

Heating

Cooling

Humidity

CO₂ and O₂

Light

Vacuum

memmert

Memmert Product Range

QUALITY - RELIABILITY - PRECISION.



HEATING AND DRYING OVENS

INCUBATORS

CLIMATE CHAMBERS

WATERBATHS

MADE IN GERMANY

www.memmert.com

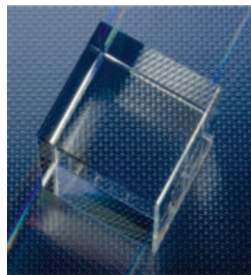
90
YEARS
OF BEING AHEAD

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.



Stainless Steel Interior & Exterior



SingleDISPLAY



TwinDISPLAY

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	Cultivation above and below room-temperature, alternate stability tests
IPPeco	

Medical devices

TYPICAL APPLICATIONS

S ²	Sterilising of instruments and laboratory glass
IFbw ¹	Warming of non-sterile cloths and blankets
ICOmed ²	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 MOD 93/42/EEC until 26 May 2024 according to the transitional provisions by the (EU) 2017/745 article 120 (2).

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, 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

- Interior and Exterior both made of Stainless Steel
- 34 different models
- 9 model sizes from 32 litres to 1060 litres
- 2 model variants: SingleDISPLAY and 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)
- Prewarming of fresh air
- **Internal data logger with capacity to store upto 10 years of data.**
- AtmoCONTROL software
- Calibration certificate at +160 °C provided as standard
- Available as medical device class I
- Various accessories available as option on request

→ Further details: www.memmert.com/universal-oven



Sterilisers S

- Interior and Exterior both made of Stainless Steel
- **Medical devices class IIb as per Directive 93/42/EEC**
- 32 different models
- 8 model sizes from 32 litres to 749 litres
- 2 model variants: SingleDISPLAY and 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)
- Prewarming of fresh air
- **Internal data logger with capacity to store upto 10 years of data.**
- AtmoCONTROL software
- Various accessories available as option on request

→ Further details: www.memmert.com/steriliser



Pass-through Ovens UF TS



- Interior and Exterior both made of Stainless Steel
 - 4 model sizes 161, 256, 449 & 749 litres
 - 1 model variant-TwinDisplay
 - Adjustable Forced Air Circulation
 - **Temperature range upto 250 °C**
 - All round heating on all 4 sides for excellent temperature homogeneity
 - Two doors provided one on front and one at the back
 - Can be equipped with lateral feed through accommodating deflection rollers for a quick throughput when manufacturing electronic components
 - **Internal data logger with capacity to store upto 10 years of data.**
 - Calibration certificate provided at +160 °C as standard
 - Various accessories available as option on request
- Further details: www.memmert.com/pass-through-oven



Vacuum Ovens VO



- Interior and Exterior both made of Stainless Steel
 - 3 different model sizes: 29, 49 & 101 litres
 - 1 model variant-TwinDisplay
 - **Temperature range up to +200 °C**
 - **Pressure range: 5 to 1100 mbar**
 - Digital electronic pressure control
 - Thermo shelves can be controlled separately (Multi-Level-Heating)
 - Anti - splinter VDA tested door construction
 - **Pump module with chemical resistant diaphragm pump as option**
 - Calibration certificate available at +160 °C, 20 mbar for each thermoshelf
 - **Internal data logger with capacity to store upto 10 years of data.**
 - Simple programming via ControlCOCKPIT or AtmoCONTROL software
 - Various accessories available as option on request
- Further details: www.memmert.com/vacuum-oven



Blanket Warmer IFbw



- 4 model sizes: 108, 256, 449 and 749 litres
 - 1 model variant-SingleDisplay
 - **Temperature range up to +80 °C**
 - All-round heating on all 4 sides for excellent temperature homogeneity
 - **Internal data logger with capacity to store upto 10 years of data.**
 - Forced air circulation
 - Door-open-recognition
 - Medical devices class I as per Directive 93/42/EEC
- Further details: www.memmert.com/blanket-warmer



Incubators

Microbiological testing, incubating, cultivating, in-vitro fertilising.

