,14	0,07	225 x 360 x 380	3006.0090.98	2
Minichiller 600 OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	0,6	0,5	0,35	0,15	280 x 490 x 424	3066.0002.98	2
Minichiller 600w OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	0,6	0,5	0,35	0,15	280 x 490 x 424	3066.0004.98	2
Minichiller 800 OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	0,8	0,6	0,45	0,3	280 x 490 x 424	3079.0001.98	2
Minichiller 800w OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	0,8	0,6	0,45	0,3	280 x 490 x 424	3079.0003.98	2
Minichiller 1000 OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	1,0	0,8	0,55	0,35	280 x 511 x 424	3080.0001.98	2
Minichiller 1000w OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	1,0	0,8	0,55	0,35	280 x 490 x 424	3080.0003.98	2
Minichiller 1200 OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	1,2	0,9	0,7	0,35	280 x 511 x 424	3078.0001.98	2
Minichiller 1200w OLÉ	-20...40 (80)*	24	0,7	18,0	0,4	1,2	0,9	0,7	0,35	280 x 490 x 424	3078.0003.98	2

* Permissible return temperature max. +80 °C Options on request: heater, Pilot ONE controller

w = water-cooled

Applications in semicon manufacturing

The Minichiller series offers compact and energy-efficient recirculating coolers specifically designed for reliable temperature control in semicon testing applications. With their small footprint and robust construction, they are ideally suited for use in laboratories, cleanrooms and production environments where precision and stability are essential.

Key areas of application include **wafer and chuck testing**, where the Minichiller ensures stable cooling performance for thermal cycling and characterisation tasks, as well as **component testing**, where sensitive electronic devices and semicon components require precise and reproducible temperature conditions. By providing consistent cooling capacity, Minichillers help safeguard test accuracy and reliability while reducing dependence on dry ice or mains water cooling. Equipped with user-friendly controls, temperature stability of up to ±0.5 K, and a closed recirculating system that prevents contamination, the Minichiller ensures optimal conditions even in demanding cleanroom environments. Different performance classes and cooling capacities allow the units to be adapted to specific test setups, while their compact stainless steel housing and integrated carrying handles provide both mobility and durability.

As a cost-effective and environmentally friendly solution, the Minichiller combines precision, efficiency and versatility, making it a trusted choice for thermal management in **semicon wafer testing, chuck testing and component evaluation.**

Our products

Unichillers®

Natural Refrigerant

Powerful Unichillers in compact tower design with small space requirements and air-cooled refrigeration machine. The devices are equipped with the Pilot ONE controller with numerous professional functions. The circulation chillers are turned into powerful process thermostats with the heating options. The option "freeze protection" permits operation with water.

Down to -20 °C
Working temperature

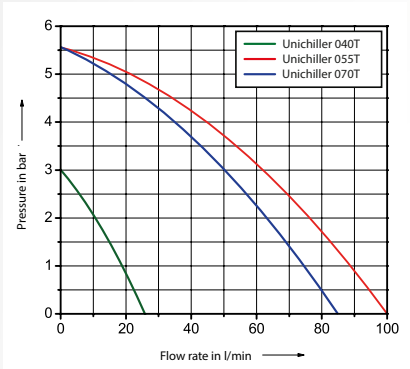
Up to 35 kW
Cooling power

Up to 210 l/min
Pump capacity

Pilot ONE
Touch screen controller

Unichiller 070T

Unichiller 045T

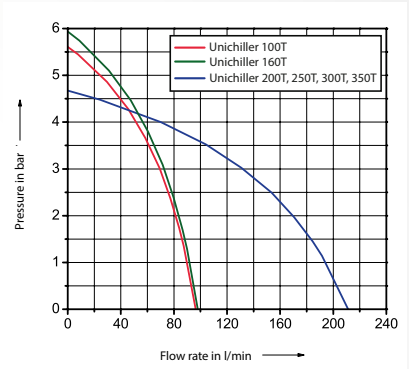


Pump curve
according to DIN 12876 with water at 20 °C

Model	Working temperature range (°C)	Pump max. (l/min)	Pump max. (bar)	Cooling power (kW) at (°C) 15	Cooling power (kW) at (°C) 0	Cooling power (kW) at (°C) -10	Dimensions W x D x H (mm)	Cat.No.	G
Unichiller 040T	-10...40	26	3,0	4,0	2,5	1,1	640 x 700 x 1606[1]	3014.0072.01	3
Unichiller 055T	-10...40	100	5,6	5,5	2,3	0,8	640 x 937 x 1606[1]	3015.0093.01	35
Unichiller 070T	-10...40	84	5,6	7,0	4,0	2,3	640 x 937 x 1606[1]	3016.0046.01	35

Options on request: heating, externally open applications, winter option, outdoor setup

