

**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 (closed system) with integrated extraction of hazardous fumes via a filter system into the atmosphere.

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 tight vessel with appr. 200 litre volume and Drain stud, extraction system, specimen basket, grease collection plate and special closing mechanism with 2 viton seal rings. Double-wall lid system with cooling system with hydr. dampers for easy opening / closing.
- container with alu-oxide filter pellets and duct stud for leading cleaned fumes into the atmosphere
- integrated fan system for removal of gases
- automatic control system for functions: degreasing, distillation, drying (located in integrated control box)
- digital temperature display (set /actual)
- electrical heater 3,0 Kw

### 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 rings (2) 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 and a gas pressure shock absorber, 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 DCM filling volume is appr. 15 Liter / min. 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 switch 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 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 (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



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



Heated outlet for bone grease sideways  
for easy access and effectivity

## Fittings

- 3 automatic electr. operated ball valves
- 2 automatic solenoid valves
- filling stud for the heater medium
- 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 display.  
Control lamps for all functions as well as thermo fuses, protectors and other safety components.

## Functions

- Digital display of: temp. of heating medium, temp. of cooling circuit, temp. of process chamber.
- Control of: overtemperature 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 by integrated drying system).  
Process interruption lamp for all of the listed functions.

## Technical Data

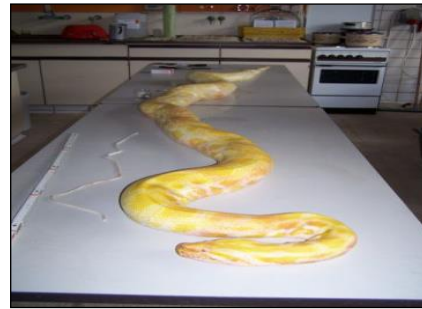
- Voltage: 3Ph / N / PE / 400V / 50Hz  
Power: 6 KW  
Current: max. 20A  
Operating temperature: adjustable from +41°C until + 55°C  
Material of all parts: stainless steel EN/DIN 1.4571 (AISI 316) for all parts in contact with the degreasing fluid  
Degreasing medium: Methylene chloride „Osteo“  
Exterior overall dimensions: 2000 (w) x 1540 (D) x 1800 (H) mm  
Inner chamber dimensions: 480 (dia.) x 750 (H)mm

Weight: appr. 810kgs

## 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.



Albino (terrarium animal)\*



Rib\*



Head\*



Vertebra\*