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

- Interior and Exterior both made of Stainless Steel
- 32 different models
- 8 model sizes from 32 litres to 749 litres
- 2 model variants: SingleDISPLAY and 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)
- Prewarming of fresh air
- Double Door (inside glass, outside stainless steel)
- **Internal data logger with capacity to store upto 10 years of data.**
- Activation of sterilisation routine via ControlCOCKPIT (INplus/ Ifplus)
- AtmoCONTROL software for programming and documenting
- Available as medical device class I
- Various accessories available as option on request

→ Further details: www.memmert.com/incubator



Peltier-cooled Incubators IPPeco

- Interior and Exterior both made of Stainless Steel
- Heating and cooling based on unique **PELTIER technology**
- 9 model sizes 32, 53,108, 256, 384,749,1060,1360, 2140
- 2 model variants: SingleDISPLAY and TwinDISPLAY
- **Temperature range: ambient -20 °C up to +70 °C**
- **Reduced power consumption - No Compressor**
- Hardly any vibration & noise
- No condensation inside chamber
- Ideal for processes and tests close to ambient temperature
- Calibration certificate at +10 °C and +37 °C
- **Internal data logger with capacity to store upto 10 years of data.**
- AtmoCOIMTROL software for programming and documenting
- Double Door (inside glass, outside stainless steel)
- Various accessories available as option on request
- Optional with LED light

→ Further details: www.memmert.com/peltier-cooled-incubator



Compressor-cooled Incubators ICP / ICPeco



- Interior and Exterior both made of Stainless Steel
- 5 different model sizes: 53, 108, 256, 449 & 749 litres
- 1 model variant: TwinDISPLAY
- **Temperature range -12 °C up to +60 °C**
- Air jacketed temperature control system
- Double door (Inside glass, outside stainless steel)
- Sophisticated ventilation technology ensuring good air circulation
- Intelligent defrosting system
- Calibration certificate at +10 °C and +37 °C
- **Internal data logger with capacity to store upto 10 years of data.**
- Various accessories available as option on request
- ICPeco: with natural and climate-friendly refrigerant CO₂ (R744), improved cooling capacity, nearly maintenance free|



→ Further details: www.memmert.com/compressor-cooled-incubator

CO₂ Incubator ICO



- Interior and Exterior both made of Stainless Steel
- 4 different model sizes: 56, 107, 156 & 241 litres
- 1 model variant: TwinDISPLAY
- Precise control of temperature, humidity, CO₂ & optional O₂ content
- **Temperature Range up to +50 °C**
- **Humidity range 40 to 97 % rh** (active and passive control available)
- 6 side heating incl. heated inner glass door short recovery times, avoiding condensation.
- Additional optional modules for feature expansion
- **Standard sterilisation programme 60 minutes at 180 °C without removing any sensor:**
- **Internal data logger with capacity to store upto 10 years of data.**
- Calibration facility for temperature, CO₂ and humidity on the controller
- Various accessories available as option on request



→ Further details : www.memmert.com/CO2-incubator

CO₂ Incubator ICOfed



- Interior and Exterior both made of Stainless Steel
- Classified as class IIa medical device
- 4 different model sizes: 56, 107, 156 & 241 litres
- 1 model variant: TwinDISPLAY
- Precise control of temperature, humidity, CO₂ & optional O₂ content
- **Temperature Range up to +50 °C**
- **Humidity range 40 to 97 % rh** (active and passive control available)
- 6 side heating incl. heated inner glass door short recovery times, avoiding condensation.
- Additional optional modules for feature expansion
- **Standard sterilisation programme 60 minutes at 180 °C without removing any sensor:**
- **Internal data logger with capacity to store upto 10 years of data.**
- Calibration facility for temperature, CO₂ and humidity on the controller
- Various accessories available as option on request



→ Further details : www.memmert.com/COa-incubator-icomed

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 pharmaceuticals, cosmetics or food industry as well as climate and temperature testing in the electronics, chemical or automotive production.

