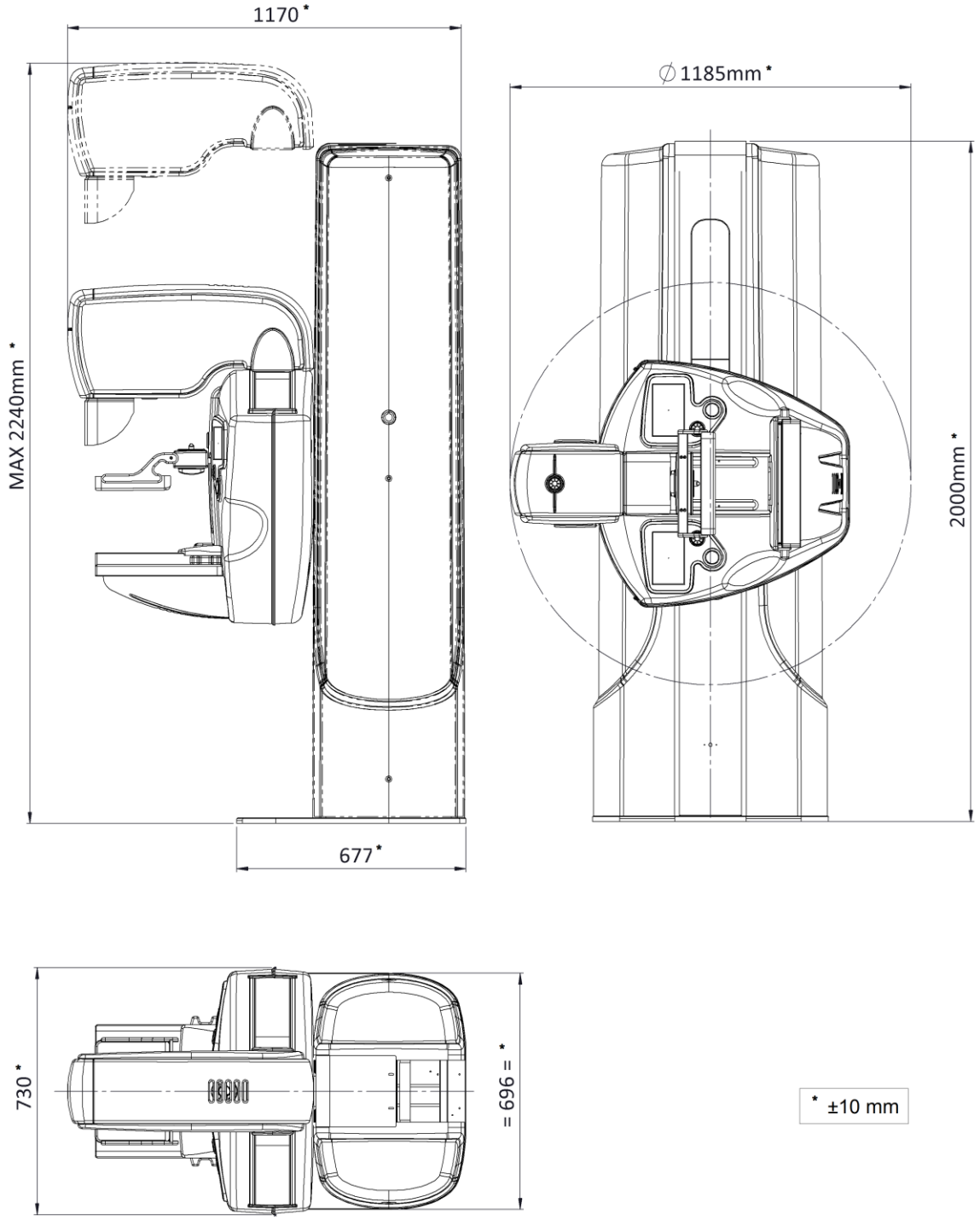
Chapter II:
TRANSPORT, UNPACKING, POSITIONING

1 – HELIANTHUS series: DIMENSIONS AND WEIGHT

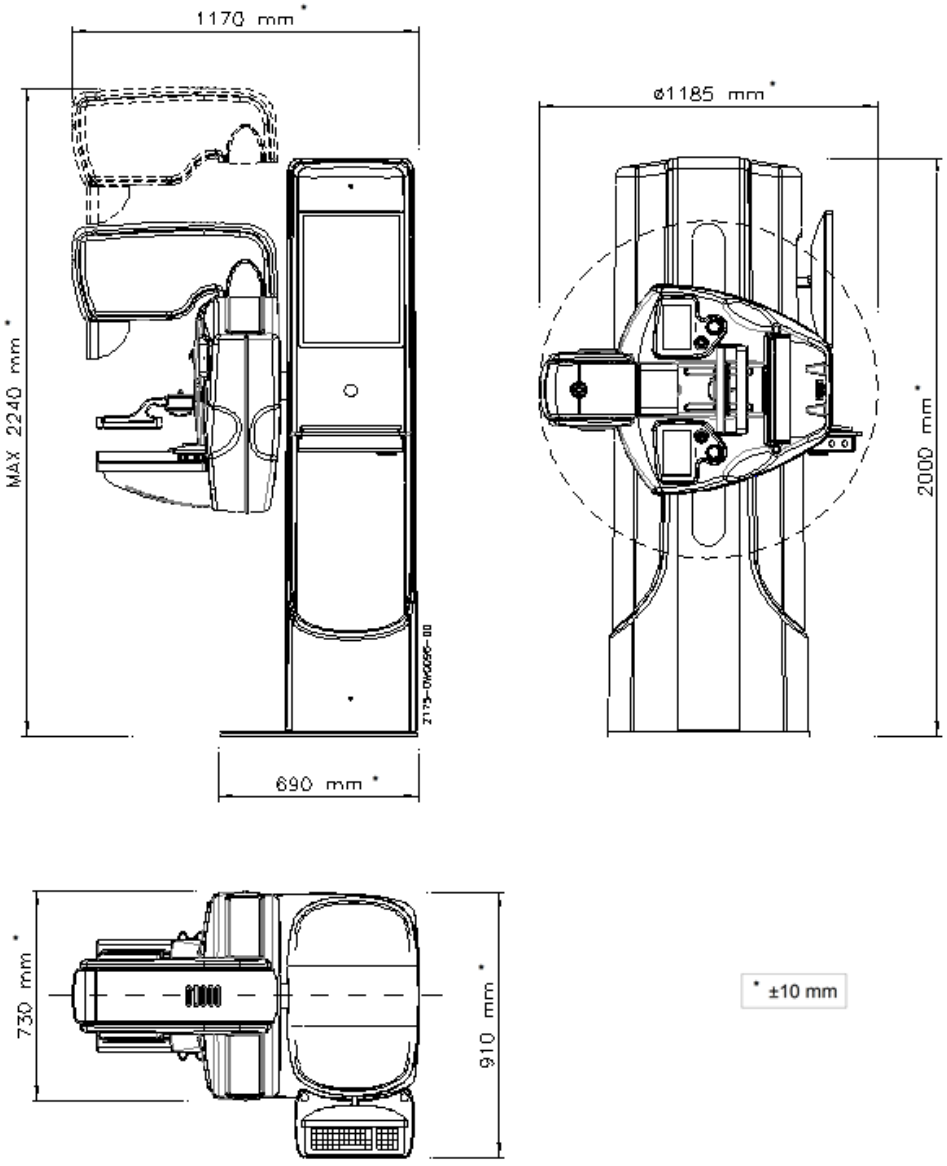
CAUTION

When carrying out the necessary support calculation, weight of patient and operator must be considered.



Weight: 300 kg

MAMMO UNIT WITH LOCAL AWS



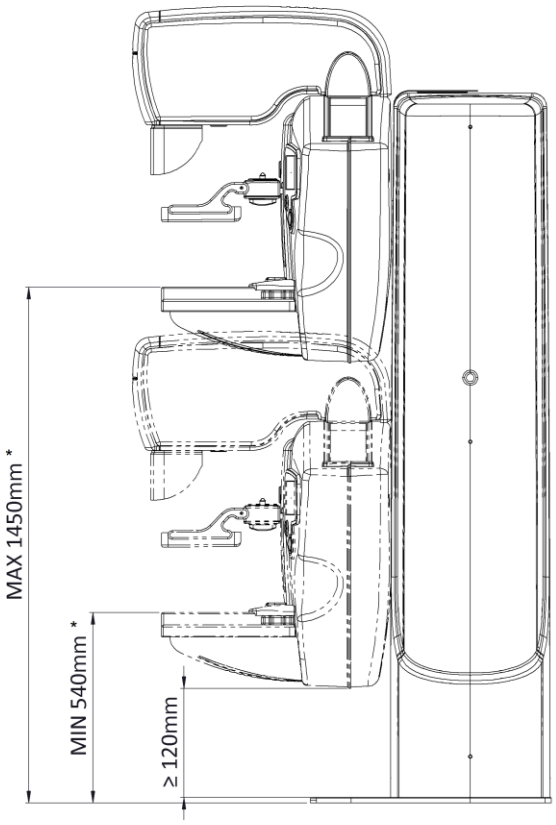
Weight: 310 kg

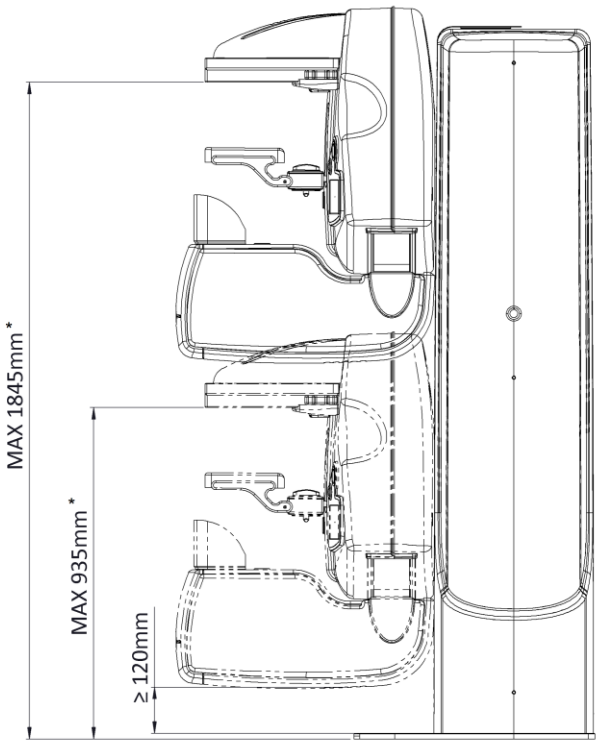
NOTE

The choice regarding the right or left positioning of the local AWS can be made during the purchase phase.

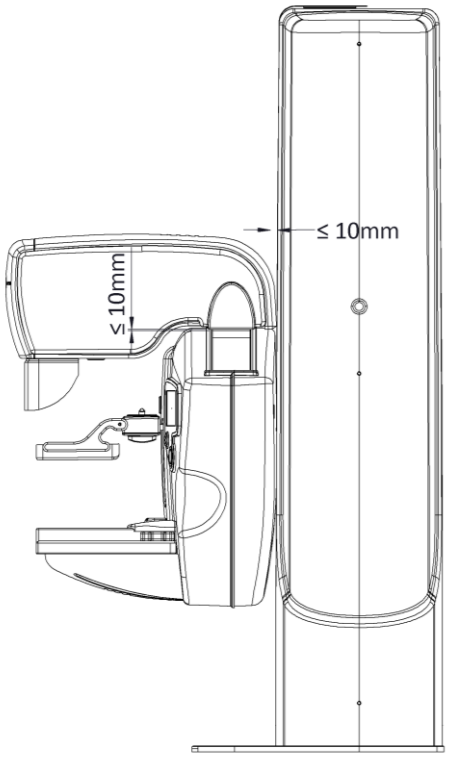
NOTE

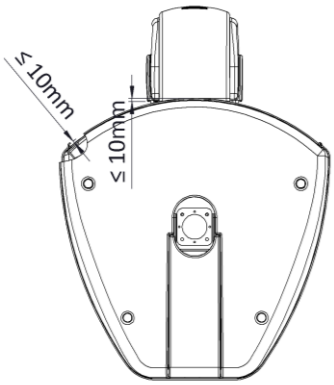
This indication (*) for the drawing above may have a tolerance of ±10mm due to the sum of overall tolerance during assembling.


