

## Memmert Product Range

CLIMATE CHAMBERS
HEATING AND DRYING OVENS
INCUBATORS
MEDICAL DEVICES
WATERBATHS



**MADE IN GERMANY** 

## **ABOUT MEMMERT**

MEMMERT is one of the world's leading manufacturers of climate chambers and temperature control units for laboratories and industrial applications. Our product range comprises climate chambers, heating and drying ovens, incubators, medical devices and water baths.

In our role as innovation leader, our philosophy is to align new product developments with customer requirements whilst simultaneously striving for a maximum level of quality, reliability and sustainability. Standardised manufacturing processes in our ultra-modern production facilities implemented by a 550-strong workforce of skilled and experienced employees guarantee consistent high-quality standards.

With over 90 years of experience and an international network spanning the globe, Memmert is synonymous with top Made in Germany quality.

## TOUCH, TURN and GO

Simple and intuitive operation with the innovative ControlCOCKPIT.

This gives you a clear and quick overview of all parameters.



Twin DISPLAY

# The best Memmert appliance for each application

The number of possible applications is almost unlimited. Memmert appliances are used in a wide variety of areas:

- in the pharmaceutical industry and medicine,
- in biological, chemical and food research,
- for industrial material and component testing and
- for various quality tests in demanding manufacturing processes.

Climate Chambers		04
TYPICAL APPLICATIONS	<ul> <li>Conditioning and climate testing of plastic material/metal, composite material</li> <li>Storage of electronic components, lacquers, coatings in controlled environment</li> <li>Stability testing (HPPeco/ICH according to ICH Q1A)</li> </ul>	
PRODUCT SERIES	HPPeco   HCP   ICH   CTC   TTC	
Heating and Drying Ovens		06
TYPICAL APPLICATIONS	<ul> <li>Drying, burning-in, ageing</li> <li>Vulcanising, degassing, curing</li> <li>Burn-in testing, conditioning, heated storage</li> </ul>	
PRODUCT SERIES	U   UNpa   UFTS   VO	
Incubators		08
TYPICAL APPLICATIONS	<ul> <li>Microbiological tests, colony counts</li> <li>Virology and toxicology</li> </ul>	
PRODUCT SERIES	I   IPPeco   ICP   ICO	
Medical devices		10
TYPICAL APPLICATIONS	<ul> <li>Sterilising of instruments and laboratory glass</li> <li>Warming of non-sterile cloths and blankets</li> <li>Cultivation of cells or tissue, in-vitro fertilisation, gene expression</li> </ul>	
PRODUCT SERIES	Um   Im   S   ICOmed   IFbw	
Baths		12
TYPICAL APPLICATIONS	<ul> <li>Temperature control of samples, plates, breeding media and emulsions in the laboratory</li> <li>Long-term exposure to heat of plastics to determine dimensional stability and post-shrinkage</li> <li>Softening temperature testing of plastic</li> <li>Warming of baby food</li> </ul>	
PRODUCT SERIES	WTB	

## **Climate Chambers**

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

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

### Constant Climate Chambers HPPeco













Heating

Cooling Humidity Light

7 model sizes: 108, 256, 384, 749, 1060, 1360 and 2140 litres

- Model variant TwinDISPLAY
- Temperature range 0 °C up to +70 °C
- $\bullet$  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

## **Humidity Chambers HCP**







Heating Humidity



4 model sizes: 56, 107,156 and 241 litres

- Model variant TwinDISPLAY
- Temperature range +18 °C up to +90 °C
- $\bullet$  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)













g Cooling Humidity

Ligh



### 3 model sizes: 108, 256 and 749 litres

- Model variant TwinDISPLAY
- Temperature range +10 °C up to +60 °C with humidity, -10 °C up to +60 °C without humidity
- ullet Digitally controlled active humidification and dehumidification 10 to 80 % rh
- Double doors (inside glass, outside stainless steel)
- Models ICH L with illumination unit
- Refrigerant R134a

#### **Climate Chambers ICH**









Heating

Cooling Humidity



#### 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

## Environmental Test Chambers CTC / TTC



## **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**





Heating



#### 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





leating



#### 5 model sizes (32 to 161 litres volume)

- Model variant TwinDISPLAY
- Temperature range up to +80 °C
- High thermal safety thanks to multiple overtemperature protection
- With no supply and exhaust air, the interior is virtually gas-tight, preventing the build-up of oily residues in small cavities



#### Heating



### 4 model sizes: 161, 256, 449 and 749 litres

- Model variant 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

## Pass-through Ovens UF TS







Heating Vacuum



#### 3 model sizes: 29, 49 and 101 litres

- Model variant TwinDISPLAY
- Temperature range up to +200 °C
- Pressure range: 5 to 1100 mbar
- Digital electronic pressure control
- Separately adjustable and directly heated thermoshelves
- Multifunctional fuzzy-supported control
- Control and logging software AtmoCONTROL