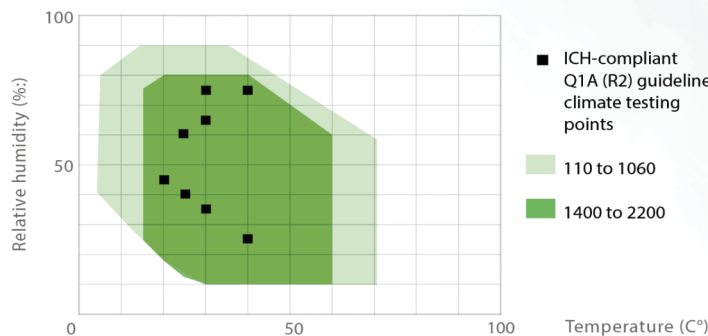
Constant Climate Chambers HPPeco

- Interior and Exterior both made of Stainless Steel
- Heating and cooling based on unique **PELTIER technology**
- 7 different model size: 108, 256, 384, 749, 1060, 1360, 2140 litres
- 1 model variant: TwinDISPLAY
- **Temperature range: ambient -20 °C up to +70 °C (up to model 1060)**
- **Temperature range: ambient -10 °C up to +60 °C (for model 1400 and 2200)**
- **Digitally controlled active humidification & dehumidification 10% to 90% rh**
- Double Door (inside glass, outside stainless steel)
- Vibration free as unique PELTIER technology is used
- **Option with LED light available for specific models**
- Capacitive type humidity sensor
- **Internal data logger with capacity to store upto 10 years of data.**
- AtmoCONTROL software for programming and documenting
- Various accessories available as option on request

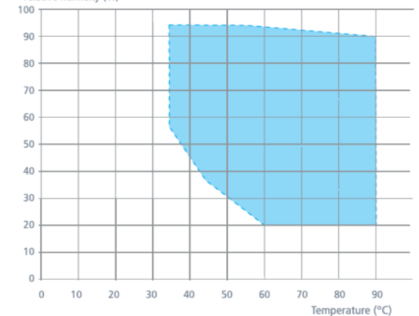
→ Further details : www.memmert.com/constant-climate-chamber



Temperature-humidity working range for HPPeco



Temperature-humidity working range for HCP



Humidity Chambers HCP

- Interior and Exterior both made of Stainless Steel
- 4 different model sizes: 56,107,156, 241 litres
- 1 model variant: TwinDISPLAY
- **Temp range ambient temp up to +90 °C**
- **Digitally controlled active humidification & dehumidification 20% to 95% rh**
- 6 side heating incl. heated inner glass door, short recovery times, avoiding condensation
- State of the art control technology
- Humidity limit control 'as standard
- Double door (inside glass, outside stainless steel)
- **Internal data logger with capacity to store upto 10 years of data.**
- AtmoCONTROL software on USB stick for programming
- Visual and acoustic alarm
- Various accessories available as option on request

→ Further details : www.memmert.com/humidity-chamber



Climate Chambers ICH / ICHeco

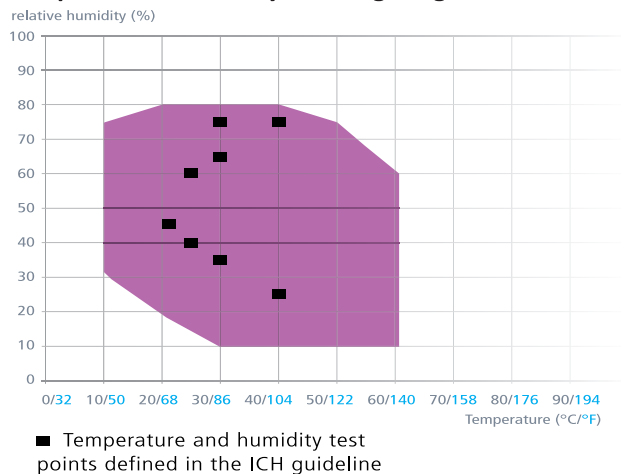


- Interior and Exterior both made of Stainless Steel
- 3 different model sizes: 108, 256 & 749 litres
- **Temperature range: -10 °C up to +60 °C (without humidity)**
- **Temperature range: +10 °C up to +60 °C (with humidity)**
- **Digitally controlled active humidification and dehumidification 10 to 80 % rh**
- 1 model variant -TwinDISPLAY
- Double door (inside glass, outside stainless steel)
- Air jacket thermostating system
- Capacitive type humidity sensor
- **Models ICH L with illumination unit to carry photo stability test in accordance with ICH Q1B 1.2 million Lux/h for visible light & 200 wh/m² for UV light.**
- Validatable software according to FDA 21 CFR Part 11 available as option
- Various accessories available as option on request
- ICHeco: with natural and climate-friendly refrigerant CO₂ (R744), improved cooling capacity, nearly maintenance free