MAX 1450mm *
MIN 540mm *
≥ 120mm


MAX 1845mm *
MAX 935mm *
≥ 120mm

* ±5 mm


≤ 10mm
≤ 10mm


≤ 10mm
≤ 10mm

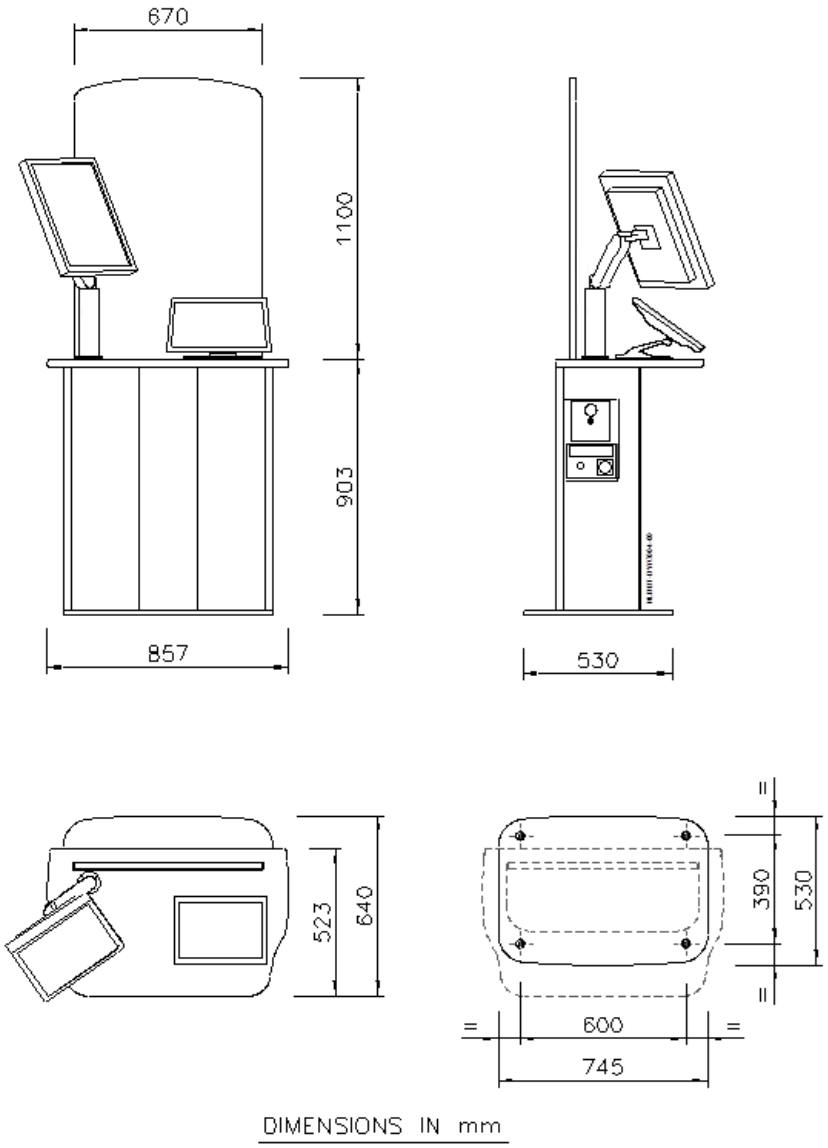
NOTE

This indication (*) for the drawing above may have a tolerance of ±5mm due to the sum of overall tolerance during assembling .

NOTE

When the stereotactic biopsy device SBD DMD is installed on HELIANTHUS series, the C-Arm maximum rotation is limited to ± 90°.

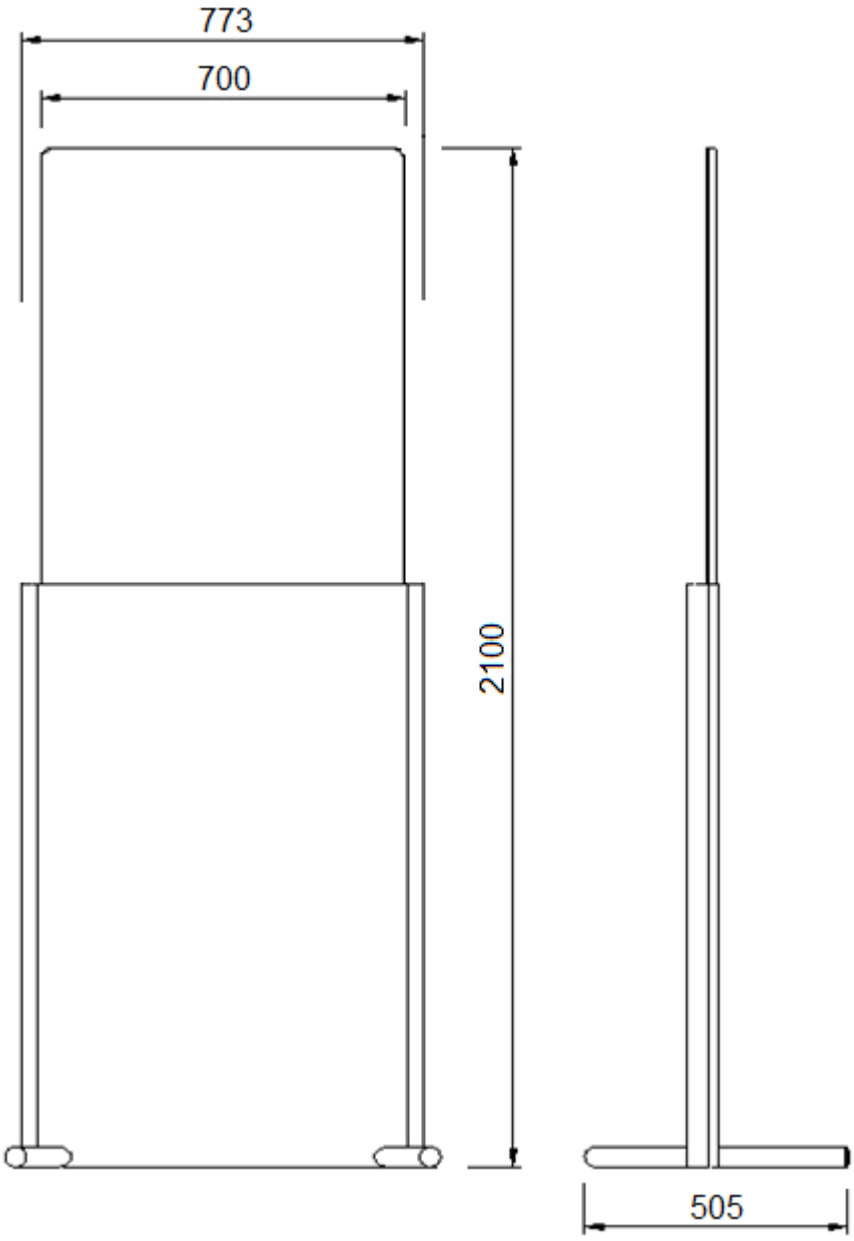
ACQUISITION WORK STATION (AWS): DIMENSIONS AND WEIGHT



DIMENSIONS IN mm

Weight:
90 kg (0,34mm Eq.Pb, thickness 20mm)
56 kg (0,50mm Eq. Pb thickness 11mm)

ANTI-X BARRIER DIMENSIONAL DRAWINGS



Weight: 77 kg (0,34mm Eq. Pb, thickness 20 mm)
50 kg (0,50mm Eq. Pb thickness 11 mm)

2 – RECEIVE SHIPMENT AND UNPACK

Required tools for unpacking and assemble mammograph

Required tools are:

- Box cutter,
- Electric screwdriver with “PHILIPS” screw head driver
- Claw hammer
- Set of 3/8’’ socket wrenches
- Hand truck with drop-down wheels

Received instructions

- Unpacking instruction
- Accompanying document
- IFU are provided in electronic format (E-IFU)

At time of receipt, before opening/unpacking the crate, perform the following steps:

- Inspect each container for damage (See unpacking check list for mammography unit);
- Note any damage on the shipping paper;
- If an external shipping damage has occurred, notify to Manufacturer damages (See unpacking check list for mammography unit);

3 – UNPACKING CHECK LIST FOR MAMMOGRAPHY UNIT

HELIANTHUS series Model_____S/n_____

INSTALLATION PLACE _____

INSTALLATION DATE _____

INSTALLATOR SIGNATURE _____

RESPONSIBLE PERSON _____

3.1	Packing external conditions/damage check	[ ]
3.2	Detector shipping conditions	[ ]
3.3	Detector storage conditions (while packed)	[ ]
3.4	Mammo Unit/Acquisition Work Station Unpacking	[ ]
3.5	Room Planning: check of installation area	[ ]
3.6	Room Planning: environment conditions	[ ]
3.7	Bolting the stand to the floor	[ ]
3.8	Detector Unpacking	[ ]

DATE_____SIGNATURE_____

CAUTION **The Mammo Unit is delivered lying horizontally on a wooden floor (pallet). You need at least two person to lift the unit over the edge of the pallet.**

CAUTION **Mammo unit is placed inside the crate with base (bottom) towards the right side, X-ray tube towards the left side. Take care to have enough space (headroom and on the right side of the crate) to lift the unit.**

CAUTION **Take packing list and unpacking instructions in the plastic envelope (placed on the front side of the crate) before starting unpacking procedure.**

CAUTION **The unit must be installed by trained personnel only.**

CAUTION **AWS and components are included in a second crate. Follow the same precautions above to unpacking it**

CAUTION **The detector has a very strict range of temperature and must be removed from its original and dedicated packing only after unpacking and placement of the unit and after installation room has reached operating temperature inside the specific operating range indicated below.**

CAUTION **Extreme care should be taken during detector unpacking to prevent damage**

ESD **Handling the Detector with care to reduce hazard of ESD**

3.1 – PACKING EXTERNAL CONDITIONS/DAMAGE CHECK

HELIANTHUS series can be shipped in three different crates for:

- Gantry (crate number 1) – HELIANTHUS gantry may be shipped also in “STAND” Position on specific pallet;
- Acquisition Work Station, if provided (crate number 2);
- Detector (own crate).

There is the possibility to have other different configurations:

- Crate containing HELIANTHUS gantry and anti-X barrier (no Acquisition Work Station provided)

For the two abovementioned configurations (Gantry with AWS and Gantry with anti-X barrier), but also for a configuration with only gantry, there is the possibility to include the detector inside the gantry’s crate (exclusively for a-Si and SOLO DM detectors).

NOTE

In presence of evident shipping damage, please contact the carrier as soon as such damage is found and request an inspection for shipping damage.

3.2 – DETECTOR SHIPPING CONDITIONS

Please check that following shipping conditions for detector have been respected.
To assure the correct functioning of the detector the following conditions must be provided

Detector Conditions during: • Transfer To Transport Terminal • Destination Terminal Custom Clearance Period • Door Delivery • Storage conditions • Mammo unit switched off	Temperature (for a-Se detector): +5° C ÷ + 40° C Temperature (for a-Si detector): -15°C ÷ +65°C Temperature (for SOLO DM detector): -5°C ÷ +55°C relative humidity (for a-Se detector): 10% ÷ 90% relative humidity (for a-Si detector): 10% ÷ 85% relative humidity (for SOLO DM detector): 10%÷65% barometric pressure 700 hPa÷1060hPa
Detector Conditions during: • International Air Transport Note: *Detector packed in the original crate*	For a-Se detector: -20°C ÷ 60°C (24 h) For a-Si detector: -18°C ÷ +70°C (36h) For SOLO DM : -5°C ÷ +55°C relative humidity (for a-Se detector): 10% / 90% relative humidity (for a-Si and SOLO DM detector): 10% ÷ 85% barometric pressure: 700 hPa/1060hPa
Detector Conditions during: **- International Sea Transport** Note: *Detector packed in the original crate and transported in a dedicate crate (only for a-Si detector)*	Temperature (for a-Si detector): -5°C/+55°C Relative Humidity (for a-Si detector): 10%/65% Barometric pressure 700 hPa/1060 hPa

3.3 - DETECTOR STORAGE CONDITIONS (WHILE PACKED)

Upon receipt of the detector, move it to a controlled area (waiting for installation) which meets environmental requirements indicated in the first row of the previous table.

Detector is shipped in a special packing with limited door to door time in order to keep detector within the same specified temperature. Special packing contains temperature recorder that must be checked after opening the packing.

3.4 – MAMMO UNIT / ACQUISITION WORK STATION UNPACKING

Mammo unit can be shipped in different packaging depending by:

1. Shipment Condition (International/National-short shipments)
2. Configurations (full components, Remote AWS, detector type)

In the first case two packing are respectively available: Crate or pallet
In the second case one or two crates could be necessary
See below details.

