

Heating

Cooling

Humidity

CO<sub>2</sub> and O<sub>2</sub>

Light

Vacuum

**memmert**

# Memmert Product Range

QUALITY - RELIABILITY - PRECISION.



CLIMATE CHAMBERS

HEATING AND DRYING OVENS

INCUBATORS

MEDICAL DEVICES

WATERBATHS

MADE IN GERMANY.

[www.memmert.com](http://www.memmert.com)



# Worldwide Leader in Technology

Since its founding days in 1947 strong relations with customers around the globe has been one of the reasons for the success story of the Memmert brand and for becoming one of the leading suppliers of temperature control appliances for the lab.

Memmert's most important objective in research and development has been controlled atmosphere, which means all parameters are controlled with the utmost precision. Inseparably linked to this are reliability, optimum temperature homogeneity and stability, user friendliness and an outstanding price/performance ratio.

# The best Memmert appliance for each application

There is a huge number of application possibilities. Memmert appliances are widely used for analysis, testing, examination and research in the 4 core branches industry, medicine, pharma and food.

## Climate Chambers

### TYPICAL APPLICATIONS

Conditioning and climate testing of plastic material/metal/composite material, storage of electronic components/lacquers/coatings in controlled environment, stability testing (HPPeco/ICH according to ICH Q1A)

### EXEMPLARY SPECIAL APPLICATIONS

HPPeco	Long-term storage, growing plants
ICH/ICHeco	Photostability testing (according to ICH Q1B) in the pharmaceutical industry, long-term storage
CTC/TTC	Accelerated and intermediate tests
HCP	Gravimetric determination water absorption

## Heating and Drying Ovens

### TYPICAL APPLICATIONS

Drying, burning-in, ageing, vulcanising, degassing, curing, burn-in testing, conditioning, heated storage

### EXEMPLARY SPECIAL APPLICATIONS

UNpa	Tempering of embedding media like paraffin and wax
VO/VOcool	Oxygen-free storing, vacuum testing

## Incubators

### TYPICAL APPLICATIONS

Microbiological tests, colony counts, virology, toxicology

### EXEMPLARY SPECIAL APPLICATIONS

ICP/ICPeco, IPPeco	Cultivation above and below room-temperature, alternate stability tests
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## Medical devices

### TYPICAL APPLICATIONS

S <sup>2</sup>	Sterilising of instruments and laboratory glass
IFbw <sup>1</sup>	Warming of non-sterile cloths and blankets
ICOmed <sup>2</sup>	Cultivation of cells or tissue, in-vitro fertilisation, gene expression

## Baths

WTB	Temperature control of samples, plates, breeding media and emulsions in the laboratory, long-term exposure to heat of plastics to determine dimensional stability and post-shrinkage, softening temperature testing of plastic, warming of baby food
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1: Memmert is bringing medical devices of class I according to EU Directive 93/42/EEC into circulation until the regulation MDR (EU) 2017/745 comes into force. After the new regulation comes into force, Memmert will bring medical devices of class I into circulation according to MDR.

2: Memmert is bringing medical devices of class IIa and IIb into circulation according to MDD 93/42/EEC until 26 May 2024 according to the transitional provisions by the (EU) 2017/745 article 120 (2).

# Climate Chambers

Storing, climate testing, conditioning, stability testing, photostability testing.

Each Mettmert climate chamber delivers a crucial point in stability and climate tests, conditioning or ageing: homogenous as well as stable temperature and humidity distribution over the entire chamber.

All Mettmert climate chambers offer digitally controlled active humidification and dehumidification, thus providing a perfect environment for stability testing in pharmaceuticals, cosmetics or food industry as well as climate and temperature testing in the electronics, chemical or automotive production.

## Constant Climate Chambers HPPeco

- 7 model sizes: 108, 256, 384, 749, 1060, 1360 and 2140 litres
- TwinDISPLAY
- Temperature range 0 °C up to +70 °C
- Digitally controlled active humidification and dehumidification 10 to 90 % rh
- Heating and cooling based on unique Advanced Peltier Technology
- Reduced power consumption – no compressor
- Hardly any vibration and noise
- Double doors (inside glass, outside stainless steel)
- Optional with LED light

→ Further details: [www.mettmert.com/constant-climate-chamber](http://www.mettmert.com/constant-climate-chamber)



