

Product Specification

Product: Bone Fat Extraction Unit „BEU 100”
Cat.-No.: MA-1390

Bone Fat Extraction Unit “BEU 1390-100” with 1000mm process chamber diameter

Type „1390.2“

Description

Used for the chemical-thermal degreasing of bone tissue specimens by means of dichloromethane (methylene chloride). Closed low temperature aerosol system at 41 ° C.

Applications: museum preparation and anatomical studies

Process chamber diameter: 1000mm

Compact system for odourless bone fat extraction.

Closed system with extraction of purified exhaust gases into the atmosphere.

Compact unit in following configuration:

- sturdy stainless steel frame construction with fully integrated stainless steel tub for security
- hermetically sealed container for up to 20 liters degreasing fluid content. With outlet and filler, suction system, specimen process basket 900 OD x 750(H)mm. Heated grease drain pipe. Process chamber lid with integral pyramid drip sprinkler system. Viton seal gasket. A double cooled process chamber lid with fully automatic opening for easy handling when opening and closing
- containers with activated carbon filter and connection fittings to drain the filtered gases to the atmosphere
- built-in fan provides the gentle drying of bone specimens at 41 ° C prior to the degreasing phase
- automatic control of the functions: drying, degreasing, distillation etc. through electronic controls with touchscreen display. All functions also manually programmable!
- Integrated vapour-lock-device
- Integrated remote maintenance service module for VPN-tunnel

Features

- a) Process chamber made of stainless steel
Internal dimensions 950 (Dia.) x 1200 (H) mm
Double mantle for indirect heating.
Heat transfer medium: water or glycerin.
Heating 6,0 KW total heating capacity.
Degreasing chamber filling volume: 25 liters
Heated drain plug for bone fat attached to the side.
Double wall cap with special plastic press hermetic seal to completely close the chamber during the bone fat extraction process.
The lid opens and closes fully automatically, so the opening and closing can be easily performed by any person.
Cover in double-walled design with as circuit for water cooling (20 liters / min.). The underside of the lid is equipped with a



MA-1390 Process chamber



MA-1390 Dichlormethane (DCM) – recycling unit with condenser and storage tank of reusable DCM

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“pyramid drop shower” to wet the corresponding bone samples (mounted or laying on the grid).

Security check lid position. Only with the lid closed there is a signal by the safety switch on the chamber cover to allow opening of the lid.

Other systems with process chamber sizes from Dia. 500 or 700mm also available!

- b) Recycling system for degreasing medium (DCM) including condenser, vapour trap and double reservoir
- c) Programmable bone dryer **before** degreasing process resp. after the maceration or softening process. To be used like a heating cabinet.
- d) Programmable bone dryer at 41° C **after** degreasing process with integrated active carbon filter and fan
- e) Chilled water supply unit.
With circulation pump for closed loop operation.
Power consumption: 1 KW, current consumption: 2.6 A, refrigerant: R 134 a, infinitely variable temperature control from +3 to +21 ° C.
Power supply: 230V / 50Hz
- f) Remote maintenance service module (for VPN-tunnel technology)

Panelling and fittings

Entire chamber with 40mm thermal insulation surrounded. Outer shell made of stainless steel sheet – double polished. Spill resistant design. Adjustable feet for levelled installation. Direct access to all fittings, heaters and other components.

Electrical components

- thermal fuse (80 ° C) to prevent overheating
- electronic thermal sensor type PT 100 temperature chamber
- electronic thermal sensor type PT 100 heat transfer medium

Inserts for bone samples:

- Standard basket 900mm OD / 600mm high with positioning grid

Fittings:

- fill and drain support for the heat transfer medium
- drain valves
- filling valves / drain valves
- connections for filling
- sight glass display for the heat transfer fluid (water)

Stainless steel control cabinet:

- with touchscreen display for fully electronic control of the BDU – 100 unit
- dust- and splash proof design with door seal
- on / off switch

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Process basket with bone specimens (separated and identified in jute bags)



Process basket with rods for specimen hooks



Heated outlet for bone fat sideways for easy access and effectivity. A closed system reservoir is standard!

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Features:

Digital display of: heat transfer temperature, chamber temperature (set and actual temperature)
Overall term process, maturity, expiration, heating function.

Monitoring:

Temperature heat transfer medium. Temperature process chamber. Function heating elements.

Programmes:

- Drying (drying of the bone with the integrated fan at max. 41 ° C **before** the degreasing and after maceration resp. softening of specimens).
- Degreasing process
- Return distillation. (For a clear separation of bone fat solvents and process water).
- Drying (drying of the bone by means of the integrated fan at max. 41 ° C **after** the degreasing).

Specifications

Power supply: 3 Ph / N / PE / 400V / 50Hz
Power consumption: 10 KW
Heating power: 6 KW
Operating current max. 30A
Operating temperature: +40 ° C to + 55 ° C
Material: stainless steel EN / DIN 1.4571 for all product wetted parts

Dimensions

Exterior Overall dimensions: 2350 (w) x 1730 (D) x 2000 (H) mm
Chamber dimensions: 1000 (dia) x 1200 (H) mm

Process basket: 900(OD) x 750(H) mm

Other useful accessories like inserts, screens, and special holders on request!

Weight: 1150kg

Site provisions and connections:

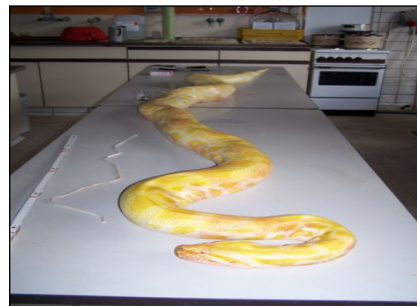
- power 3 x 400 V / 50 Hz / 25 A
- cold water inlet: 1/2 "
- cooling water outlet: 1/2 "
- sewage pipe DN 32
- exhaust pipe DN 65
- main connection (electric power)

Country of Origin

Manufactured by MEDIS MT GmbH in Germany acc. to EN and German norms and the health & safety regulations of the EC!

*Courtesy of State Museum for Natural History in Stuttgart / Germany.

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Albino (terrarium animal)*



Rib*



Head*



Vertebra*