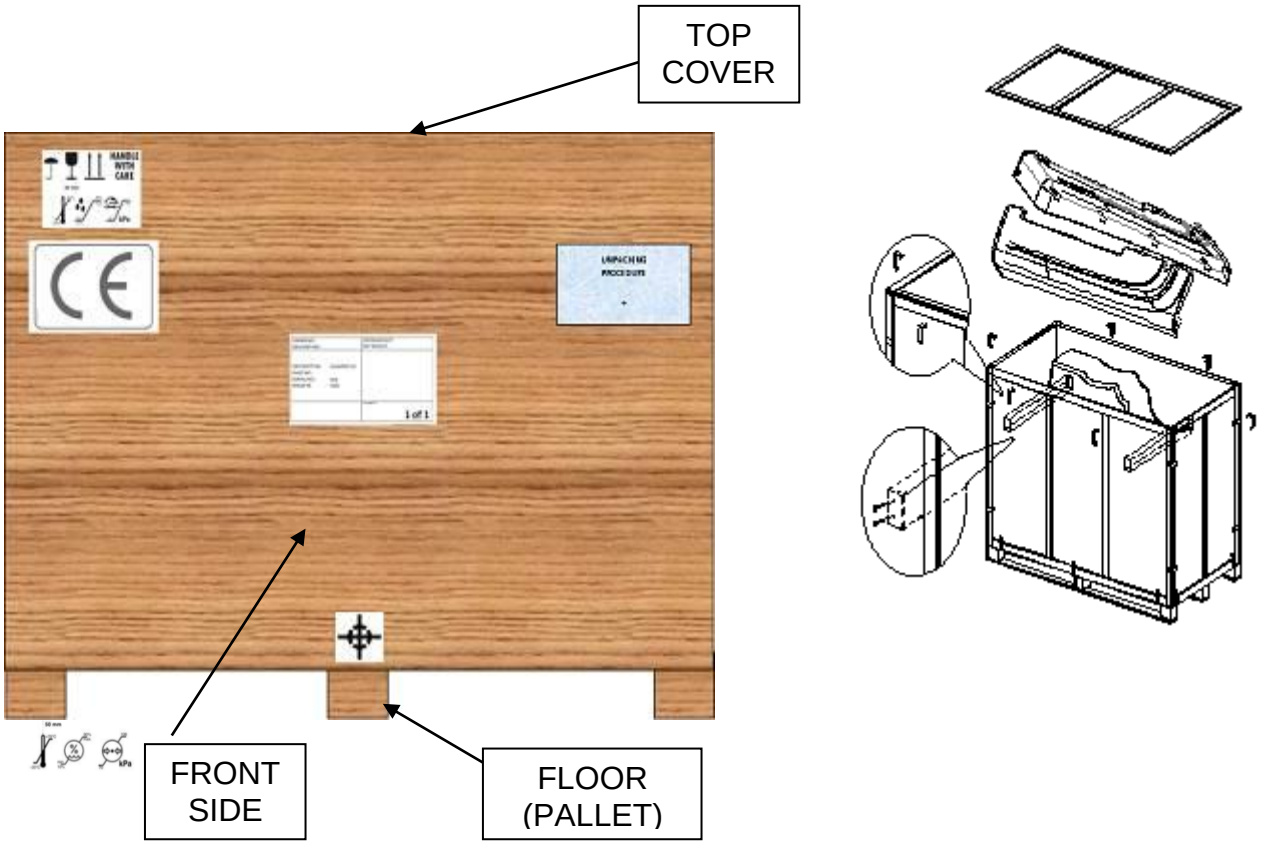
Crate packing/unpacking

NOTE

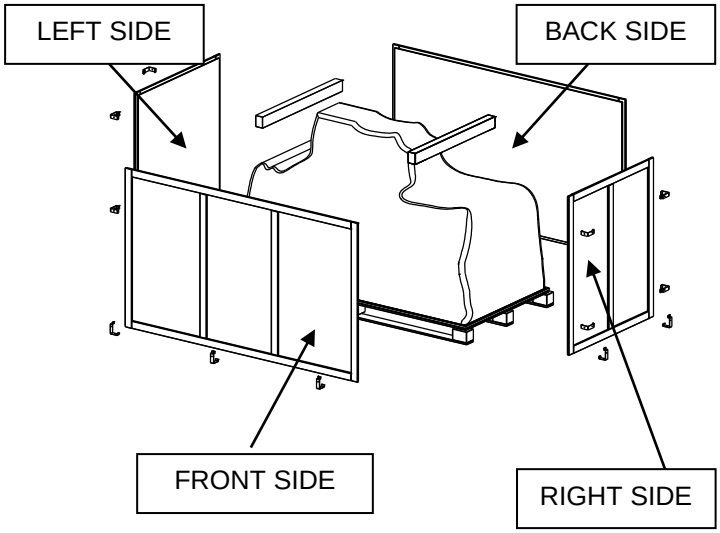
This packing is generally used for all international shipments

The system gantry is crated horizontally (prone position) on a pallet for high weight. The C-arm is flipped of 180° and locked with a foam block between rear of C-arm and gantry. Put the crate in an open space to unpack the gantry (15 m^2 as min Square surface).

1. Open the box starting from top cover;
2. Remove clips on top cover (by using a screwdriver);

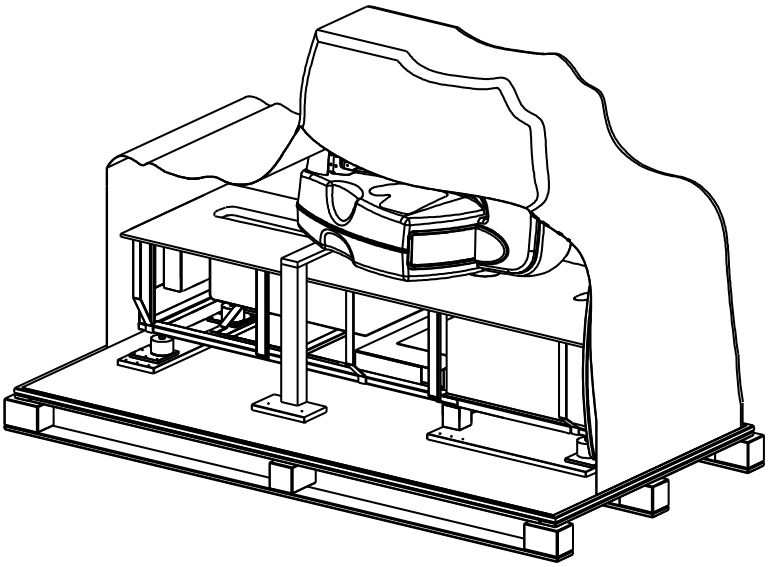


3. Remove front, right, back and left wooden walls from crate number 1° by unscrewing all the clips;

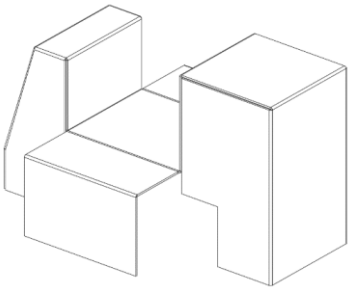


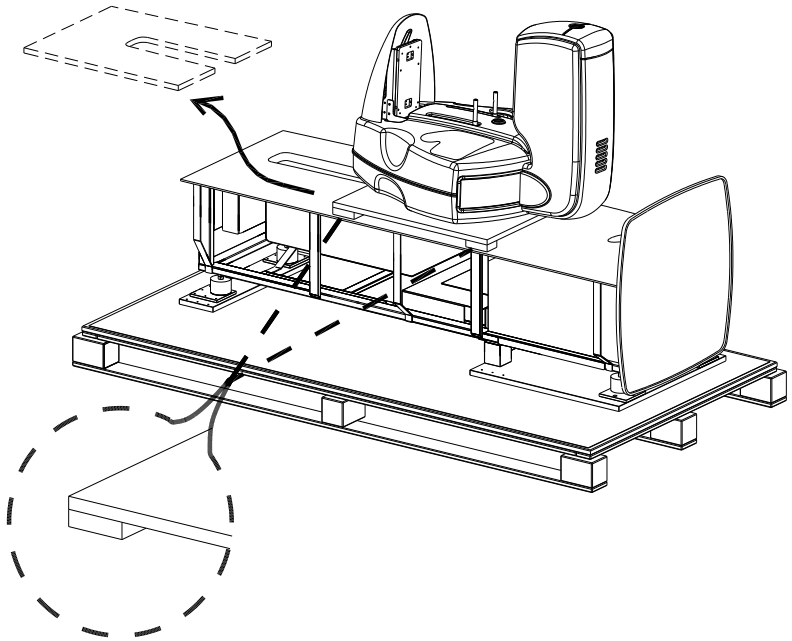
4. Carefully remove the reinforced waterproof paper (Tar coated) by cutting it;

5. Remove all wooden transport locking systems from the wooden walls;
6. Carefully remove column covers from the crate;

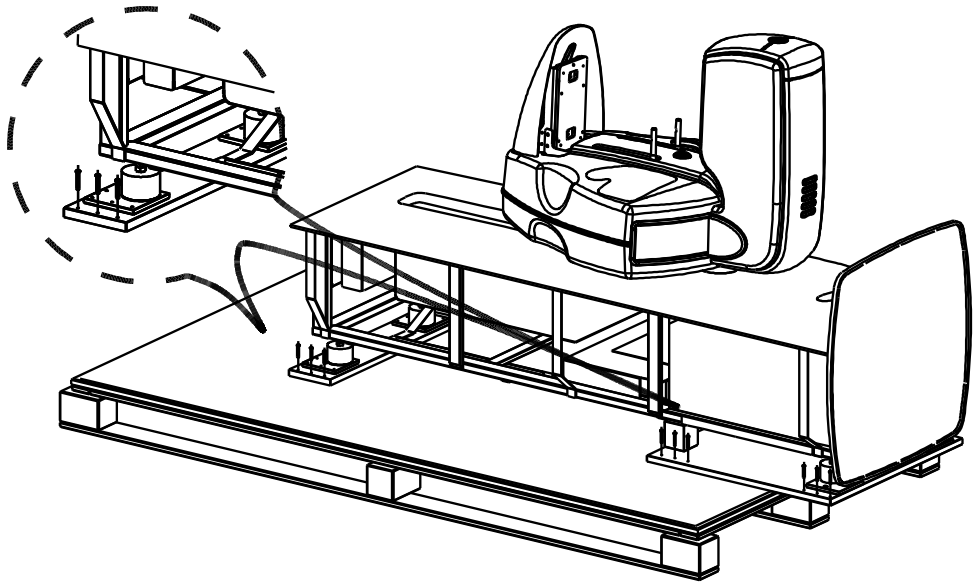


7. Remove all shipping materials – any component carton box (Open all boxes removed from crate and check their contents according to packing list), then remove the C-Arm protection fixed with the adhesive tape

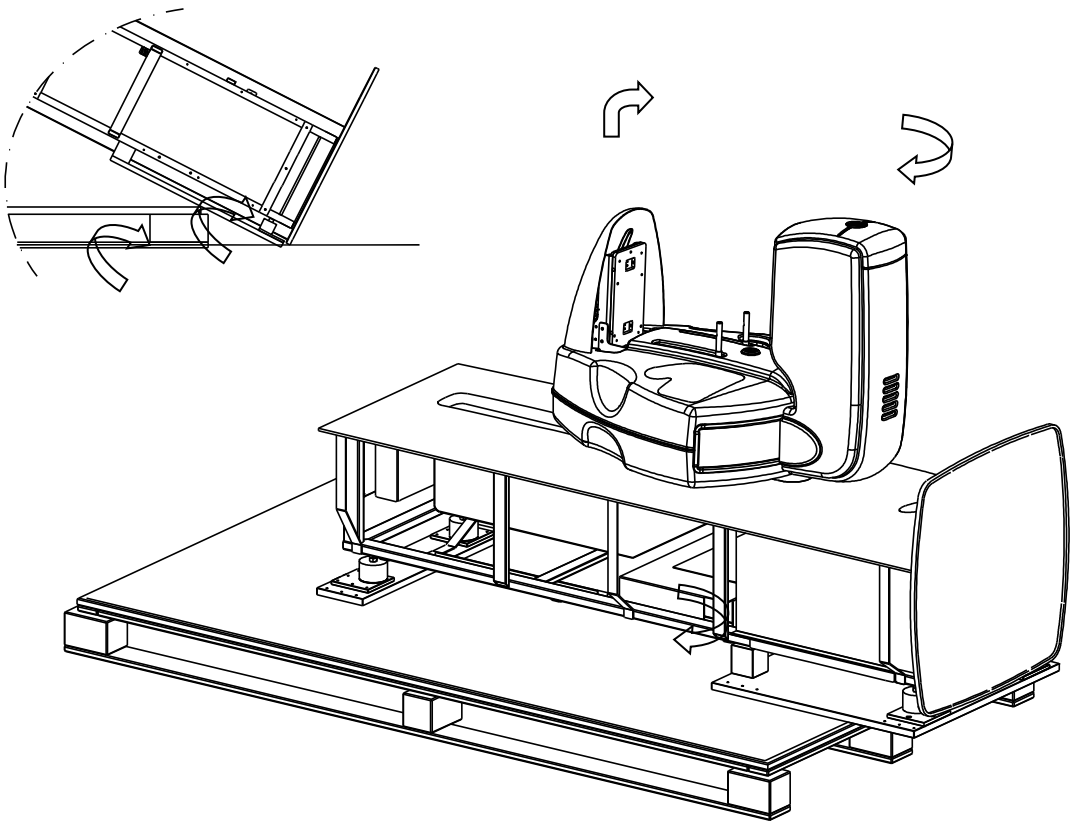




8. Unscrew the wooden sledges from the wooden floor as shown in the following figure



9. Move the Mammo unit towards the right side of the crate by sliding it on the wooden sledges



10. Push the unit with the wooden sledge about 25 cm over the end of the wooden floor and hinge on the middle of lower wooden sledge to lift it