[1] Preliminary dimensions



Pump curve
according to DIN 12876 with water at 20 °C

Unichiller 017T

Unichiller 100T

Model	Working temperature range (°C)	Pump max. (l/min)	Pump max. (bar)	Cooling power (kW) at (°C) 15	0	-10	-20	Dimensions W x D x H (mm)	Cat.No.	G
Unichiller 100T	-20...40	96	5,6	10,0	9,0	6,5	3,0	640 x 937 x 1606[1]	3017.0088.01	4
Unichiller 160T*	-10...40	99	5,9	16,0	8,8	4,0	–	941 x 1607 x 1895[1]	3056.0017.01	4
Unichiller 200T*	-20...40	210	4,7	20,0	10,0	5,0	3,0	941 x 1607 x 1895[1]	3028.0157.01	4
Unichiller 250T*	-20...40	210	4,7	25,0	18,0	11,0	6,0	941 x 2390 x 1895[1]	3057.0011.01	5
Unichiller 300T*	-20...40	210	4,7	30,0	18,0	11,0	6,0	941 x 2390 x 1895[1]	3029.0054.01	5
Unichiller 350T*	-20...40	210	4,7	35,0	23,0	14,0	8,0	941 x 2390 x 1895[1]	3021.0024.01	5

Options on request: heating, externally open applications, winter option, outdoor setup
* without rollers

[1] Preliminary dimensions


4
YEARS
WARRANTY
PROVEN
PERFORMANCE
OVER 200 CASE STUDIES
MADE IN
GERMANY
TOP INNOVATOR
NATURAL
REFRIGERANTS
LOWEST GWP
EASY
OPERATION
PLUG & PLAY
unistat
tango
petite fleur

A technology leader with sustainability – Natural refrigerants since 1976

The complete range with natural refrigerants

ONLY FROM HUBER

Synthetic refrigerants are on the brink of extinction. In the race against global warming, a gradual phase a gradual phase-down in which synthetic refrigerants will be banned worldwide. We have alternatives, because natural refrigerants have been standard here for decades.

Only from Huber you can get the entire range from -125 to +425 °C with natural refrigerants – that is unique in the world.

In response to the impending bans on synthetic refrigerants, we say: „Finally, it's about time!" The future belongs to natural refrigerants with a low GWP value. We recognized this as early as 1976 and launched circulation coolers and refrigerated circulators with propane R290 and propene R1270 on the market. In addition, we have consistently expanded our range with high-performance CO_2 solutions, including the new Unistats in the GL series (Green Line). We are the only supplier on the global market that are able to supply the entire spectrum from ultra-compact laboratory coolers to high-performance industrial process thermostats with natural refrigerants – we look forward to hearing from you!

World market leader for temperature control units with natural refrigerant – since 1976

Our products make us an ecological pioneer in environmental protection. Our entire product range for the laboratory already works with natural refrigerants as standard. Our products are made of high-quality materials with high recyclability are durable and sustainable.

The environment has been our focus since the company was founded. One of the company's first goals was to develop alternatives to the then widespread use of fresh water for cooling. Another measure was the voluntary phase-out of CFC/HCFC refrigerants long before legal regulation.

We are pioneers in the temperature control technology industry in the use of environmentally friendly hydrocarbons as refrigerants. All laboratory temperature control units in our range have been available with natural refrigerants for years – at no extra charge as standard.

Our factory and offices demonstrate our commitment and practice of responsible use of water and energy shows that we take environmental protection seriously. The tango factory is an example of environmental conscious architecture. Made of solid concrete with triple-glazed windows, a thick layer of insulation and kilometers of plastic pipes in the floor, ceiling and walls within which water is recirculates to efficiently control the ambient temperature and acts as a gigantic heat exchanger with minimal energy requirements.

In 2016, we were awarded the environmental prize for companies by the state of Baden-Württemberg and in 2023 we were the first company in the whole of Baden-Württemberg to receive the KEFF+ label from the Ministry of the Environment for the resource savings we have implemented.

Our bestsellers
With natural refrigerants

BESTSELLER
for the laboratory since 1976

Investing in a temperature control unit with natural refrigerants is an investment into an environmentally friendly, futureproof and sustainable technology. However, natural refrigerants are only one aspect of environmentally friendly solutions. Our temperature control units combine natural refrigerants with extremely low energy consumption, making them particularly energy and resource efficient.

Back in the 1970s, our company founder Peter Huber developed the first cooling appliances with natural refrigerants and was the first to the market. In the following years the entire range of laboratory temperature control was converted to natural refrigerants. As a result, over 90 % of our temperature control units sold in 2018 were supplied with natural refrigerants.

In practice, natural refrigerants such as R290, R1270 and R744 have considerable advantages, including low pressure losses in pipes and heat exchangers as well as low energy consumption during compression. Disposal is also easier than with synthetic substances. As they are natural substances, these refrigerants can be released into the atmosphere in a controlled manner.

Ministats
Ministats are the smallest refrigerated circulators in the world. With their small dimensions, the devices occupy minimal bench space and can be operated in the tightest of spaces, for example in a fume cupboard.

Compact-cooling circulators
Working temperature -45 ... 200 °C
Cooling power up to 600 W

Minichillers
Minichillers are a space-saving, cost-effective and environmentally friendly cooling solution for numerous laboratory applications. By reducing water consumption to zero, Minichillers pay for themselves within a short time.