## Humidity Chambers HCP

- 4 model sizes: 56, 107, 156 and 241 litres
- TwinDISPLAY
- Temperature range +18 °C up to +90 °C
- Digitally controlled active humidification and dehumidification 20 to 95 % rh
- 6 side heating incl. heated inner glass door: short recovery times, avoiding condensation
- Double doors (inside glass, outside stainless steel)

→ Further details: [www.mettmert.com/humidity-chamber](http://www.mettmert.com/humidity-chamber)



## Climate Chambers ICH / ICHeco



- 3 model sizes: 108, 256 and 749 litres
- TwinDISPLAY
- Temperature range +10 °C up to +60 °C with humidity, -10 °C up to +60 °C without humidity
- Digitally controlled active humidification and dehumidification 10 to 80 % rh
- Double doors (inside glass, outside stainless steel)
- Models ICH L with illumination unit
- Models ICH C with CO<sub>2</sub> control
- ICHeco: with natural and climate-friendly refrigerant CO<sub>2</sub> (R744), improved cooling capacity, nearly maintenance free

→ Further details: [www.memmert.com/climate-chamber](http://www.memmert.com/climate-chamber)



## Environmental Test Chambers CTC / TTC



- Model size: 256 litres
- Temperature range +10 °C up to +95 °C with humidity, -42 °C up to +190 °C without humidity
- Digitally controlled active humidification and dehumidification 10 to 98 % rh (only CTC)
- Temperature change rate in cooling operation (acc. to IEC 60068-3-5) 3 K/min (+180 °C to -40 °C)
- Temperature change rate in heating operation (acc. to IEC 60068-3-5) 10 K/min (-40 °C to +180 °C)
- Automatic defrosting system provided for the evaporator

→ Further details: [www.memmert.com/environmental-test-chamber](http://www.memmert.com/environmental-test-chamber)



# Heating and Drying Ovens

Drying, heating, ageing, testing, sterilising, burning-in, curing, storing.

In 1947 the first ever Memmert oven, a hot air steriliser, was built for the Red Cross. Ever since then, the Memmert range of heating and drying ovens has grown into a versatile line-up of extremely precise and reliable high quality temperature control appliances.

Designed to make the lab staff's day-to-day work easier and more efficient, Memmert heating and drying ovens offer the utmost level of user friendliness. From material testing labs to electronic production, from fire brigades to opera houses, from pharmaceutical research to hospitals, these state-of-the-art ovens connect to the world.

## Universal Ovens U

- 9 model sizes from 32 litres to 1060 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range up to +300 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Natural convection (N) or forced air circulation (F)
- Paraffin Oven UNpa: temperature range up to +80 °C; interior chamber almost gas tight for avoiding oily residues in tiny cavities

→ Further details: [www.memmert.com/universal-oven](http://www.memmert.com/universal-oven)



## Pass-through Ovens UF TS



- 4 model sizes: 161, 256, 449 and 749 litres
- TwinDISPLAY
- Temperature range up to +250 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- For 2-sided loading (door front and back)
- Forced air circulation



→ Further details: [www.memmert.com/pass-through-oven](http://www.memmert.com/pass-through-oven)

## Vacuum Ovens VO



- 3 model sizes: 29, 49 and 101 litres
- TwinDISPLAY
- Temperature range up to +200 °C
- Pressure range: 5 to 1100 mbar
- Digital electronic pressure control
- Thermoshelves can be controlled separately (Multi-Level-Heating)
- Multifunctional fuzzy-supported control
- Control and logging software AtmoCONTROL
- VOcool with cooling unit:  
temperature range +5 °C up to +90 °C



→ Further details: [www.memmert.com/vacuum-oven](http://www.memmert.com/vacuum-oven)

# Incubators

## Microbiological testing, incubating, cultivating.

Microbial and especially cell cultures are extremely sensitive to fluctuations in their surrounding microclimate. The slightest swing of environmental parameters can jeopardise the results of an experiment. Therefore each Memmert incubator was designed for long-term stability of temperature, humidity and carbon dioxide.

Like a well-tuned engine the control systems in a Memmert incubator are perfectly balanced between swift and smooth operation. Each incubator precisely keeps the desired parameters in the entire working chamber within the smallest tolerance limits.

