

Pathological anatomy - Forensic medicine  
Series PM-TN and PM-BT



# OUR COMMITMENT

## in the field of pathological anatomy and forensic medicine



**Forensic medicine** deals with the link between medicine and the law; it is part of public medicine alongside social medicine. It is divided into legal medicine, which deals with the evolution of law, the interpretation of regulations and their applicability from a medical point of view and in forensic medicine, which uses medicine for the purpose of ascertaining individual cases of judicial interest.

**Pathological anatomy**, on the other hand, is a specialised branch of medicine that studies human diseases by means of macroscopic organ examination or microscopic tissue and cell examination. In the clinical field, pathological anatomy plays a key role in planning any medical or surgical therapies by providing diagnoses on tissues or cells taken from patients with a suspected disease. The anatomopathological investigation enables to distinguish between normal tissues, inflammation, benign and malignant tumours and other pathological conditions. The product line that will be described is used purely in the postmortem examination (autopsy).

The **autopsy** is a post mortem investigation, i.e. performed on the corpse, the purpose of which is to clarify the cause of death or to understand the course of a disease. This practice is a relatively infrequent activity in the anatomopathological routine and is especially employed following a death for unexplained reasons or when the physician or authority explicitly requests it. Also practiced when there is a suspicion of infectious disease diffusion. The autopsy practice also represents a crucial inspection of the medical-assistance quality of a hospital.

**Angelantoni Life Science** offers a wide range of products, intended for the fields of pathological anatomy and forensic medicine, which includes prefabricated mortuaries of different capacities and temperatures. The line is provided with other additional items, specifically trolleys for the transport of bodies and autopsy tables in different executions to meet every customer's need.

## SERIES PM-TN

The mortuary chambers series **PM-TN** works in a temperature range from **0° C** to **+10° C**, to ensure **middle term** storage.

## COLD STORAGE ROOMS LINE

SHORT-TERM CORPSE STORAGE



The **PM-TN** line is made with modular prefabricated panels in galvanised and pre-painted white steel sheet metal with grey service doors.

The inner floor has the same characteristics as the panels but with reinforced AISI 304 stainless steel cladding, equipped with condensation water drainage with siphon drain.

The service doors (70x80 cm each) for the removal of the stretcher, and equipped with external key lock are located on the front of the machine.

The number of doors outlines the configuration of the different chambers, which will be illustrated below.

Each door is fitted with an anti-condensation system through electric heaters installed on the frame and odourless rubber gaskets.

The stretcher is entirely made of AISI 304 stainless steel, sliding on 2 telescopic rails also made of stainless steel, with rubber wheels for easy and silent movement.

Insulation is obtained with the "sandwich technique" using high-density injected polyurethane foam with a thickness of 80 mm.

The cooling system is managed by a fully sealed compressor located in the upper part of the chambers equipped with air condensing units.

Chambers with double cooling system are available on request.

The cooling circuit works with R134a refrigerant.

Equipped with internal evaporator with forced evaporation, with electric, automatic and/or manual defrosting system, condensate water is automatically ejected through a PVC pipe outside the chamber, conveyed to the siphoned drain placed on the floor of the chamber.



# SERIES PM-BT

The mortuary chambers series **PM-BT** works in a temperature range from **-10° C** to **-20° C**, to ensure **long term** storage.

## MORTUARY FREEZERS LINE

LONG-TERM CORPSE STORAGE



The **PM-BT** line is made with modular prefabricated panels in galvanised and pre-painted white steel sheet metal with grey service doors.

The inner floor has the same characteristics as the panels but with reinforced AISI 304 stainless steel cladding, equipped with condensation water drainage with siphon drain.

The service doors (70x80 cm each) for the removal of the stretcher, and equipped with external key lock are located on the front of the machine.

The number of doors outlines the configuration of the different chambers, which will be illustrated below.

Each door is fitted with an anti-condensation system through electric heaters installed on the frame and odourless rubber gaskets.

The stretcher is entirely made of AISI 304 stainless steel, sliding on 2 telescopic rails also made of stainless steel, with rubber wheels for easy and silent movement.

Insulation is obtained with the "sandwich technique" using high-density injected polyurethane foam with a thickness of 80 mm.

The cooling system is managed by a fully sealed compressor located in the upper part of the chambers equipped with air condensing units.

Chambers with double cooling system are available on request.

The cooling circuit works with R452A refrigerant.

Equipped with internal evaporator with forced evaporation, with electric, automatic and/or manual defrosting system, condensate water is automatically ejected through a PVC pipe outside the chamber, conveyed to the siphoned drain placed on the floor of the chamber.