WARNING

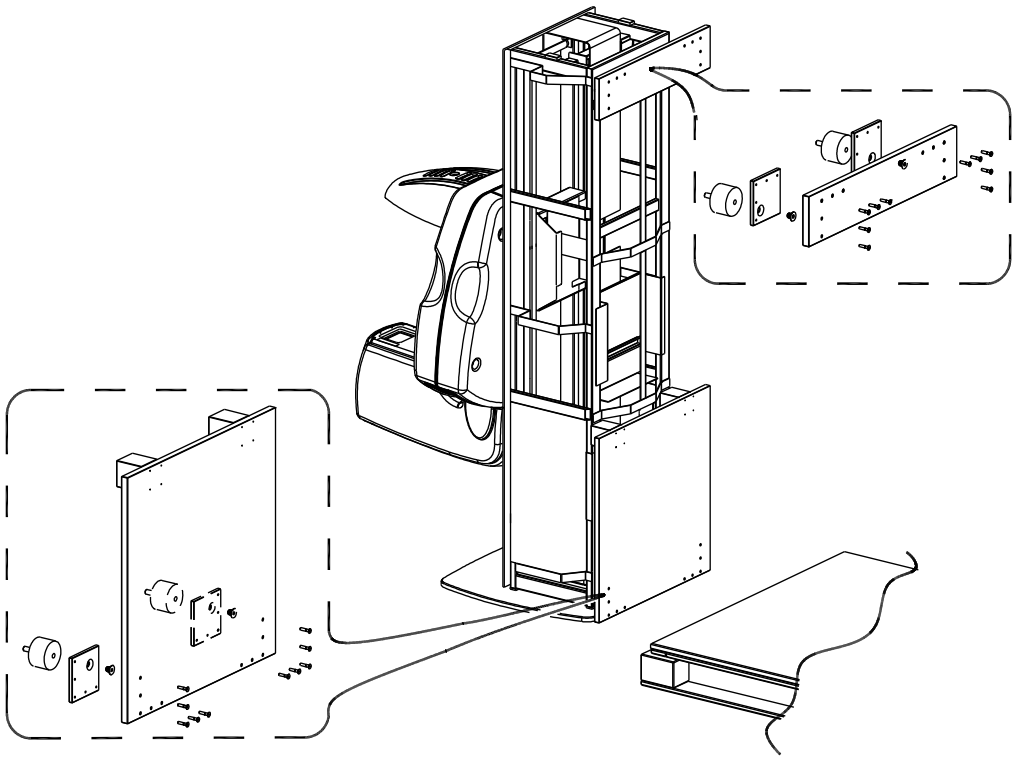
Risk of Injury!!
Mammo unit is heavy: it weighs over 300kg. You need at least two person to lift the unit over the edge of the pallet.

WARNING

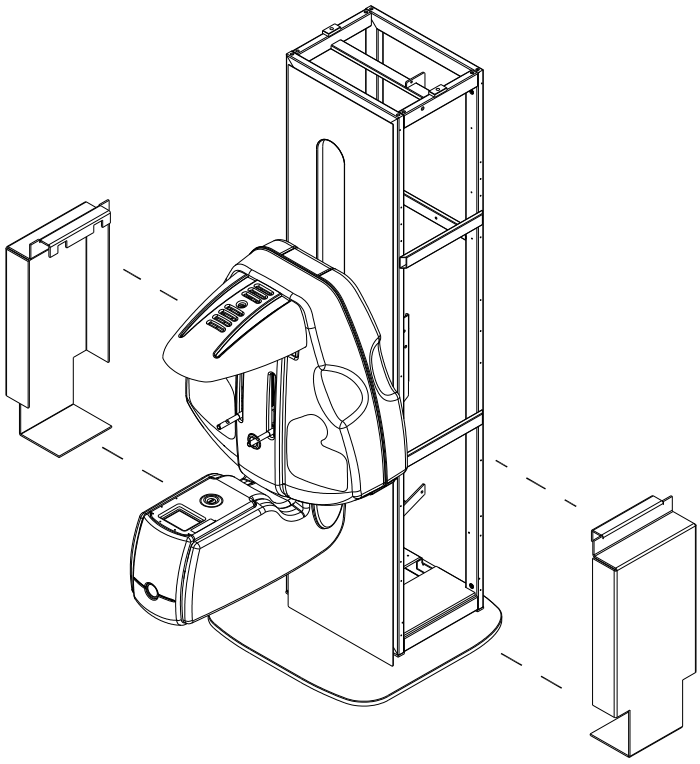
Do not apply forces to C-Arm when moving the unit out of the box and during final location placement.

11. Lift the Mammo Unit

12. Unscrew the wooden sledges from Mammo unit



13. Unscrew the plates of rubber puffers (upper and lower puffers) and remove all puffers (silent-blocks);
14. Remove the lateral protective panels by unscrewing them;

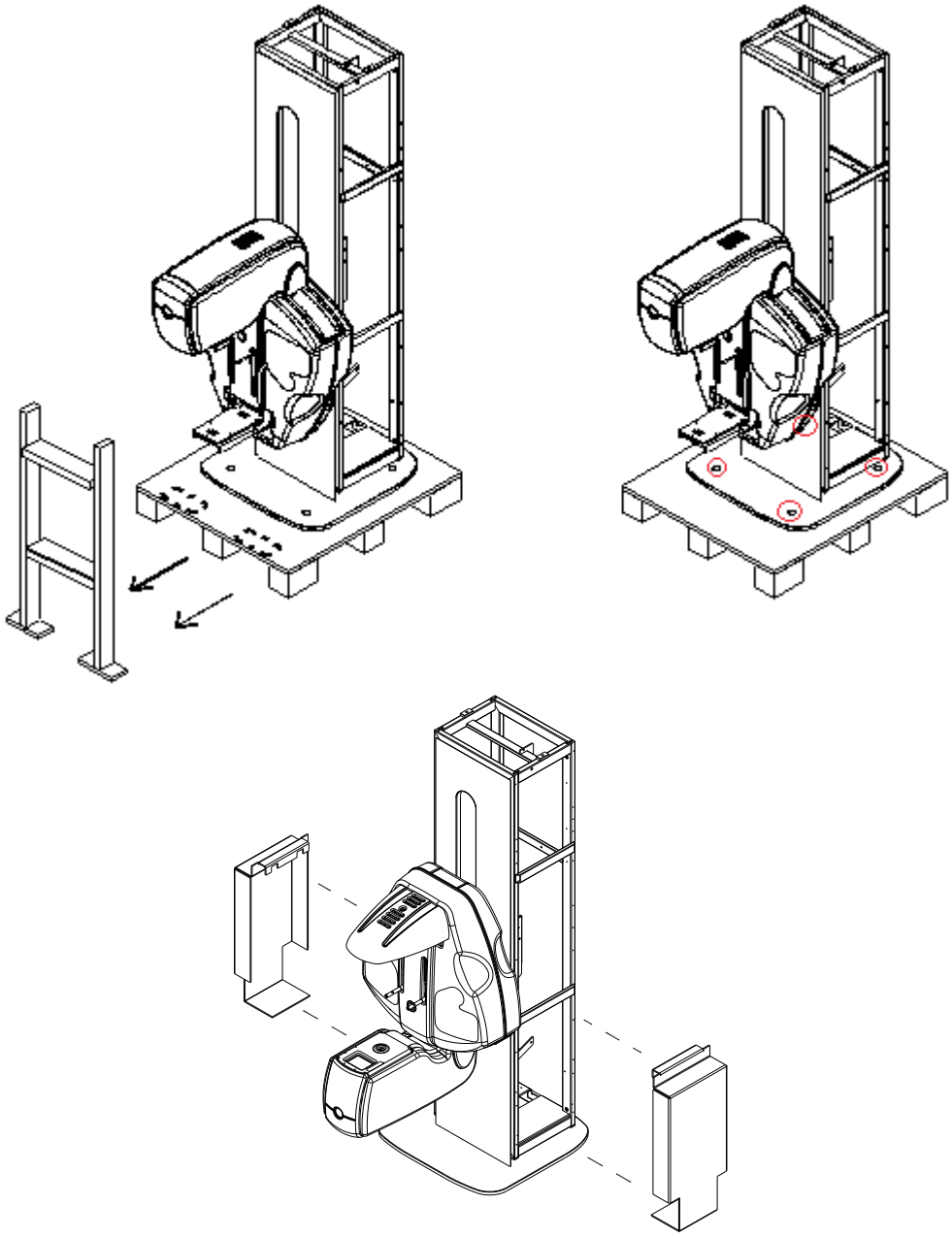


Stand position packing/unpacking

NOTE This packing is generally used for national/Short shipment on controlled VAN/Trucks

The system gantry is locked vertically on a specific wooden pallet. The C-arm is flipped of 180° and locked with two foam blocks between rear of C-arm and gantry.

1. Remove pluriball from gantry
2. Remove C-Arm support by undoing the screws on the base
3. Unscrew the gantry form pallet removing all silent-block and screws



AWS UNPACKING

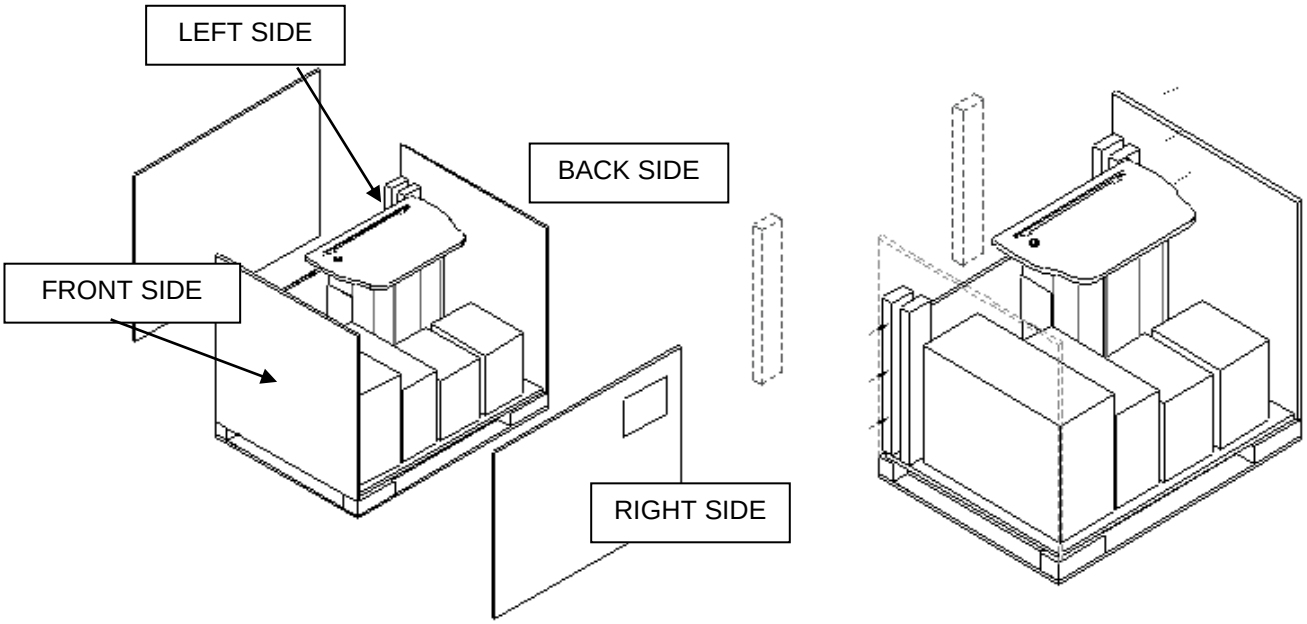
1. Remove front, right, and left wooden walls from crate number 2, by unscrewing the screws on clips and by removing all the clips

CAUTION **For a correct unpacking pay attention: front panel is panel with plastic envelope and unpacking instructions.**