### Incubators I

- 8 model sizes from 32 litres to 749 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range up to +80 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Natural convection (N) or forced air circulation (F)
- Double doors (inside glass, outside stainless steel)

→ Further details: [www.memmert.com/incubator](http://www.memmert.com/incubator)



### Peltier-cooled Incubators IPeco

- 9 model sizes: 32 litres to 2140 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range 0 °C up to +70 °C
- Heating and cooling based on unique Advanced Peltier Technology
- Reduced power consumption – no compressor
- Hardly any vibration and noise
- Double doors (inside glass, outside stainless steel)
- Optional with LED light

→ Further details: [www.memmert.com/peltier-cooled-incubator](http://www.memmert.com/peltier-cooled-incubator)





## Compressor-cooled Incubators ICP / ICPeco



- 4 model sizes: 108, 256, 449 and 749 litres
- TwinDISPLAY
- Temperature range -12 °C up to +60 °C
- Air jacketed temperature control system
- Double doors (inside glass, outside stainless steel)
- ICPeco: with natural and climate-friendly refrigerant CO<sub>2</sub> (R744), improved cooling capacity, nearly maintenance free



→ Further details: [www.memmert.com/compressor-cooled-incubator](http://www.memmert.com/compressor-cooled-incubator)

## CO<sub>2</sub> Incubators ICO



- 4 model sizes: 56, 107, 156 and 241 litres
- TwinDISPLAY
- Temperature range up to +50 °C
- Humidity range 40 to 97 % rh (active and passive control available)
- Standard sterilisation programme: 60 minutes at 180 °C (without removing sensors)
- 6 side heating incl. heated inner glass door: short recovery times, avoiding condensation



→ Further details: [www.memmert.com/co2-incubator](http://www.memmert.com/co2-incubator)

# Medical devices

Heating, tempering, sterilising, cultivating, in-vitro fertilising.

The products on the following two pages are classified as medical device (class I, IIa and IIb). Memmert medical devices can be found in clinics, doctors' practices and pharmacies. Especially in emergency trauma rooms, the blanket warmers are used to preheat blankets and cloths. In the incubators you can be certain that bacteria cultures and cell cultures are incubated most gently and without any temperature overshoots.

It is the hard-lined commitment to quality that has made Memmert a reliable partner in the medical sector and medical research industry. Of course Memmert is DIN EN ISO 13485 certified since many years.

## Universal Ovens Um

- 9 model sizes from 32 litres to 1060 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range up to +300 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Natural convection (N) or forced air circulation (F)
- Medical device class I<sup>1</sup>

→ Further details: [www.memmert.com/universal-oven-um](http://www.memmert.com/universal-oven-um)



## Incubators Im

- 8 model sizes from 32 litres to 749 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range up to +80 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Natural convection (N) or forced air circulation (F)
- Double doors (inside glass, outside stainless steel)
- Medical device class I<sup>1</sup>

→ Further details: [www.memmert.com/incubator-im](http://www.memmert.com/incubator-im)



## Sterilisers S

- 8 model sizes from 32 litres to 749 litres
- 2 model variants: SingleDISPLAY or TwinDISPLAY
- Temperature range up to +250 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Natural convection (N) or forced air circulation (F)
- Medical device class IIb<sup>2</sup>

→ Further details: [www.memmert.com/steriliser](http://www.memmert.com/steriliser)



## CO<sub>2</sub> Incubators ICOMed

- 4 model sizes: 56, 107, 156 and 241 litres
- TwinDISPLAY
- Temperature range up to +50 °C
- Humidity range 40 to 97 % rh (active and passive control available)
- Standard sterilisation programme: 60 minutes at 180 °C (without removing sensors)
- 6 side heating incl. heated inner glass door: short recovery times, avoiding condensation
- Medical device class IIa<sup>2</sup>

→ Further details: [www.memmert.com/co2-incubator-icomed](http://www.memmert.com/co2-incubator-icomed)



## Blanket Warmer IFbw

- 4 model sizes: 108, 256, 449 and 749 litres
- SingleDISPLAY
- Temperature range up to +80 °C
- All-round heating on all 4 sides for excellent temperature homogeneity
- Forced air circulation
- Door-open-recognition
- Medical device class I<sup>1</sup>

→ Further details: [www.memmert.com/blanket-warmer](http://www.memmert.com/blanket-warmer)



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# Waterbaths

Memmert's evergreens: uniquely precise and reliable.

Ever since Memmert started its waterbath production in the 1960's, the continuous development of modern control technology as well as various safety features have made waterbaths pillars of the Memmert product range. Due to their unparalleled precision, they are perfectly suited for demanding applications in quality management and science.