### ACP7 ELECTRONIC CONTROLLER

Both the PM -TN and PM-BT lines are equipped with an **ACP7 electronic controller** capable of ensuring high performance, maximum safety and ease of use. The controller comes with a simple and functional interface that allows you to adjust activities and settings. Access to the parameters is password-protected with 3 privilege levels: user, service and administrator. The 7" touch screen version has ideograms for intuitive navigation and multilingual indications, with colour differences to immediately display warning and alarm signals (including audible ones).

# AVAILABLE CONFIGURATIONS

Various mortuary chamber line configurations are available. Extremely intuitive representative diagrams associated to their nomenclature are illustrated.

PM 1201



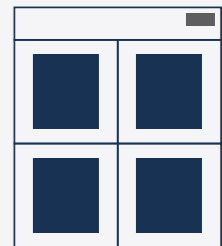
PM 2102



PM 2103



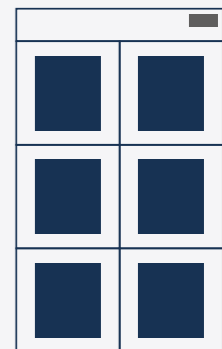
PM 2006



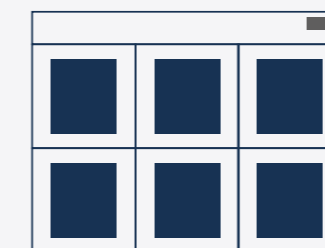
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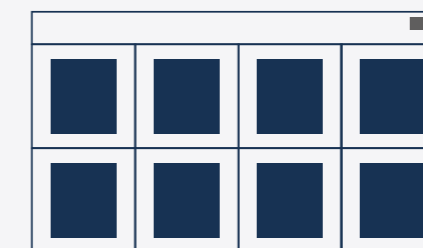
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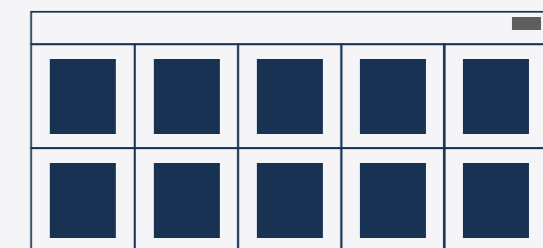
PM 2010



PM 2014



PM 2020



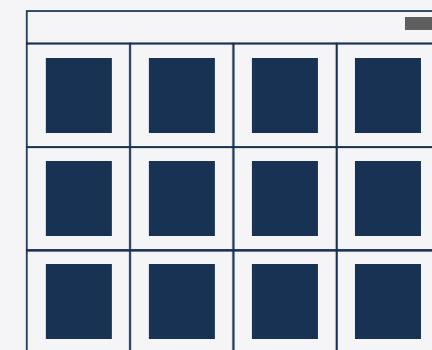
#### Versions Capacity

- 1 door
- 2 doors
- 2 doors (2 x H)
- 3 doors (3 x H)
- 4 doors (2 x H)
- 6 doors (2 x H)
- 6 doors (3 x H)
- 8 doors (2 x H)
- 9 doors (3 x H)
- 10 doors (2 x H)\*
- 12 doors (3 x H)

PM 2413



PM 2416



\* Available on request. For more information contact the technical office.

# ACCESSORIES THAT COMPLETE THE SERIES

## / ACCESSORIES OF THE PM-TN AND PM-BT LINES

- WINDOW 400X400MM INSTALLED ON THE DOOR TRIPLE GLASS
- 70X180H NET CLEARANCE SERVICE SIDE DOOR
- INTERNAL AND EXTERNAL STAINLESS STEEL EXECUTION
- TEMPERATURE CHART RECORDER
- CHART RECORDER KIT (100 DIAGRAMS AND 2 PENS)

## / TROLLEYS AND LIFTS (CTS MODELS)

- **CTS1** - SS hydraulic lifting trolley for movement of longitudinal bodies. Made of powder-coated steel, adjustable in height by pedal with two hydraulic pistons. Equipped with rollers for sliding the stretcher also with manual locking system, equipped with 4 wheels, two of which are fixed and two are pivoting.
- **CTS2** - it has the same characteristics as the CTS1 but for loading the side bodies.
- **CTS1-E** - Electric lifting trolley for moving bodies by length. Made of painted galvanised steel. The main frame includes a battery powered electro-hydraulic lifting system. The battery can be recharged by its charger (230 VAC, 50Hz). Vertical adjustment is controlled by an up/down pedal with key switch to prevent unauthorised operation which also functions as an emergency switch. Equipped with four solid rubber steering wheels (two of which can be locked).
- **CTC2** - Trolley complete with stretcher and outer cover.
- **CTB1** - Trolley for 1 stretcher.
- **CTB2** - Trolley for 2 stretchers.

