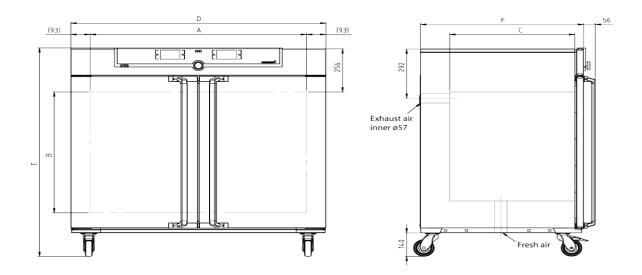
# Universal Oven UN450

Precise drying, heating, ageing, burn-in and hardening in research, science, industry and quality assurance.



The universally applicable lab oven U is Memmert's classic appliance for temperature control in science, research and material tests in industry. The technologically perfected masterpiece made of high-quality, hygienic, easy-to-clean stainless steel leaves nothing to be desired in terms of ventilation and control technology, overtemperature protection and precisely tuned heating technology.

On this page, you can find all the essential technical data on the universal Memmert lab oven. Our customer relations team will be pleased to help if you want further information. If you should require a customized special solution, please contact our technical specialists at <u>info@memmertusa.com</u>.



## Temperature

Working temperature range	at least 5 (UN/UNplus/UNm/UNmplus) or 10 (UF/UFplus/UFm/UFmplus) above ambient temperature to +300 °C
Setting resolution temperature	up to 99.9 °C: 0.1 / from 100 °C: 0.5
Setting temperature range	+20 to +300°C
Temperature sensor	1 Pt100 sensor DIN class A in 4-wire-circuit

# **Control technology**

Language setting	German, English, Spanish, French, Polish, Czech, Hungarian
ControlCOCKPIT	SingleDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-color display
Timer	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
Function SetpointWAIT	the process time does not start until the set temperature is reached
Calibration	three freely selectable temperature values
adjustable parameters	temperature (Celsius or Fahrenheit), air flap position, timer

#### Ventilation

Convection	natural convection
Fresh air	Admixture of pre-heated fresh air by electronically adjustable air flap
Vent	vent connection with restrictor flap

#### Communication

Documentation	settings stored in case of power failure
Data Logging	AtmoCONTROL software for reading out, managing and organizing the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand).
Safety	

Temperature control	adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature
Autodiagnostic system	for fault analysis

# Standard equipment

Internals	2 stainless steel grids, electropolished
Works calibration certificate	Calibration at +160°C
Door	fully insulated stainless steel doors with2-point locking (compression door lock)

## **Stainless steel interior**

Interior	easy-to-clean interior,made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides
Volume	449 I / 15.9 cu ft
Dimensions	w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 40.9 x 28.3 x 23.6 inches
Max. number of shelves	8
Max. loading of chamber	661 lbs
Max. loading per shelf	66 lbs

#### Textured stainless steel casing

Dimensions	w <sub>(D)</sub> x h <sub>(E)</sub> x d <sub>(F)</sub> : 48.2 x 49.1 x 30.9 inches (d +2.2" door handle)
Installation	on lockable castors
Housing	rear zinc-plated steel

#### **Electrical data**

Voltage	208V, 3 phases, w/o neutral, 50/60 Hz; approx. 4800 W / 13.4 A
Electrical load	

# **Ambient conditions**

Set Up	The distance between the wall and the rear of the appliance must be at least 6". The clearance from the ceiling must not be less than 8" and the side clearance from walls or nearby appliances must not be less than 2".
Altitude of installation	max. 2,000 m above sea level
Ambient temperature	+5 °C to +40 °C
Humidity rh	max. 80 %, non-condensing
Overvoltage category	II
Pollution degree	2

# Packing/shipping data

Transport information	The appliances must be transported upright
Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-RegNo.	DE 66812464
Dimensions approx incl. carton	w x h x d: 53 x 57 x 42 inches
Net weight	approx. 355 lbs
Gross weight carton	approx. 501 lbs

#### Standard units are safety-approved and bear the test marks