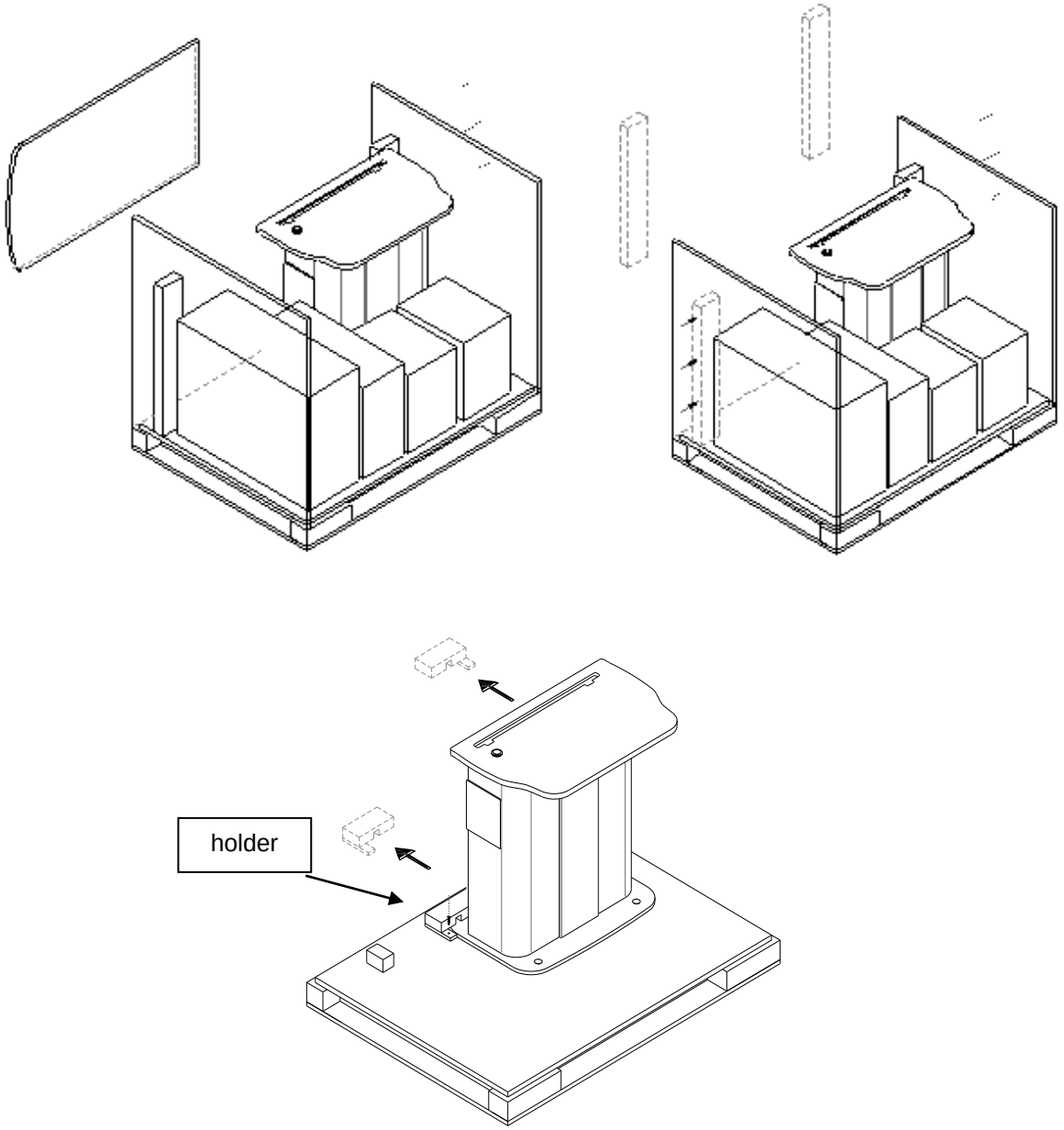
CAUTION **Back cover must be remained until protective screen is not removed and transferred in a safe place**

CAUTION **Be sure to have necessary equipment and personnel available to move heavy loads**

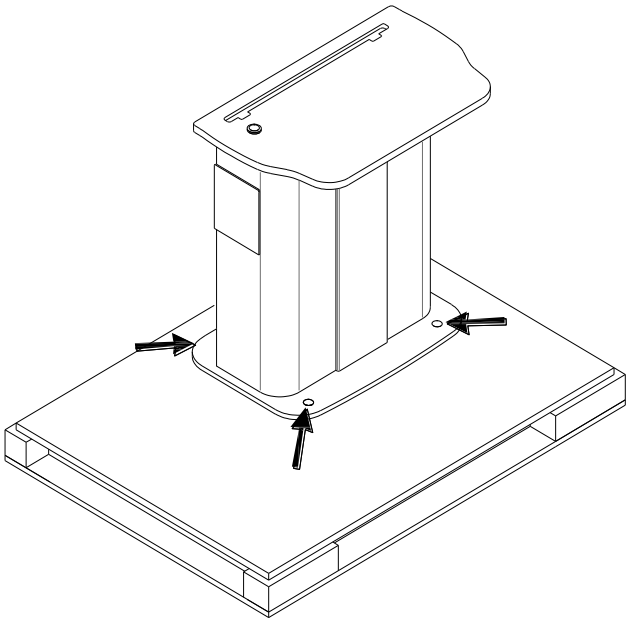
2. Carefully remove the reinforced waterproof paper (Tar coated) by cutting it



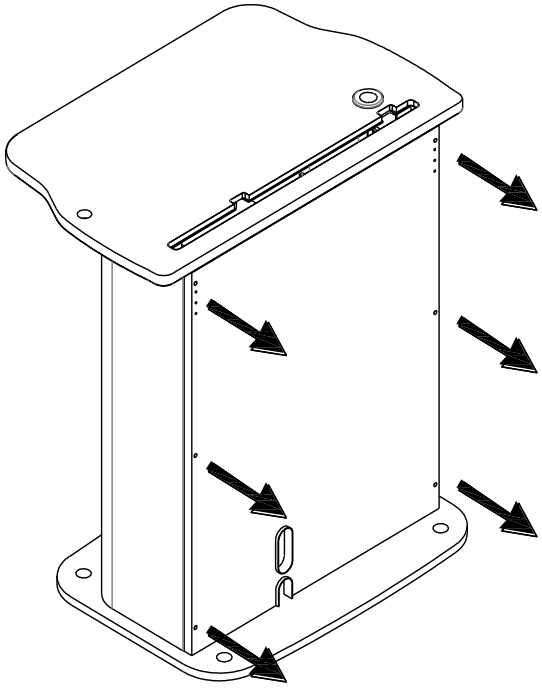
3. Remove carton box with components
4. Remove the wooden transport locking the AWS protective screen
5. Lift the AWS protective screen setting it free from the two holders
6. Remove pluriball from AWS protective screen and AWS chassis



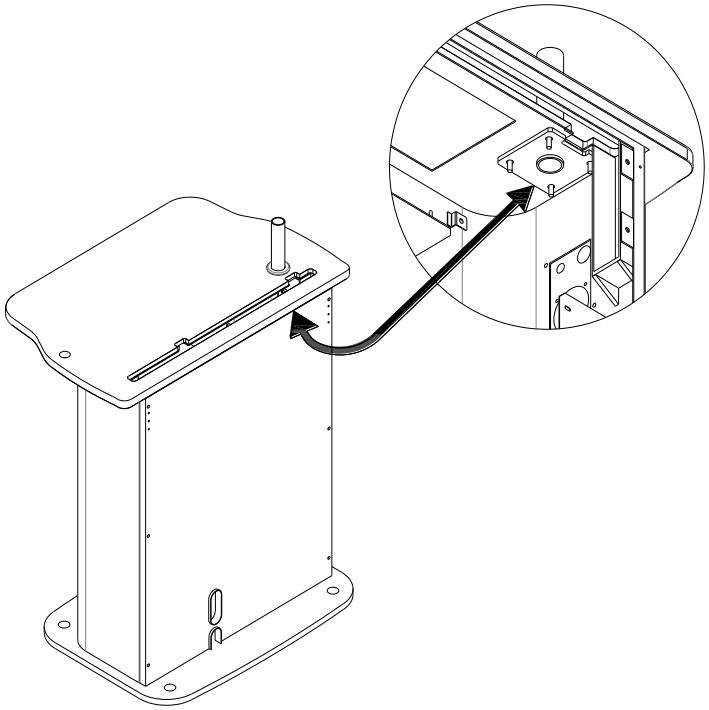
7. Unfix AWS base by unscrewing n°4 screws



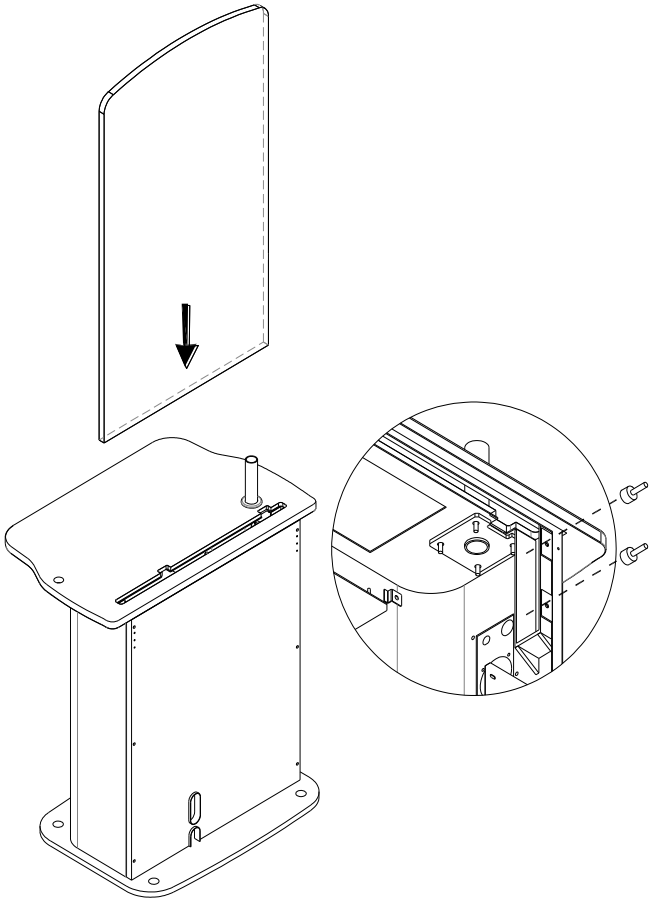
8. Remove carton protection of AWS TSD (fixed on AWS by means of adhesive tape).



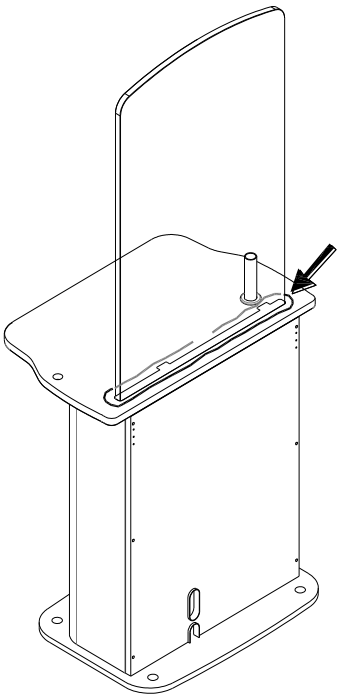
9. Remove the rear panel, acting on the n. 6 screws shown. (At the end of all the operations it will have to be reassembled).



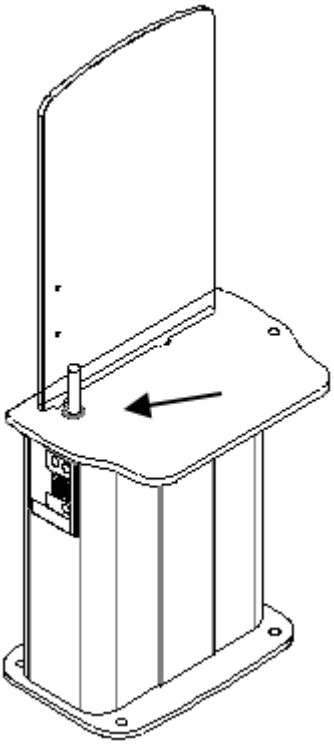
10. Insert the supplied monitor support tube from the inside, fixing it using the n. 4 supplied self-locking nuts



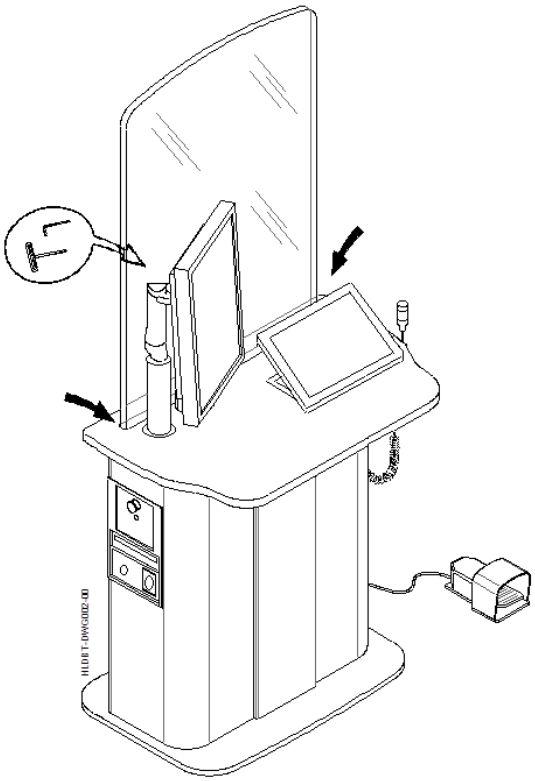
11. Using glass suction cups (n. 2 operators), insert the anti-X crystal inside the special slot. Secure it to the structure using the n. 2 supplied rubber glazing bead



12. In the space around the glass, insert the supplied rubber gasket, pressing it until it is completely seated



13. Insert the plastic ring with gasket function on the tubular. Refit the metal stop ring of the supplied monitor arm with an Allen key.