Circulation chillers
Working temperature -20 ... 100 °C
Cooling power up to 1200 W

TC
The TC immersion coolers significantly reduce the consumption of dry ice, minimising environmental impact. Additionally, they lower solvent usage, making them an eco-friendly choice for modern laboratories. They are available with natural refrigerants.

Immersion coolers
Working temperature -100 ... 100 °C
Cooling power up to 300 W

KISS and CC
KISS and CC (Compatible Control) series cooling thermostats are designed for temperature control tasks down to -90 °C. The devices are suitable for many typical heating and cooling tasks such as sample temperature control, material testing and quality control.

Baths/Circulators
Working temperature -55 ... 200 °C
Cooling power up to 1500 W

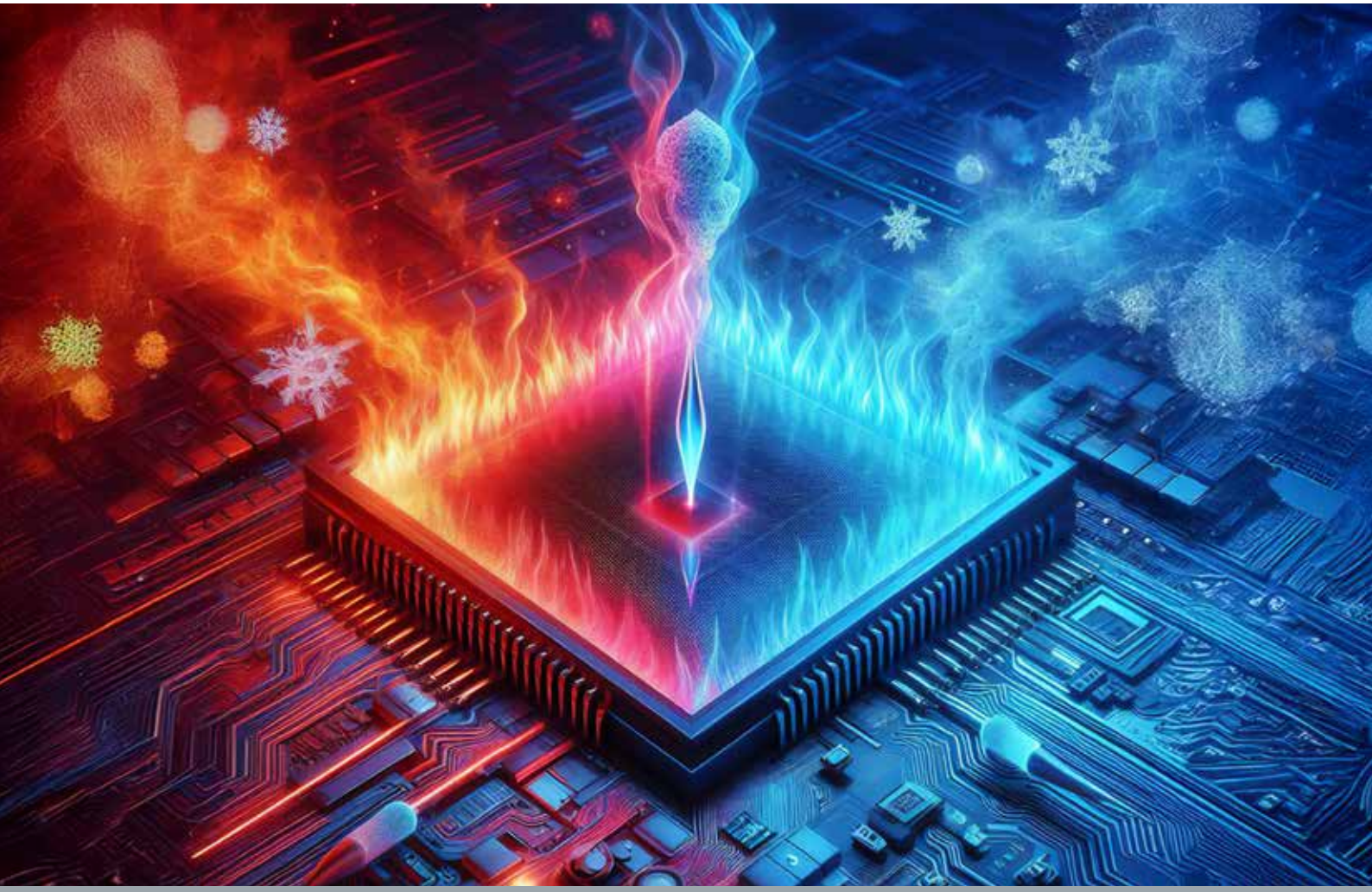
Free extension
4 year warranty

Comprehensive and free – our 4 year warranty package

We offer an extensive warranty extension with numerous benefits. To take advantage of this option an online registration of the Huber unit is required. The standard warranty is for 12 months from the shipping date (Ex Works Offenburg, Germany).

The 4-year warranty is provided at no extra cost. Registration of the end customer's address must be completed within 3 months from the delivery date.

Inspired by **temperature** designed for you



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