## / EG MODELS

### • EG 101 LIFTABLE AND SWIVELLING

Variable height worktop with a maximum stroke of 180 mm. Rotation capacity of 90° in both directions, for a total of 180°. The lifting and rotation of the top are adjusted by means of a hydraulic control unit incorporated in the central column, fitted with a dc electric motor with 24 V power supply that ensures low noise level. Electrical control of the movement (24 V for operator safety) by means of a manipulator with four directions (high /low /left /right) placed on the front in an easy-to-operate position.

### • EG 102 LIFTABLE

Variable height worktop with a maximum stroke of 180 mm. The worktop movement, only for lifting or lowering, is adjusted by means of a hydraulic control unit with the same characteristics as the previous model.

### • EG 103 FIXED

Worktop with fixed height at 850 mm.

### • EG 104 SIMPLE

Fixed top mm 750\*2600\*850 h, complete with 500\*350\*200 mm tank; tank and top drains connected to a single central manifold; base consisting of a sturdy stainless steel support frame and four support feet.

## / MODEL BA 91

### • FIXED DISSECTION TABLE

- All made of AISI 304 stainless steel with porosity-free welding, divided into two tank sections, each 50x40x20H cm where one is perforated to facilitate the drainage of liquids and aspiration of formalin vapour, lower shaped area for collecting liquids, inclined towards the drains.

## / ACCESSORIES FOR AUTOPSY TABLES

- GROUND HEAT SINK
- AC FILTER FOR SUCTION SYSTEM ON AUTOPSY TABLE
- ORGAN HOLDER TABLE

## / DISPLAY TABLE FOR BODIES

- **TES 1** - Display table for bodies
- **TES 2** - Display table for bodies, with wheels



TES 2



CTB 1



EG

## TECHNICAL SPECIFICATIONS - TN LINE

MODEL		PM 1201/TN- 1S	PM 2003/TN- 2S	PM 2102/TN- 2S	PM 2405/TN- 3S	PM 2006/TN- 4S
Sales code		10472	10474	10490	10482	10476
Corpses stored	No.	1	2	2	3	4
Capacity (for each stretcher)	Kg	Up to 100 kg (on request up to 200 kg)				
Outer dimensions	mm	900(L)x2260(P)x1360(H)	900(L)x2260(P)x2030(H)	2360(L)x980(P)x2410(H)	900(L)x2330(P)x2730(H)	1800(L)x2260(P)x2030(H)
Internal dimensions	mm	740(L)x2100(P)x1200(H)	740(L)x2100(P)x1870(H)	2200(L)x740(P)x1900(H)	740(L)x2100(P)x1570(H)	1800(L)x2260(P)x2030(H)
Net weight	Kg	245	335	400	440	550
Energy consumption	KW/h	0,57	0,6	0,57	0,65	0,65
Supply voltage		230V/50				
Maximum absorbed power	A	5	5,5	5	6	6,5
Noise level	Db(A)	<55	<56	<56	<56	<55
Thermal dissipation	Kcal/h	490	520	490	600	520
Cooling Gas		R134a				
Working temperature	°C	0/+10				
Safety class		CLASS I				
Alarms		Acoustic and optical				
In the event of a power failure		Compressors OFF (the controller is powered for 36 hours from a battery backup)				
MODEL		PM 2010/TN- 6S	PM 2407/TN- 6S	PM 2014/TN- 8S	PM 2413/TN- 9S	PM 2416/TN- 12S
Sales code		10478	10484	10480	10486	10488
Corpses stored	No.	6	2	8	9	12
Capacity (for each stretcher)	Kg	Up to 100 kg (on request up to 200 kg)				
Outer dimensions	mm	2700(L)x2260(P)x2030(H)	1800(L)x2330(P)x2730(H)	3600(L)x2260(P)x2150(H)	2700(L)x2260(P)x2850(H)	3600(L)x2260(P)x2900(H)
Internal dimensions	mm	2540(L)x2100(P)x1870(H)	1640(L)x2100(P)x2570(H)	3440(L)x2100(P)x1870(H)	2540(L)x2100(P)x2570(H)	3440(L)x2100(P)x2570(H)
Net weight	Kg	716	688	960	983	1260
Energy consumption	KW/h	0,8	0,8	1	1	2,75
Supply voltage		230V/50				
Maximum absorbed power	A	7	7	4	4	5
Noise level	Db(A)	<55	<56	<55	<55	<55
Thermal dissipation	Kcal/h	690	690	900	900	1200
Cooling Gas		R134a				
Working temperature	°C	0/+10				
Safety class		CLASS I				
Alarms		Acoustic and optical				
In the event of a power failure		Compressors OFF (the controller is powered for 36 hours from a battery backup)				