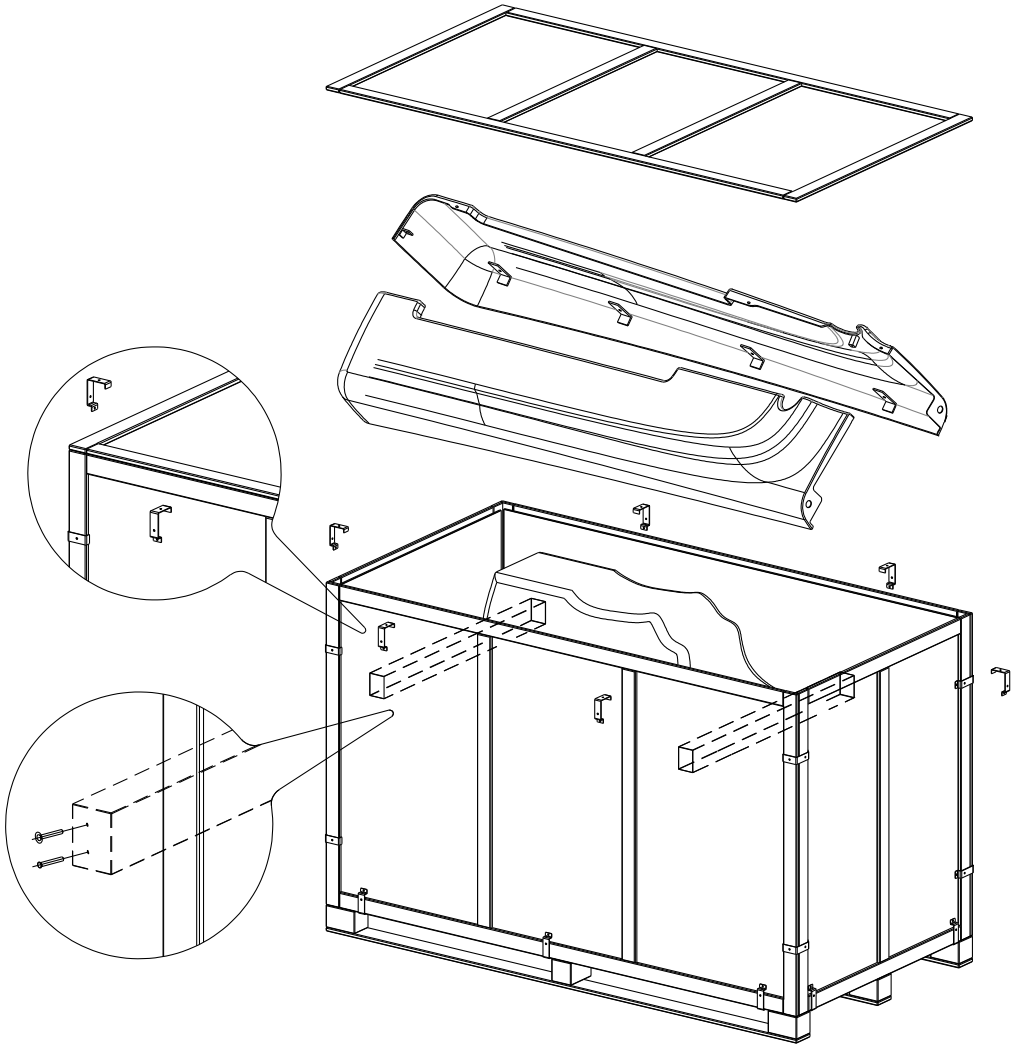


14. Insert the articulated monitor-holder arm on the tube. Fasten the monitor on the appropriate plate with the screws provided. Reconnect the cables of the monitor(s), the X-ray button and the pedal (optional)

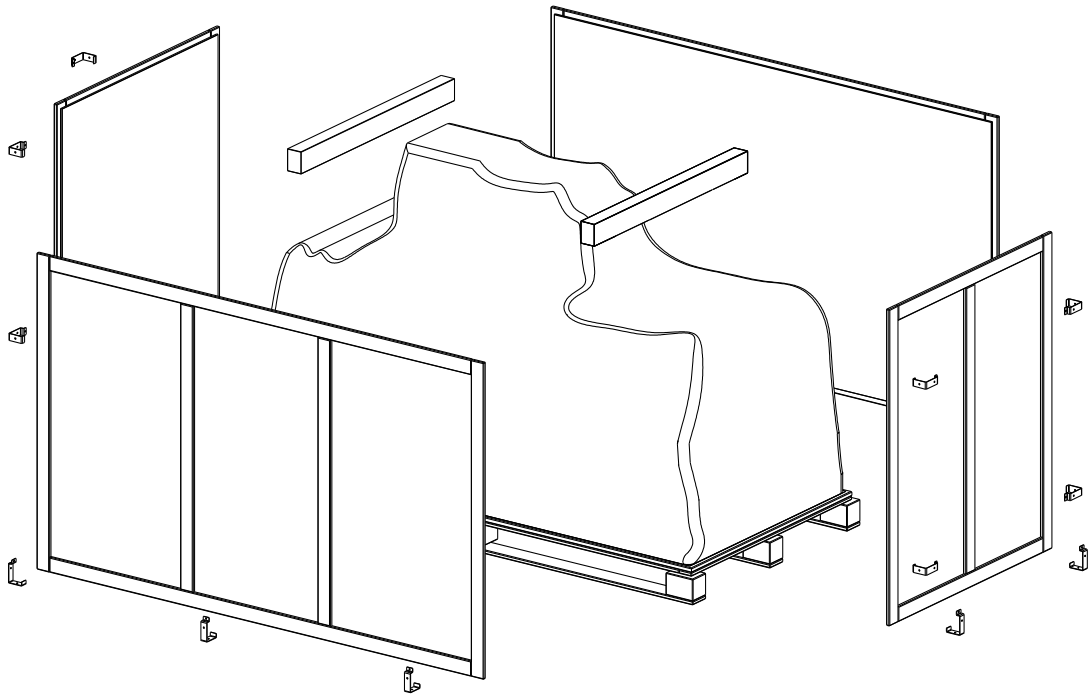
MAMMO UNIT & ANTI-X BARRIER UNPACKING

The unpacking procedure in the case of mammography unit and anti-x barrier is similar to that described above, the drawings that represent the actions to be carried out are shown.
The system gantry is crated horizontally (prone position) on a pallet for high weight. The C-arm is flipped of 180°. Put the crate in an open space to unpack the gantry (15 m^2 as min Square surface).

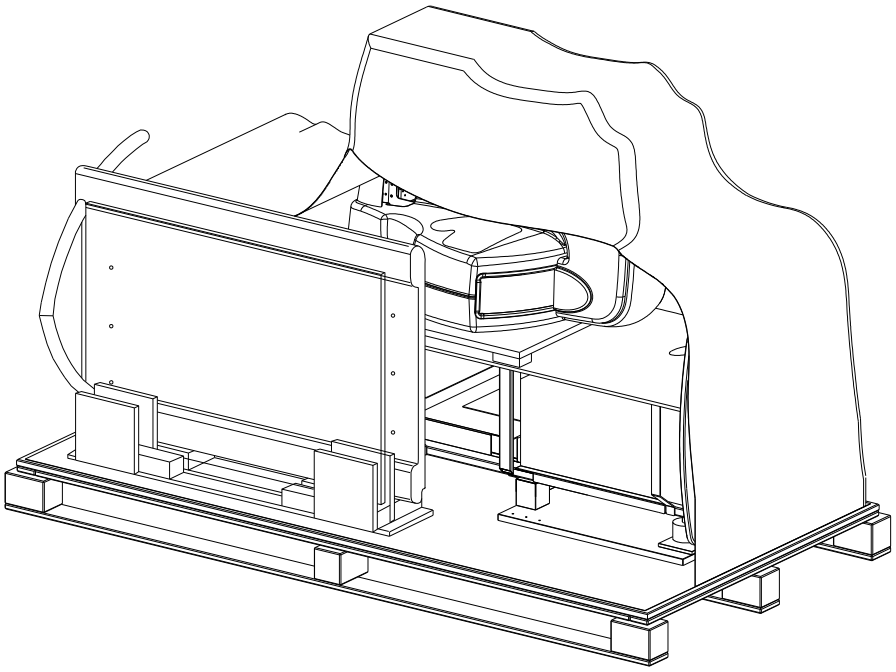
1. Open the box starting from top cover;
2. Remove clips on top cover (by using a screwdriver);



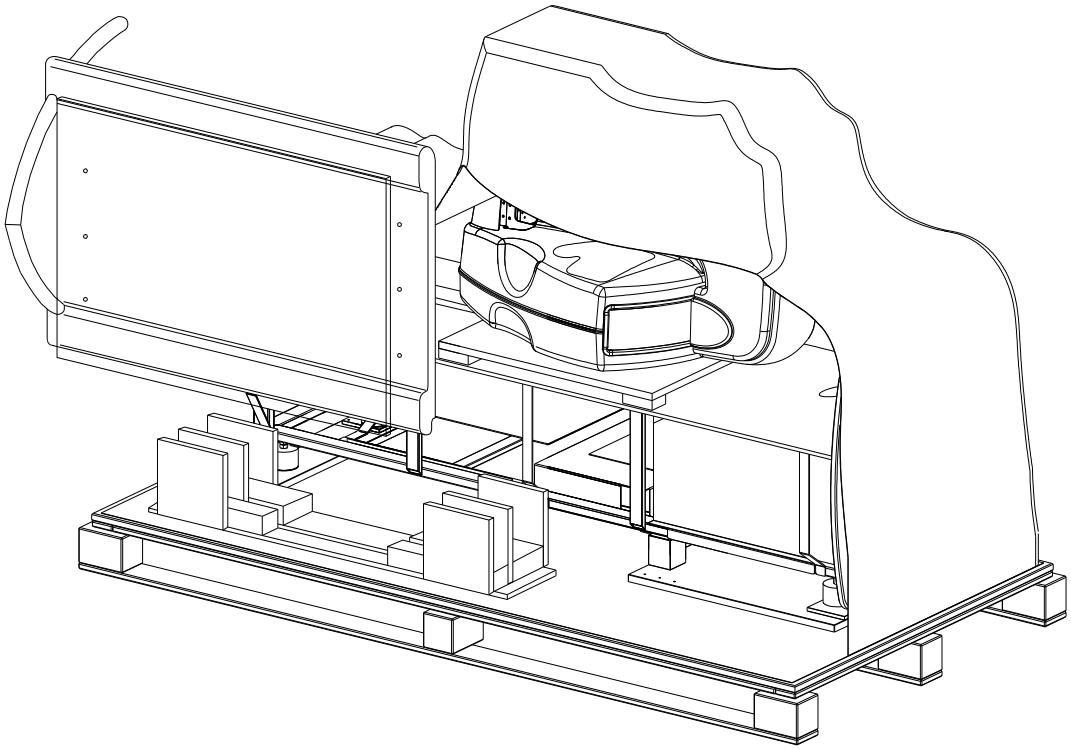
3. Remove front, right, back and left wooden walls from crate number 1° by unscrewing all the clips;