#### Vacuum Ovens VO



#### **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





#### Heating

#### 8 model sizes from 32 litres to 749 litres



- 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)

#### Peltier-cooled Incubators IPPeco









Heating Cooling

Light

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







Heating Cooling



**Compressor-cooled Incubators** 



4 model sizes: 108, 256, 449 and 749 litres

- Model variant TwinDISPLAY
- $\bullet$  Temperature range -12 °C up to +60 °C
- Very good air circulation in the interior thanks to sophisticated ventilation technology
- Double doors (inside glass, outside stainless steel)
- Refrigerant R134a





Humidity









4 model sizes: 56, 107, 156 and 241 litres

- Model variant 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

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



## **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**





Heating



#### 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 I1

#### Incubators Im





Heating



#### 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 I1



Heating

#### 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 IIb2

#### Sterilisers S

















#### 4 model sizes: 56, 107, 156 and 241 litres

- Model variant 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>



## CO<sup>2</sup> Incubators ICOmed





Heating



#### 4 model sizes: 108, 256, 449 and 749 litres

- Model variant 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>

#### **Blanket Warmer IFbw**



<sup>1.</sup> Memmert places Class I medical devices on the market in accordance with MDR, (EU) 2017/745.

<sup>2.</sup> According to Regulation (EU) 2023/607 amending Regulations (EU) 2017/745 as regards the transitional provisions for certain medical devices, in accordance with MDR, Article 120.3c, Memmert is placing Class Ila and Ilb medical devices on the market until 31 December 2028 in accordance with MDD 93/42/EEC.

## **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.

#### **Waterbaths WTB**





Heating



6 model sizes: 7, 10, 17, 23, 37 and 51 litres

- $\bullet$  Temperature range up to +100  $^{\circ}\text{C}$
- Flat and gable cover, bottom shelf reversible, shaking device available as accessory
- High-quality, rust-resistant and easy-to-clean stainless steel for the interior and exterior housing



## 10 good reasons for a Memmert

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

# Individual design meets strategic partnership

The range of services of m360 includes both small modifications and complex high-tech innovations.

Since the 1980s, m360 has been developing and implementing customer-specific, premium solutions in the field of temperature and climate control technology based on Memmert series products. At Memmert's central production site in Schwabach, Middle Franconia (southern Germany), the m360 team of experts design and produce tailor-made solutions in close cooperation with customers and business partners in order to create the perfect atmosphere for every application.

In doing so, m360 focuses on the creative and innovative development of the established Memmert technology according to the individual wishes of the customers. This can be a simple modification of a series product from Memmert or an extensive project in the construction of special machines and systems.

#### What we can do for you

Our brand is aimed at international customers who are looking for solutions to special challenges in the field of temperature and climate control technology. We offer an extremely high customer-first focus to create products that do not exist in the market. We collaborate closely with the customer to understand and meet the specific challenges and requirements down to the very last detail. At the same time, our experts work intensively on innovative ideas which they identify as highly topical, e.g., automatic solutions for the laboratory. With our experienced insight into the market, our team can precisely estimate trends and special solutions that will be in demand in the future.

## The UF600plus in detail



Ergonomic telescopic rails and special trays make it easier to load the device.



The reinforced handle enables the particularly tall door to be opened easily.

#### **Modifications**

With m360 modifications and special accessories, you can unleash the full potential of your Memmert product. In our m360 list of services, you will find a selection of frequently requested extensions of a Memmert basic device. This includes additions such as entry ports and traffic light circuits, as well as individual programming of the AtmoCONTROL software.

#### **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



#### **Accessories**

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



#### **Software**

- Additional interfaces for data evaluation
- Individual temperature, humidity and CO2 parameters

#### **Select Series**

Our m360 Select Series comprise of highly developed devices that are based on frequently expressed customer requests and have proven successful in practice. Customers value these high-quality custom-made products for their outstanding quality and reliability. The portfolio includes both frequently requested special sizes and appliances for highly specific requirements, such as meeting a standard for drying food residues on crockery. Each appliance in the m360 Select Series is the result of meticulous development work by m360 experts and is based on customer feedback, achieving perfect balance between innovation and practicality.

#### **Innovations**

With m360 Innovations, we offer you complete, customised solutions that are precisely tailored to your individual needs. Our team of experts is at your side from the initial technical consultation to the final implementation. Based on proven Memmert technology, we develop and build appliances that are specifically designed for your application. No matter how complex your requirements are, we deliver innovative solutions that are tailored to your specific needs and harness the full power of our technology.

## m360 Solutions for you





## **CONTACT US!**

Do you have any questions about the Memmert product portfolio or would you like personalised support? Please get in touch with your Memmert representative, send us an e-mail to sales@memmert.com or visit our website www.memmert.com/products. We look forward to hearing from you!

