

# Product specification

**Product: Bone Fat Extraction Unit BEU- 500**  
**Item no.: MA-1370**

## Bone fat extraction unit with 500 mm Process chamber

For chemical-thermal degreasing of bone tissue with dichloromethane (methylene chloride) in a closed low-temperature vapor degreasing aerosol system at 40 °C. Fields of application: Anatomy and preparation. Degreasing chamber diameter: 500mm Compact system for odorless bone degreasing. Closed system with exhaust of the cleaned exhaust gases into the atmosphere.

Type: MA-1370

### Design

- Sturdy stainless steel frame construction complete with integrated stainless steel safety trough and standing grate
- Hermetically sealed tank for approx. 20 liters of degreasing medium-content. With discharge and filling spouts, suction system, sample basket. 500 AD x 750(H) mm. Heated grease drain nozzle.
- Process chamber lid with integrated pyramid drip shower and Viton press seal. Double-walled, cooled process chamber lid with fully automatic opening for easy handling during opening and closing.
- integrated blower ensures gentle drying of the bone preparations at 40 °C before the degreasing phase
- automatic control of the functions: Drying, degreasing, distillation, etc. by electronic control with touchscreen display. All functions also manually programmable!
- integrated steam return lock
- integrated remote maintenance module based on "VPN tunnel"

### Components

Stainless steel bone degreasing chamber.  
Internal dimensions, 500(diam.) x 1200(H) mm.  
Double jacket for indirect heating by means of a heat transfer medium (water or glycerine).  
Heating 6,0 KW total heating power.  
Chamber volume degreasing medium: approx. 20 liters.  
A Heated drain port for bone grease attached  
Special plastic press seal for completely hermetic closure of the chamber during the degreasing process.

Page 1 of 4



Bone fat extraction system with DCM recovery and Bone degreasing module. Degreasing chamber: 500mm AD x 900mm(H)



MA-1370 with process chamber and DCM storage and recycling system

# Product specification

The lid is provided with a counterbalance so that opening and closing can be easily performed by any person. Lid in double-walled design with cooling. Bottom of lid with drip shower for wetting the bone samples to be degreased (suspended or lying on the grid insert). Inner container Incl. a lid protection circuit with magnetic interlock (without the release by the safety switch on the vessel lid, the unit cannot be put into operation!

b)  
Recovery plant for degreasing agent incl. condenser

and storage tank

c)  
Programmable bone drying plant at approx. 40 °C

d)  
Cold water generator for lid cooling.  
With circulating pump for closed circuit.  
Infinitely variable temperature control from +3 to +21 °C.  
Energy consumption: 550W; current consumption: 2.6 A; refrigerant: R 134 a; stepless temperature control from +3 to +21 °C.  
Connection: 230V / 50Hz (power supply through control cabinet).

## Paneling and fittings

The entire chamber is surrounded with 40 mm thermal insulation. Outer shell made of stainless-steel sheet, ground. Splash-proof construction. Adjustable feet for level, leveled placement and installation. Direct access to all fittings, heating elements and other components.

## Electrical components

- Thermo-fuse (80°C) against overheating
- electronic thermo-sensors, type PT 100 chamber temperature
- Electronic thermo-sensors, type PT 100 Heat transfer medium

## Inserts for bone specimens

- Process basket with suspension grid

## Fittings

- Filler neck for the heat transfer medium (1/2")
- Drain valves
- Filling valves / drain valves / overflow valves
- Connections for automatic filling
- Sight glass indicator for the heat transfer medium (water)



Heated outlet for bone fat on the front of the unit. Easily accessible and effective



Process basket with suspension grid

# Product specification

## Stainless steel control cabinet

- with color touch screen display for fully electronic control of the bone extraction system
- dust- and splash-proof design with door seal
- electronic temperature controller with digital display
- main switch

## Functions

Digital display of: Heat transfer fluid temperature, cooling circuit Temperature, chamber temperature.

Monitoring of: Temperature heat transfer medium, Temperature degreasing chamber, function radiator

## Programs

- Drying (drying of the bones by integrated fan at approx. 40°C before degreasing).
- Degreasing
- Back distillation (for clean separation of bone fat, solvent, and process water).
- Ventilation of the vessel before opening the lid.

## Technical data

Operating voltage: 3 Ph / N / PE / 400 V / 50 Hz  
Connected load: 10 KW

Working temperature: +40 °C to + 55 °C  
Material: stainless steel EN / DIN 1.4571 for all product touched parts

- Network socket

## Dimensions

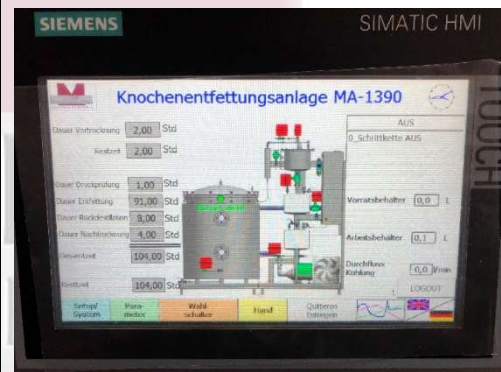
Overall external dimensions: 2000(W) x 1100(D) x 2200(H)mm  
Usable space dimensions: 480 (diam.) x 750(H)mm  
Basket dimensions / hanging depth: 480 (AD) x 750(H)mm

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

Weight: approx. 860kg



Stainless steel control cabinet



Color touch screen display for operating of the system, only the process cover must be tightened by hand.

# Product specification

## The customer must connect or provide the equipment:

- Power current 3 x 400 V / 50 Hz / 25 A
- Inlet cold water: 1/2"
- drain cooling water: 1/2"
- Waste water spigot DN 32
- exhaust air spigot DN 65
- Electrical main connection (power current)

We recommend a floor exhaust with branch for a flexible exhaust air hose ID= 60mm (approx.500m<sup>3</sup> exhaust air volume)

The exhaust air volume of the unit can be max.800m<sup>3</sup>/h, however, it is throttled in the factory according to the on-site throttled.



## Country of Origin

Manufactured in Germany by MEDIS MT GmbH according to ISO 9001 and the valid EN standards as well as occupational safety and safety regulations.

Page 4 of 4