

Product specification ^{KP}

Product: Bone fat extraction unit
Product No.: MA-1390

Bone fat-extraction unit with 1000mm process chamber

Type: MA-1390

Description

For the chemical-thermal degreasing of bone tissue with dichloromethane (methylene chloride) in the closed low-temperature-vapour-bone-extraction-aerosol-system at 41 ° C.
Applications: Anatomy and museum preparation. Process chamber diameter: 1000mm compact system for odorless bone fat extraction

Closed system towards the installation room with independent fan (100-800m³ / h) to dry the bones before (heated air) and after the degreasing process.

Design

- Stabilet stainless steel frame construction with fully integrated stainless steel security tub and stand rust
- hermetically sealed container for about 20 liters of degreasing medium content. With outlet and filler, suction system, sample reception basket 900 AD x 750 (H) mm. Heated grease drain plug. Process chamber lid with integrated "volcano grid" drop shower and Viton seal. Double-walled, cooled process chamber lid fully automatic opening for easy handling when opening and closing the lid during reduced speed in jog mode
- Containers for activated carbon filter and connection fittings to drain the filtered gases in the atmosphere, at inhouse exhaust system the container may remain unfilled.
- integrated fan ensures the gentle drying of bone specimen at about 40 ° C before the degreasing phase
- automatic control of functions: drying, degreasing, destialation etc. by electronic control with color touch screen
Display All functions can also be started manually!
- integrated steam condenser for DCM-saving operation.
- Integrated remote maintenance module for service and if necessary control of the unit.



Bone fat extraction uni with DCM recycling- and bone drying module. Degreasing chamber: 1000mm AD x 900mm (H)



Dichloromethane recover unit with condensator and reservoir

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Components

- a) Bone fat extraction unit made of stainless steel. Inside dimensions 950 (diameter) x 1200 (H) mm. Double encasement for indirect heating by means of heat transfer medium (water or glycerin). Heating 6.0 kW total heating performance. Degreasing medium: about 20 Lit.
Heated drain plug for bone fat laterally installed, Double-walled cover lid with Viton round seal for the completely hermetically tight closure of the chamber during the degreasing process.

The lid opens and closes fully automatically by pressing the command, so that the opening and closing can be easily performed by anybody .
Lid in double-walled design with connection for water cooling cover
Lid bottom side "volcano grid" stainless Steel drop shower to wet the pieces to be degreased bone samples
(Hooked, in small bags or lying on the grid insert)

Security check lid position. Only in case of a closed lid a signal at the lid will allow commissioning the unit. Other systems with container sizes of diameter 500 or 700mm also available!

- b) Recovering unit for degreasing agents incl. condenser and reservoir (recovery rate: about 80%)
- c) Programmable bone drying unit at about 40 ° C with optional activated carbon filter and fan
- d) Chilled water generator (option = highly recommended). With circulation pump for closed circuit.
Energy consumption: 550W; Current consumption: 2.6A;
Refrigerant: R 134 a; stepless temperature control of + 3 to +21 ° C.
Connection: 230V / 50Hz (power supply via control cabinet)

Housing and fittings

Total chamber surrounded by thermal insulation.
Outer shell made of thick walled stainless steel sheet, ground (K400). Splash-proof construction. Adjustable feet for even, levelled set up and installation.
Direct access to all valves, heating elements and other components.



Process basket with hook-in rack (detachable)



Heated output for bone fat lateral at the unit.
Easily accessible and effective

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Electrical components

- Thermal fuse (55 ° C) to prevent overheating
- Electronic thermal sensor, type PT 100 chamber temperature
- Electronic thermal sensor, type PT 100 heat transfer medium
- Monitoring of the cooling

Inserts for bone samples:

- Standard basket 900mm AD / 600mm tall with hook-in rack

Fittings

- Fill and drain support for the heat transfer medium
- drain valves
- Filler valves / drain valves
- Connections for filling
- Sight glass display for the heat transfer medium (water)

Control cabinet made of stainless steel:

- with touchscreen display for fully electronic control of the bone fat extraction unit
- Dust and splash-proof design with door seal.
- Main switch

Functions

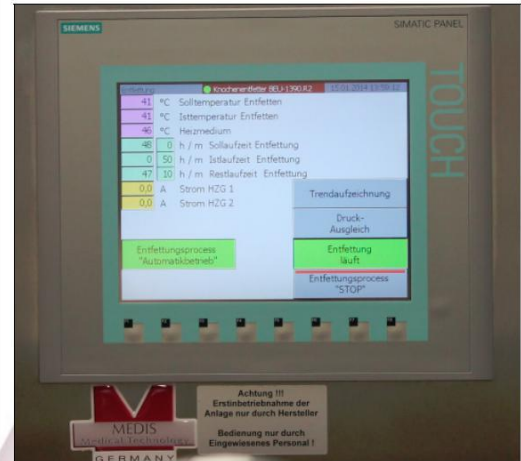
Digital display of: Heat carrier temperature, chamber temperature (Target and actual temperature)
Total runtime, process, time to maturity, expiration time
power consumption of the heaters.

Monitoring of: Temperature heat transfer medium, temperature
Degreasing chamber, function of the heating elements

Programs:

- Drying (drying of bone via integrated fan at about 40 ° C before degreasing).
- Degreasing
- Reverse distillation (for clean separation of bone fat, solvent, and process water).
- Airing of the boiler before opening the lid

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Color touchscreen display for operation of the unit, only the process lid must be tightened by hand



Python Constrictor Snake (albino terrarium) *



rib*

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Technical data

Operating voltage: 3Ph / N / PE / 400V / 50Hz
Connection load: 10 KW
Heating power: 6 kW
Operating current: max. 30A
Working temperature: +40°C up to + 55 ° C
Material: Stainless steel 1.4571 for all items, which are in contact with the medium

Dimensions

Outside dimensions: 2350 (W) x 1730 (D) x 2250 (H) mm
Usable space dimensions: 1000 (diam.) X 1200 (H) mm
Basket dimensions / hang up depth: 900 (AD) x 750 (H) mm

Other usable space volume / basket versions, inserts, sieves and special holders on request!

Weight: about 1350kg

The following items are supposed to be connected or provided on side:

- Electric power 3 x 400 V / 50 Hz / 25 A
- Cold water inlet: 1/2"
- Floor drainage
- Flexible exit air hose DN 65
- Network socket

We recommend a floor extraction with branch for a flexible exit air hose ID = 60 mm (about 500m³ exit air volume)

The exit air volume of the unit can be max. 800m³/h, however it is throttled factory according to the site requirements.

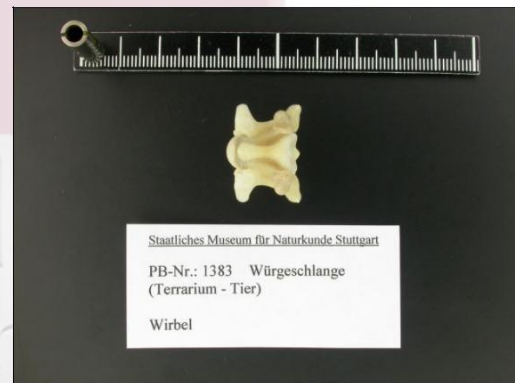
Country of Manufacture

Made in Germany by MEDIS MT GmbH in accordance with ISO 9001 and the valid EN standards and occupational health - and safety regulations.

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Skull*



Vertebra*

*
Results from the Governmental Museum of Natural History Stuttgart with the bone fat extraction unit MA-1370 (with kind approval).