Working with below ambient temperatures is easy with the space-saving Peltier cooling unit CDP115. It fits on all Memmert waterbath sizes and is environmentally friendly.

## Waterbaths WTB

- 6 model sizes: 7, 10, 17, 23, 37 and 51 litres
- Temperature range up to +100 °C
- Flat and gable cover, bottom shelf reversible, shaking device available as accessory
- Peltier-cooling device available

→ Further details: [www.memmert.com/waterbath](http://www.memmert.com/waterbath)



A large rectangular area with horizontal ruling lines, intended for writing personal notes.



## Device Modifications – Proven and Good

### The perfect extension for your Memmert appliance

Our mission at Memmert is to provide you with the best possible solution for your individual application. With the increasing complexity of customer processes, a custom-fit modification of our appliances has many advantages for your application. Through modifications, process and set-up times can be significantly reduced or errors in the application can be completely ruled out by monitoring devices. Even small measures, such as individually adapted accessories, have a noticeable influence on the ergonomics and user-friendliness in the operation of the appliance.

You as a customer have the best ideas – and often already have a specific idea of how our products can be better used in your working environment.

Tell us about your thoughts and let us create an individual solution together with you! Please contact us and call us at +49 9122-925-0 or send us an email to [sonderbau@memmert.com](mailto:sonderbau@memmert.com).

The Memmert customisation department team is looking forward to hearing from you!

## Versatile modifications for our standard appliances



### Mechanics

- Customised interior fittings
- Individual entry ports in all sizes and shapes
- Telescopic slide pull-outs for ergonomic loading



### Electronics

- Extended parameter monitoring e.g. by means of additional measuring sensors
- Optical and acoustic process monitoring e.g. by means of a traffic light system



### Software

- Additional interfaces for data evaluation
- Individual temperature, humidity and CO<sub>2</sub> parameters



### Accessories

- Tailor-made subframe and stacking options
- Modified grids and shelves
- Individual air filters

## Customised solutions for your requirements

### Our expertise as a development partner in plant and project business

The Memmert customisation department has been active in the project business for over 20 years now and has proven itself in countless projects as a strong and reliable partner. The experts in customisation benefit from two aspects: Access to the complete capacities of an ultra-modern and specialised production line, as well as the entire technical know-how of the Memmert company in designing climate and temperature control appliances. Combined with the experience of our project managers, the Memmert customisation department is also able to find a solution for the most complex requirements.

### Special sizes

Does your product not fit into a standard unit? We build appliances to measure! Whether you need more volume in the interior or there is not enough space for installation at the installation location, we have the expertise to design your appliance individually. Ask us!

### Process and plant integration

Integrate our technology seamlessly into your plant or your work organisation. We will find the right solution together for your process integration:

- Preparation for integration into your plant
- Integration of your processes into our appliances
- Inclusion of customer-specific installations
- Interface for semi-automatic assembly

### Project business

Are you a project developer with ideas for innovative products and looking for a strategic cooperation? Take advantage of our know-how and manufacturing capacities for your project. Our customisation department will be pleased to hear from you!





- 1 **Leader in technology:** Experienced and continuously innovative for more than 6 decades.
- 2 **ControlCOCKPIT:** Touch, turn & go! Easy and intuitive operation. Clear view of all parameters.
- 3 **Performance:** Unparalleled precision and temperature stability, brilliant all-round surface heating.
- 4 **Advanced Peltier Technology:** Pioneer of energy-efficient, environmentally friendly products with Peltier technology.
- 5 **Convenience:** Interfaces for connecting and programming, easy opening/closing of the door and transport.
- 6 **Safety** of users and chamber loads. Electronic temp. monitoring system, overtemp. protection, alarm notifications and MobileALERT.
- 7 **AtmoCONTROL software:** Drag, drop & go! Simple to operate, user-friendly, multiple possibilities for reading and data logging.
- 8 **Stainless steel:** Beautiful and functional. Particularly corrosion-resistant, hygienic, robust, can be recycled without any problems.
- 9 **Service:** Technical support – whenever, wherever. Spares, maintenance, repair, commissioning, IQ/OQ/PQ qualification, customer training.
- 10 **Customised solutions:** Tailor-made solutions and customised appliances for complex applications.

YOUR MEMMERT PARTNER