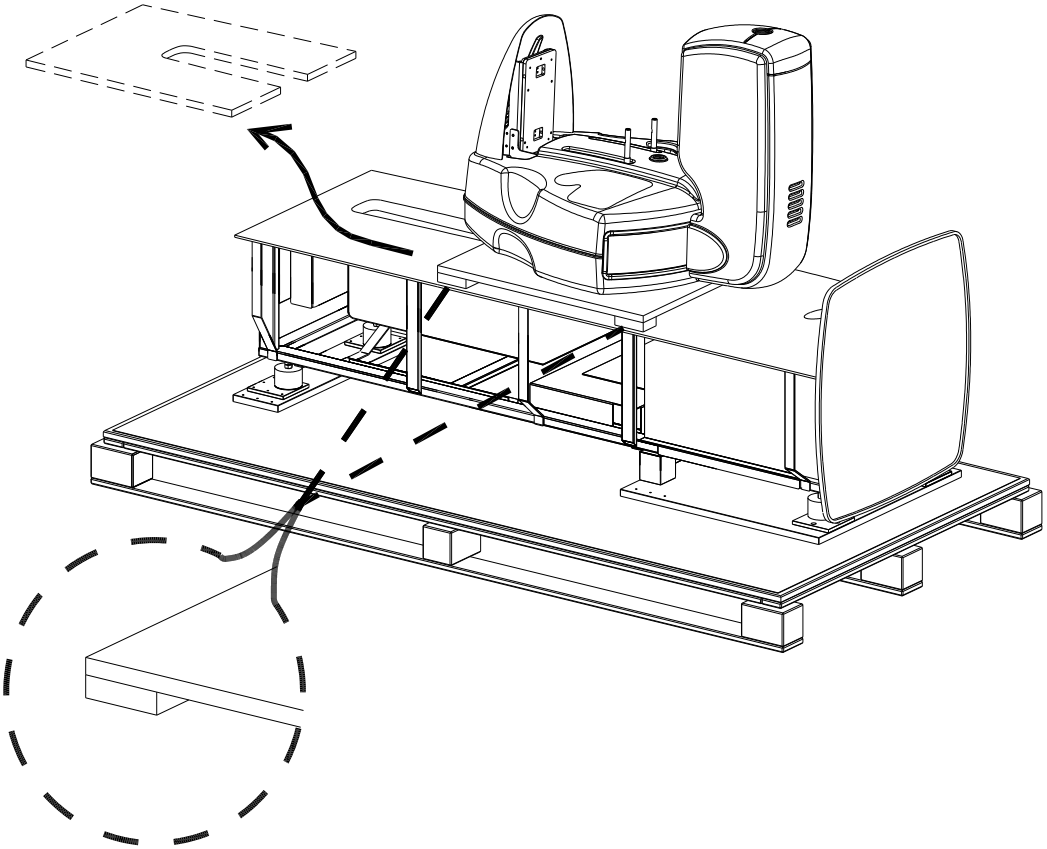
4. Carefully remove the reinforced waterproof paper (Tar coated) by cutting it;



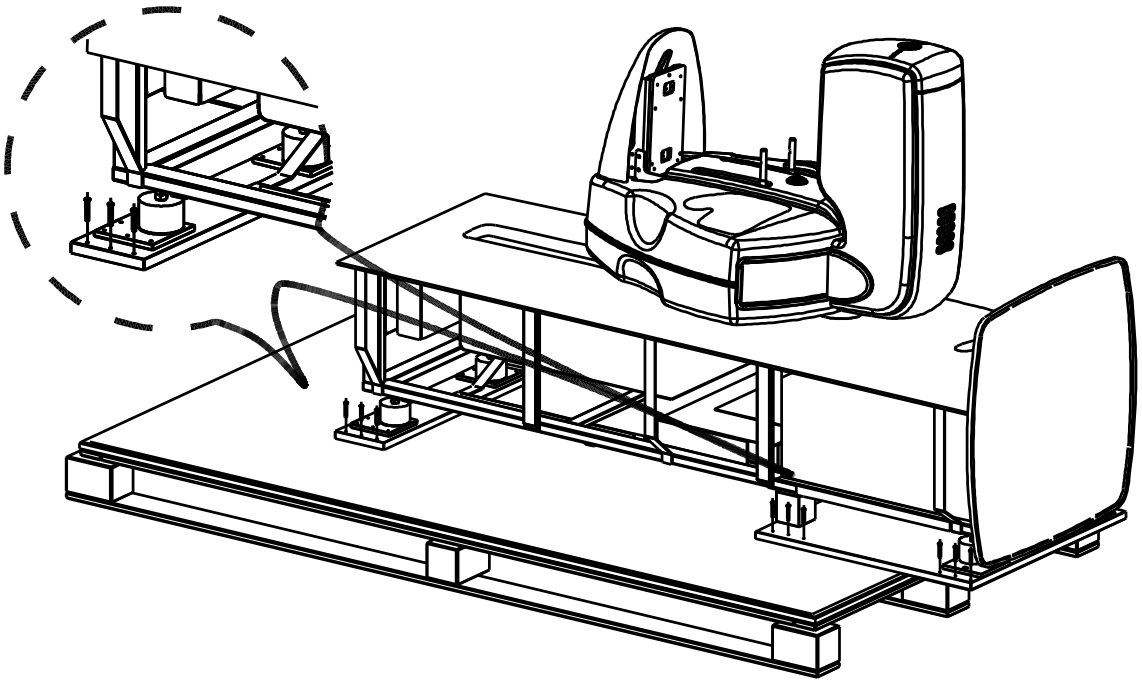
5. Remove all wooden transport locking systems from the wooden walls. Carefully remove column covers from the crate. Remove all shipping materials – any component carton box.
6. Carefully lift the anti-x barrier



7. Carefully lift the anti-x barrier

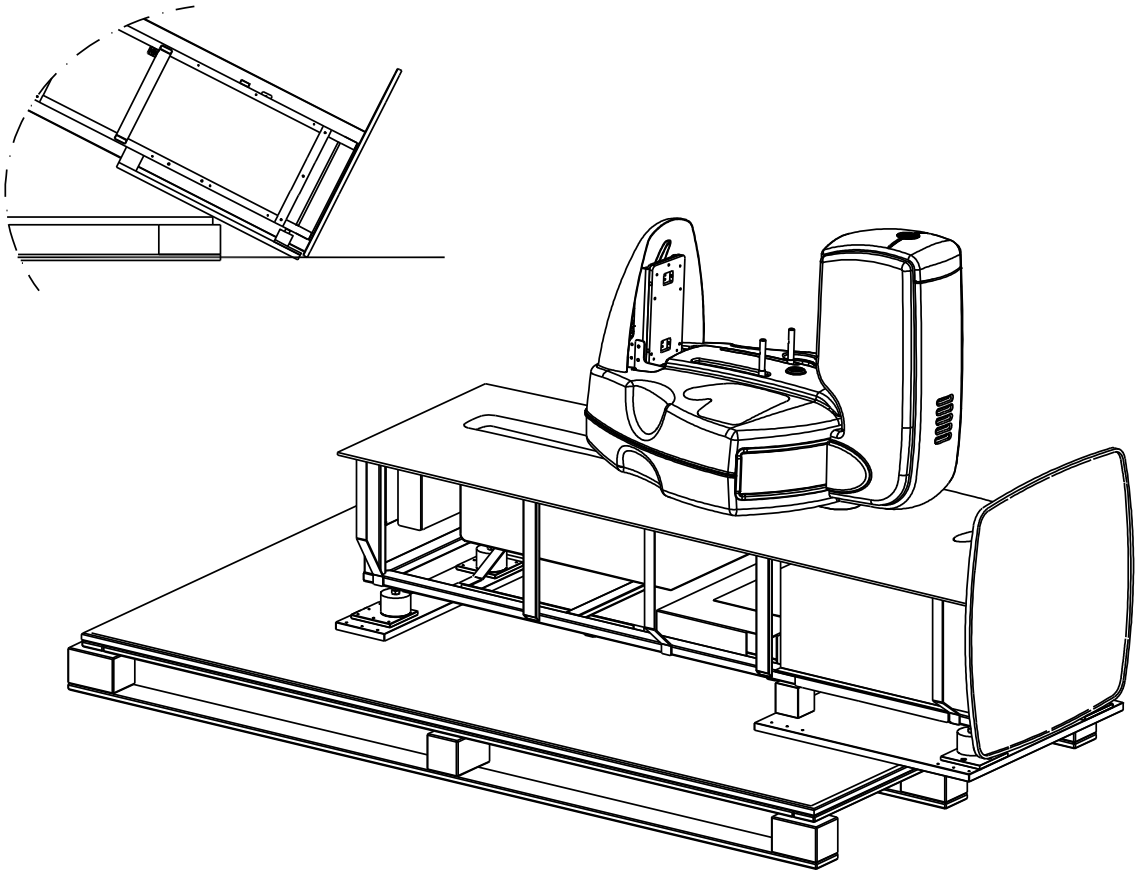


8. Unscrew the wooden sledges from the wooden floor as shown in the following figure



9. Move the Mammo unit towards the right side of the crate by sliding it on the wooden sledges

10. Push the unit with the wooden sledge about 25 cm over the end of the wooden floor and hinge on the middle of lower wooden sledge to lift it



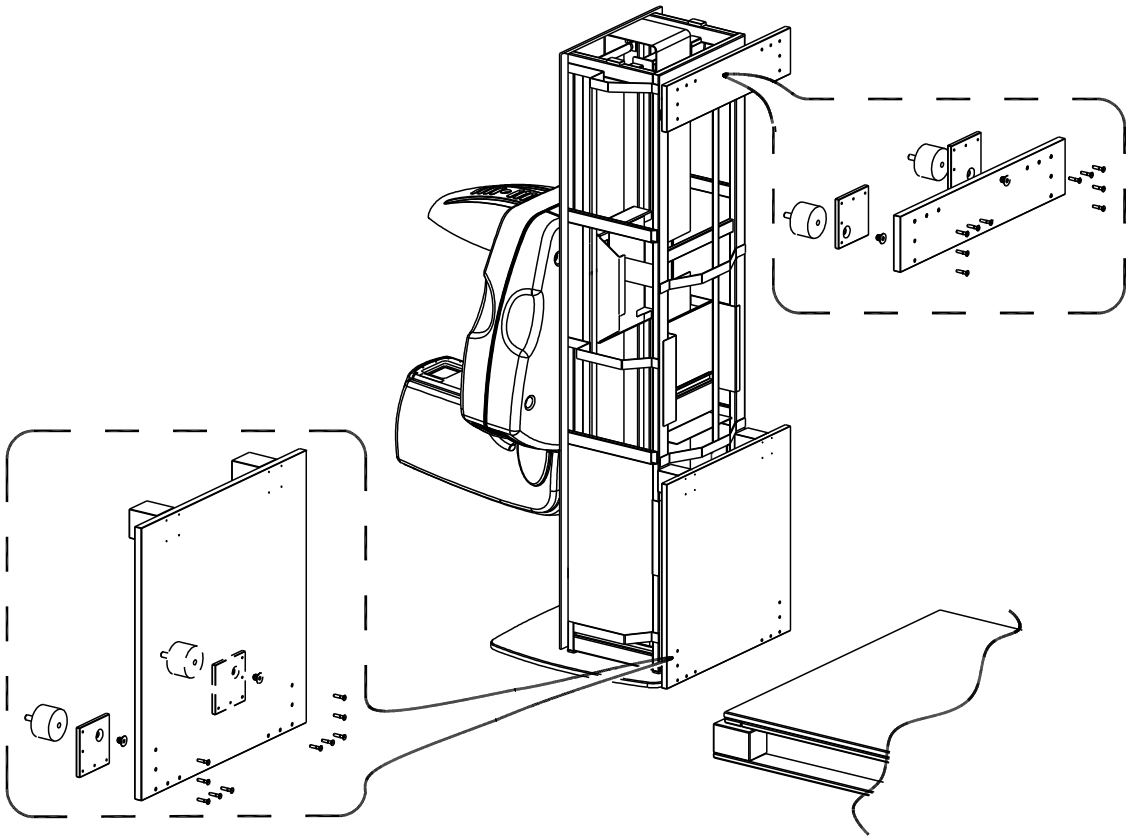
Risk of Injury!!

WARNING **Mammo unit is heavy: it weighs over 300kg. You need at least two people to lift the unit over the edge of the pallet.**

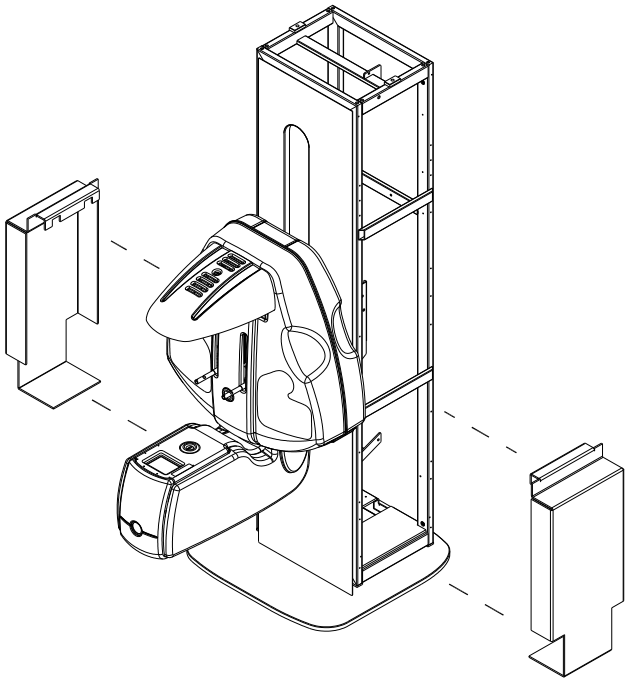
WARNING **Do not apply forces to C-Arm when moving the unit out of the box and during final location placement.**

11. Lift the Mammo Unit

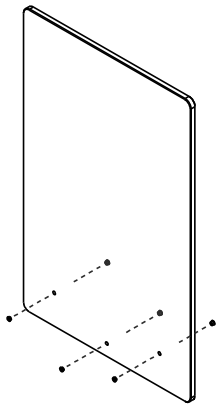
12. Unscrew the wooden sledges from Mammo unit



