

## Product: Central Formalin Supply and Disposal System 600 Cat.-No.: MA-3000

**Fully central automatic formalin supply and disposal system for up to 5 tap stations. For use in pathology and anatomy**

**Type: 3000**

### Description

The system described here is used for the central supply of formalin for especially larger institutes of pathology and anatomy.

The formalin plant can be connected up to 5 taps in the grossing lab and other formalin handling areas.

Ideally, the system with the two tanks for fresh and used formalin is placed in a room where the filling and emptying can be performed easily. The tanks (from 600 up to 1500 litres capacity) are available on a security grid container which is able to hold the total amount of the specific container.

Since formalin smells strongly, causes breathing problems and is cancerous, the room must be well ventilated.

Both containers are equipped with a protective steel surrounded frame. Basically, the system offered is a closed system. Fumes cannot enter the room during because the filling and exchange process is done by a professional supply / disposal service.

The entire system is designed according to § 19 WHG!

### Technical Description of Components

Storage tanks made of plastic

Fully assembled with metal cage for safety

Content storage tanks: 600 liters

Level sensor for tank 1 "fresh formalin". Installation inside threaded lid  
conductive 3-rod electrode for "minimum" and "absolute minimum" level signalling

Level sensor for tank 2 "old formalin". Installation inside threaded lid  
conductive 2 electrode for "Max" level signalling

Diaphragm metering and conveying pump

Pump output: 0 - 150 l / h / pressure: 8 bar

Connections: G  $\frac{3}{4}$

Electrical connection: 230/400V / Power: 0.37 kW / El. security: IP 55

All wetted parts are resistant to formalin.

Suction side piping in stainless steel



MA-3000 Central Formalin supply and disposal system with 600 litre containers for fresh and waste formalin



Volume and pressure control system for MA-3000

- 2 x shut-off valves in PVC / FPM (1 x for rinsing)
  - 1 x stainless steel discharge piping
  - 2 x shut-off valves (ball valve) made of PVC / FPM  
(1 x for emptying and soft start)
  - 1 x laboratory dispensing nozzle in stainless steel for filling of containers with integr. flow limiter and backflow preventer, operated by foot switch with electronic metering function (0 to max.). According to DIN 12899, part 2. Filling nozzle is positioned in the extracted area!
  - 1 x overflow valve  
Material: PVC / FPM / PTFE  
Set pressure: 8 bar connection: G1 outside
  - 1 x hose connector for return flow to tank, 20mm OD. Material: PVC
  - 1 x pulsation dampener (accumulator)  
Volume: 10 litres, P max: 10 bar
  - 1 x integrated pressure switch  
Setting range: 1 - 10bar, with adj. hysteresis
  - 1 x filling unit made of PVC / FPM
  - 1 x connection for secondary pressure line
  - 1 x control cabinet for wall mounting (near tanks) for automatic control of the pump, depending on the pressure switch and the display of the tank fill level.
- Components of the control cabinet:  
Main switch, control transformer, three-phase switching for booster pump, control lamps: operation / malfunction, "Manual - 0 - Automatic" switch, relay electrodes for level control, indicator light for the level inside tank, pump timer with 15 variables. Audible alarm with acknowledgment button.

## Specifications

Power supply: 3 x 400V, 50Hz with N and PE  
Protection: IP 54  
Power consumption: 0.5 kW  
Dimensions system with 2 x 600l tanks: 2100 (W) x1100 (D) x1200 (H)  
Weight appr.: 310kgs

To be provided by the customer at site:

- power supply from the manifold to the tank position and control cabinet!
- formalin supply and disposal piping

## Country of Origin

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



Manual formalin tap for fresh formalin mounted to a MEDIS MT Tissue Grossing Station MA-0032.  
Below left: waste formalin drain into 600 litres



Control cabinet for MA-3000