

**Product: Bone Fat Extraction Unit „BEU 1370-50”**  
**Cat.-No.: MA-1370-50**

## Bone Fat Extraction Unit „ BEU 1370-50“

**For use in anatomy and preparation for chemical thermal degreasing of bone specimens by use of methylene chloride (dichlormethane) in a closed low temperature vapour degreasing system at 41°C**

**Applications: anatomy and museum bone preparation**

**Type: 1370.2**

### Description

Compact unit for odourless bone fat extraction with Solvent recycling And an integrated extraction ventilation of hazardous fumes via a duct system ready for a connection to the outside of the workspace or building

Compact unit in following configuration:

- durable stainless steel frame construction complete with integrated stainless steel safety tray for collection of fluids and step-on grate
- hermetical sealed vessel with appr. 200 litre volume and drain stud, extraction system, specimen basket, grease collection plate and special closing mechanism with viton seal ring. Double-wall lid system with cooling system with counterbalancing for easy opening / closing.
- A container is optional ready for activated carbon filter pellets with a duct stud for leading cleaned fumes into the atmosphere
- integrated fan system for removal of gases and dry of bones
- automatic control system for functions: degreasing, distillation, drying (located in integrated control box)
- digital temperature display (set /actual)
- electrical heater and cooling
- Integrated vapour-lock-device
- Integrated remote maintenance service model (for VPN-tunnel)

### Features

- a) Bone fat extraction chamber (stainless steel)  
Inner dimensions: 480 (Dia.) x 750(H) mm  
Double bottom construction for indirect heating by means of heating medium (water or glycerine).  
Heater 3,0 KW total heating capacity.  
Double wall lid with special viton seal ring for totally hermetical sealing during degreasing process



BDU-1370-50 Bone Fat Extraction Unit with DCM-recycling and bone drying modules  
Degreasing chamber size:  
500mm AD x 900mm(H)



BDU 1370-50 with process chamber with patented screen shower (left), DCM recycling system (middle) and dryer (below right)



Process basket with rods for specimen hooks

The lid is supplied with a weight neutralisation system so that the opening / closing procedure is done easily by any person. The lid is never hot as it is cooled and the operating temperature does not exceed the value of 55°C. The lid has a double-wall with connectors for the water cooling system (tap water or closed cooling circuit). The bottom of the lid is supplied with a so called „drop shower“, which allows the condensed degreasing medium to run over the bone specimens. The bone specimens are either placed in the stainless steel basket or hang onto a special cross bar in the vapour of the degreasing fluid.

The inside of the degreasing vessel is pickled and brushed. The lid carries a safety device which allows the heating of the system only when the lid is fully closed!

Degreasing vessels in other sizes are available on request!

- b) Recycling system for degreasing medium (DCM) including condenser, vapour trap and double reservoir (recovery rate: 85%)
- 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.
- 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 (with VPN tunnel only)

## Panelling and fittings

Degreasing vessel totally insulated with 40mm thermo-material  
Outer insulation made of stainless steel – double polished  
Spill water protected design. Adjustable feet for precise and plane levelling and installation (option)  
Direct access to all fittings, heaters and further components

## Electric components

- thermo fuse (55°C). Overheating protection
- electronic thermo sensor, type PT 100
- thermometer for control of heating-temperature
- level indicator for heating medium (water)



Dichlormethane (DCM) – Recycling Unit with condenser and storage tank of reusable DCM.

Top right: empty container for optional activated carbon and connection stud for house intern exhaust system.



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



Heated outlet for bone grease sideways for easy access and effectivity



# Product Specification JD

## Fittings

- automatic electr. operated ball valves
- filling stud for the heater medium (1/2" hose)
- manual drain valves
- filling valves / drain valves / overflow valves

Control box made of stainless steel for the control of the bone fat extraction unit. Dust-free and splash water protected design with door seal.

Inclusive:

Electronical temperature controller with digital touch-screen display.  
Thermo fuses, protectors and other safety components.

## Functions

- Digital display of: temp. of heating medium, temp. of cooling circuit, temp. of process chamber. Time
- Control of: over temperature of heater medium.
- Function knobs: on / off-Switch. Degreasing. Distillation. (for clean separation of bone fat, degreasing medium and process water). Drying (drying of bones at room temperature or hot air by integrated drying system). Process interruption message for all functions.

## Technical Data

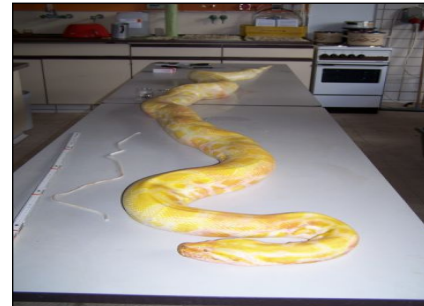
Voltage: 3Ph / N / PE / 400V / 50Hz  
Power: 6 KW  
Current: max. 20A  
Operating temperature: adjustable from +41°C until + 55°C  
Material of all parts: stainless steel EN/DIN 1.4571 (AISI 316) for all parts in contact with the degreasing fluid

Degreasing medium: Methylene Chloride „Osteo“  
Exterior overall dimensions: 2000 (w) x 1540 (D) x 1800 (H) mm  
Inner chamber dimensions: 480 (dia.) x 750 (H)mm

Weight: appr. 810kgs  
Equivalent constructive changes and product modifications is reserved.

## Country of Origin

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



Albino (terrarium animal)



Rib



Head



Vertebra