## TECHNICAL SPECIFICATIONS - BT LINE

MODEL		PM 1201/BT- 1S	PM 2003/BT- 2S	PM 2102/BT- 2S	PM 2405/BT- 3S	PM 2006/BT- 4S
Sales code		10473	10475	10491	10483	10477
Corpses stored	No.	1	2	2	3	4
Capacity (for each stretcher)	Kg	Up to 100 kg (on request up to 200 kg)				
Outer dimensions	mm	900(L)x2260(P)x1360(H)	900(L)x2260(P)x2030(H)	2360(L)x980(P)x2410(H)	900(L)x2330(P)x2730(H)	1800(L)x2260(P)x2030(H)
Internal dimensions	mm	740(L)x2100(P)x1200(H)	740(L)x2100(P)x1870(H)	2200(L)x740(P)x1900(H)	740(L)x2100(P)x1570(H)	1800(L)x2260(P)x2030(H)
Net weight	Kg	245	335	400	440	550
Energy consumption	KW/h	0,57	0,6	0,57	0,65	0,65
Supply voltage		230V/50				
Maximum absorbed power	A	5	5,5	5	6	6,5
Noise level	Db(A)	<55	<56	<56	<56	<55
Thermal dissipation		490	520	490	600	520
Cooling Gas		R452A				
Working temperature	°C	-10°C / -20°C				
Safety class		CLASS I				
Alarms		Acoustic and optical				
In the event of a power failure		Compressors OFF (the controller is powered for 36 hours from a battery backup)				
MODEL		PM 2010/BT- 6S	PM 2407/BT- 6S	PM 2014/BT- 8S	PM 2413/BT- 9S	PM 2416/BT- 12S
Sales code		10479	10485	10491	10487	10489
Corpses stored	No.	6	6	2	9	12
Capacity (for each stretcher)	Kg	Up to 100 kg (on request up to 200 kg)				
Outer dimensions	mm	2700(L)x2260(P)x2030(H)	1800(L)x2330(P)x2730(H)	3600(L)x2260(P)x2150(H)	2700(L)x2260(P)x2850(H)	3600(L)x2260(P)x2900(H)
Internal dimensions	mm	2540(L)x2100(P)x1870(H)	1640(L)x2100(P)x2570(H)	3440(L)x2100(P)x1870(H)	2540(L)x2100(P)x2570(H)	3440(L)x2100(P)x2570(H)
Net weight	Kg	716	688	960	983	1260
Energy consumption	KW/h	0,8	0,8	1	1	2,75
Supply voltage		230V/50				
Maximum absorbed power	A	7	7	4	4	5
Noise level	Db(A)	<55	<56	<55	<55	<55
Thermal dissipation		690	690	900	900	1200
Cooling Gas		R452A				
Working temperature	°C	-10°C / -20°C				
Safety class		CLASS I				
Alarms		Acoustic and optical				
In the event of a power failure		Compressors OFF (the controller is powered for 36 hours from a battery backup)				

# ALS

SERVING  
LIFE SCIENTISTS

AS

AG

STERIL

AIC

**Angelantoni Life Science (ALS)** is a world leader in the supply of refrigeration equipment and in the design of technological solutions in the biomedical sector, constantly engaged in innovation and safety, both biological and environmental.

**AS** brand provides for a wide range of refrigerators cabinets, ultra-low temperature freezers, blood banks refrigerators, freezers to preserve blood components, mortuary prefabricated rooms, stability tests and plant growth chambers, refrigerators and freezers for COVID-19 vaccines.

**AG** brand supplies standardized brine chilling units for pharmaceutical and chemical applications or pharma process, manual or automated solutions allow to reach  $-70^{\circ}\text{C}$  for special walk-in chambers and shelters to storage vaccines or other farmaceutical products.

**STERIL** brand provides for equipment able to meet any product protection need, as well as the product, operator and environment safety requirements, for any level of concentration and for any kind of substance (horizontal and vertical laminar flow cabinets, biohazard and cytostatic safety cabinets, laminar flow pass boxes with UV, sanitized hydrogen peroxide pass boxes, weighing, sampling and dispensing cabinets and isolators designed in accordance with the latest international standards (GMP).

**AIC** brand provides Waster, and an automated treatment system for hospital and contaminated waste.



Angelantoni Plants



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TECHNOLOGY FOR LIFE