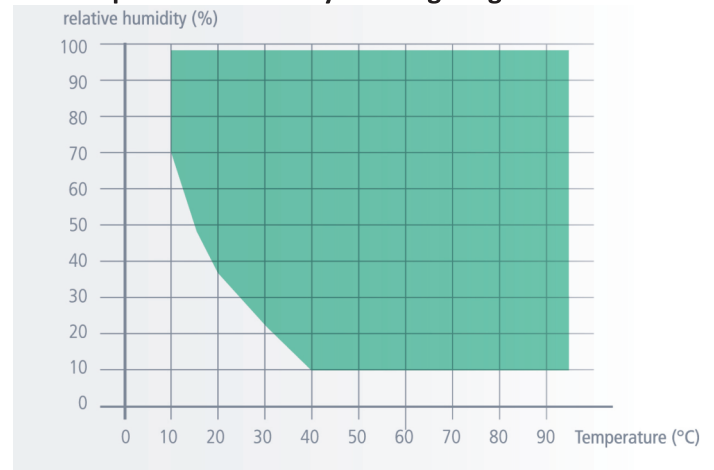


→ Further details : www.memmert.com/climate-chamber

Temperature-humidity working range for ICH



Temperature-humidity working range CTC



Environmental Test Chambers CTC / TTC



- Interior and Exterior both made of Stainless Steel
- 1 model of 256 litres capacity
- **Temperature range -42 °C to + 190 °C without humidity**
- **Humidity range 10 % to 98 % in temp range of +10 °C to + 95 °C**
- Average cooling speed 3 K/min (+180 °Cto -40 °C)
- Average heating speed 10 K/min (-40 °Cto +180 °C)
- Automatic defrosting system provided for the evaporator
- State of the art perfect class control technology
- Electronically controlled active humidification and dehumidification from 10-98 % rh
- Capacitive type humidity sensor
- Adjustable high performance air fan
- Various accessories available as option on request



→ Further details : www.memmert.com/environmental-test-chamber

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 and oilbaths pillars of the Memmert product range. Due to their unparalleled precision, they are perfectly suited for demanding applications in quality management and science.

Waterbath WTB

- 6 different model sizes 7.5,10,17.1,23.1,37.5 & 51 litres.
- Heating on bottom side
- **Temperature range at least 5°C above ambient up to +100°C (with cover depending on ambient pressure)**
- Flat and gable cover, bottom shelf reversible, shaking device available as accessory

→ Further details : www.memmert.com/waterbath



Important Conversion Chart

Pressure Conversion Chart			
mbar	mm/Hg	Torr	kPa
1	0.75	0.75	0.10
5	3.75	3.75	0.5
7.5	5.63	5.63	0.75
10	7.50	7.50	1.00
50	37.50	37.50	5.00
100	75.01	75.01	10.00
300	225.02	225.02	30.00
500	375.03	375.03	50.00
700	525.04	525.04	70.00
900	675.06	675.06	90.00
1000	750.06	750.06	100.00
1100	825.07	825.07	110.00
Length / Volume Conversion Chart			
1m = 100 cm = 1000 mm = 3.28 ft			
1ft = 12 Inches = 304.8 mm			
1 cu.m = 1000 Litres			
1 cu.ft = 28.316 Litres			

m360 - Memmert customized products

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.

Customer-specific adjustment of standard models:

- Feed-throughs and ducts
- Special fittings for special applications (e.g. weighing equipment)
- Limiting temperatures in the heating and cooling range
- Air exchange rates
- Relative humidity
- Light intensity and spectrum
- (Wall) Frames
- Telescopic trays
- Heavy duty appliances, heavy duty bottom grids
- Special bases, stacking frames
- Central or integrated water supply
- Special model sizes
- Appliances for integration in the production lines

What can we do for you? If you have questions concerning applications and appliances, our customer relations team will be pleased to help you. For further information please contact directly sales.india@memmert.com or use our product selector to find the right Memmert product for your application within seconds.

10 good reasons for a Memmert

- 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 Advance 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 programming and documentation.
- 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 LOCAL OFFICE

Memmert India Laboratory Equipment Pvt. Ltd.

Manas, 64, Lokmanya Colony, Near Utsav Hall, Paud Road,
Kothrud, Pune - 411038., Maharashtra, INDIA

Cell : +91 7720044027 / + 91 7517804348

E-Mail : sales.india@memmert.com

YOUR MEMMERT PARTNER