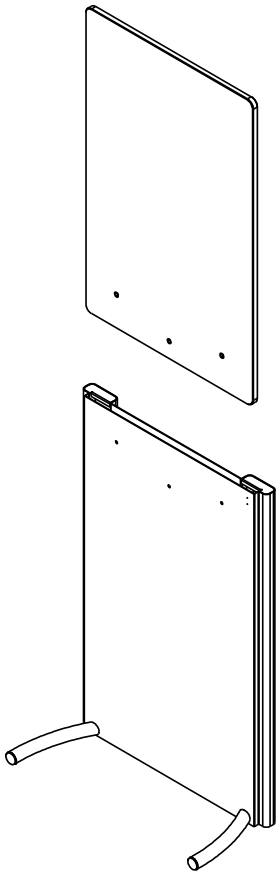
13. Unscrew the plates of rubber puffers (upper and lower puffers) and remove all puffers (silent-blocks);
14. Remove the lateral protective panels by unscrewing them;



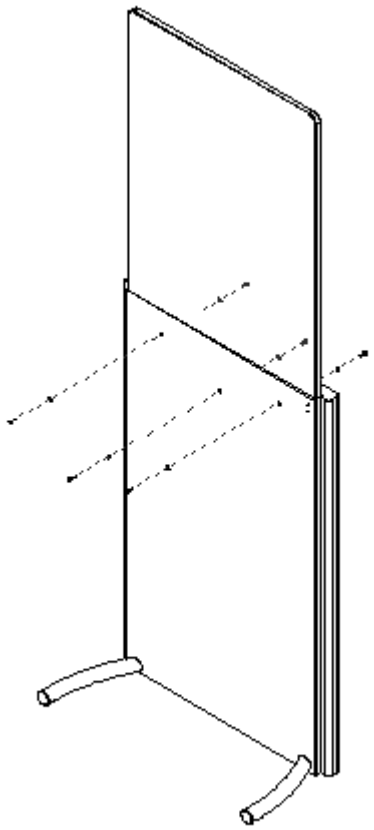
15. Prepare the anti-x barrier by inserting the supplied plastic bushings on the two sides



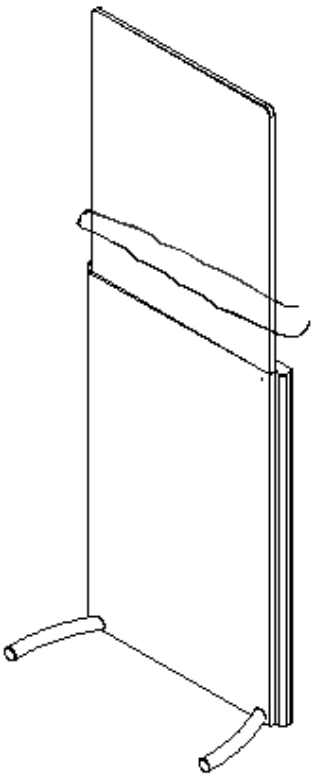
16. Insert the supplied rubber strip into the crystal holder and make it spread on the bottom. Lift (two people), possibly with suction cups for glass, the anti-x barrier, inserting it in the pocket.



17. Care for the alignment of the holes performing small lateral movements. Once aligned locking it to the structure with the supplied joint screws



18. Now insert the supplied gasket by pressing it along the end of the barrier



PREINSTALLATION PRECAUTIONS

1. In case of risk of dew, once the equipment has been unpacked, wait for at least 24 hours before applying voltage, thus enabling it to reach a thermal equilibrium with the surrounding environment.

2. Check each package to make sure that all components and items, required for installation, have been delivered according to packing list.

3. Check that cables are not jammed and other parts are not damaged during transport.

Any component or item that is not delivered must be reported immediately to your local service provider.

4. In case of necessity of re-packing the Mammo Unit (gantry) and/ or the Acquisition Work Station, please follow the previous procedure starting from the last step to the first step.

5. Not trash the original crate until the end of the Mammo Unit and Acquisition Work Station installation.

3.5 – ROOM PLANNING: CHECK OF INSTALLATION AREA

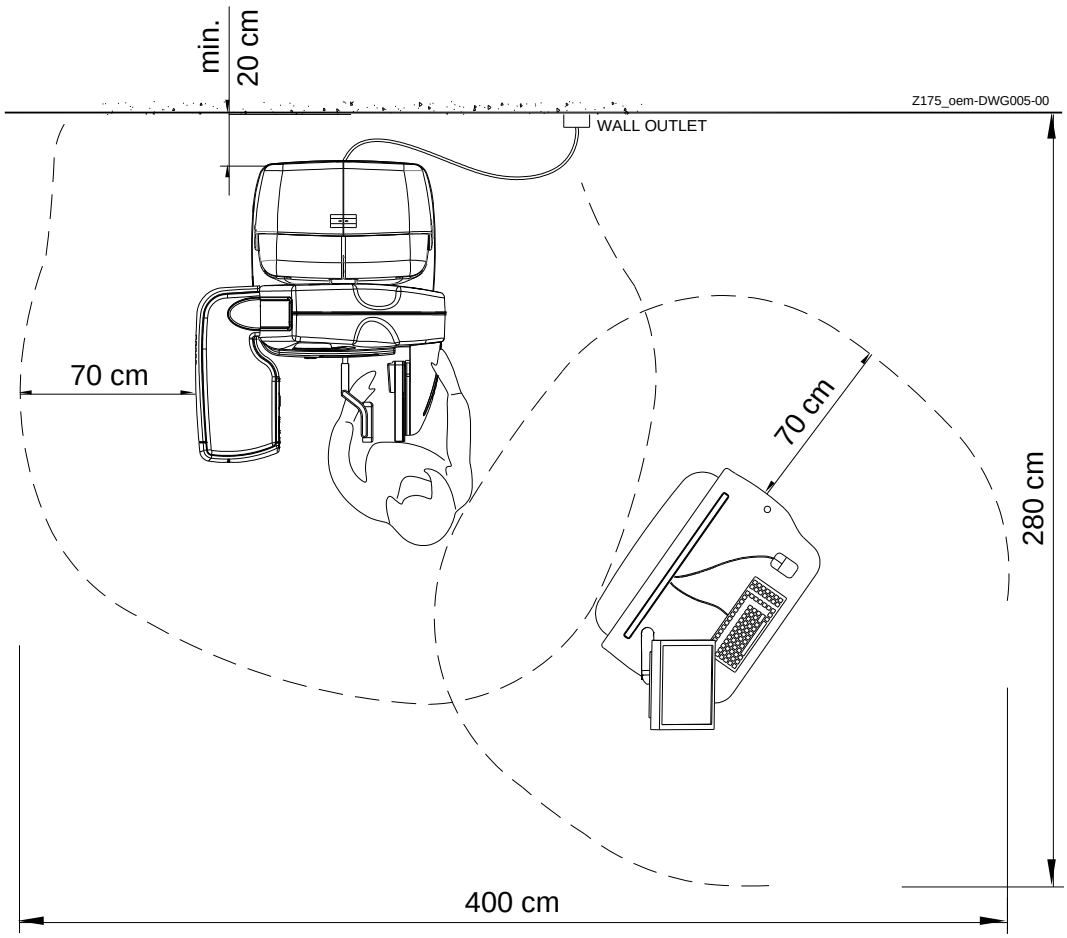
Before installation, the purchaser shall verify the suitability of the floor to support the unit weight, check the ambient temperature and humidity, arrange the electric installation in accordance with the local law and complete all the necessaries formalities regarding the possession and operation of X-ray device.

The device can only be installed by trained personnel duly authorised by Metaltronica S.p.A, in accordance with technical specifications laid down in this manual.

The installing company must ensure that the radiation protection complies with respective national and international requirements. Also take into consideration that any improper use of all x-ray equipment can bring about the following risks:

- exposure to X-rays, can be harmful to your health due to ionogenic radiation able to cause serious, permanent injuries;
- inside the device, there are dangerous voltages and any contact with them can cause serious injuries or death;
- unauthorised opening of the tube can cause injuries (for high temperature components inside)
- X-ray output window is made in Beryllium: Do not touch or force it.
- presence of an active web connection, can only be used under strict control of technical assistance for service in remote

Please refer to the following drawing to evaluate the dimensions of mammography unit.
The delivered cable length from mammography unit to the wall outlet is about 5 m. The delivered cable length from mammography unit to the Acquisition Work Station is about 5 m.



The movement of the C-Arm can harm people if the distance between walls and C-Arm is too small. The free space between tube covers and walls is usually of a minimum of 700 mm (approx. 28”) when the C-Arm is in 90° or -90° position.

WARNING

Do not install or operate any other equipment (except Acquisition Work Station) within 1.5 m distance from the patient or in the vicinity of the system.

According to local regulation for radiological protection, the access to the equipment and to the controlled area must be restricted to the authorized personnel only.

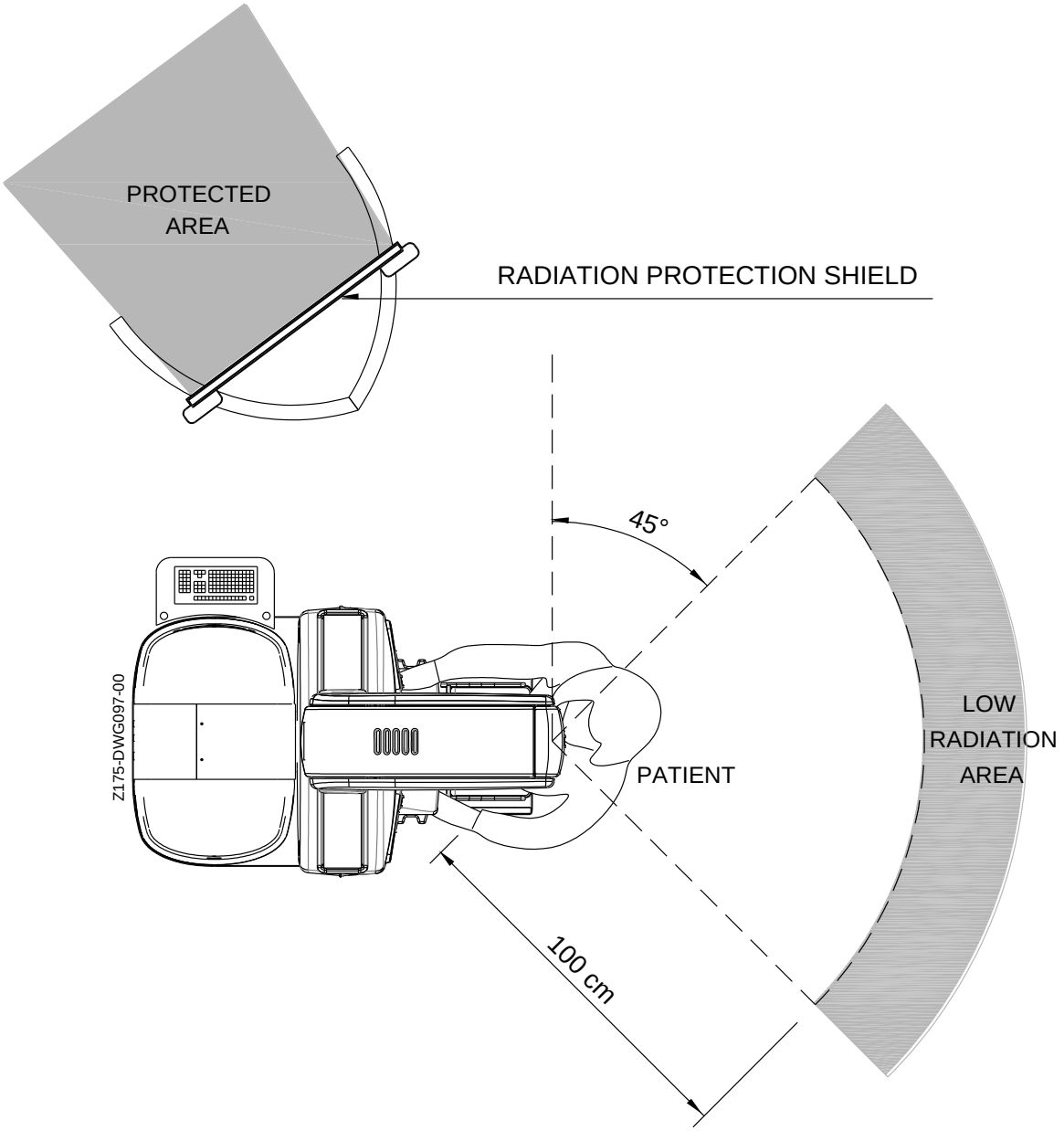
This medical equipment may only be operated in medical rooms which meet IEC requirements. The patient environment is determined by IEC 60601-1-1 as 1.5 m (approx. 59”) away from the patient. Do not place any other equipment in the vicinity of the system.

To obtain the maximum protection against the stray radiation, significant zone of occupancy and protected area can be identified according to the following drawing.

The protective barrier must be placed so that:

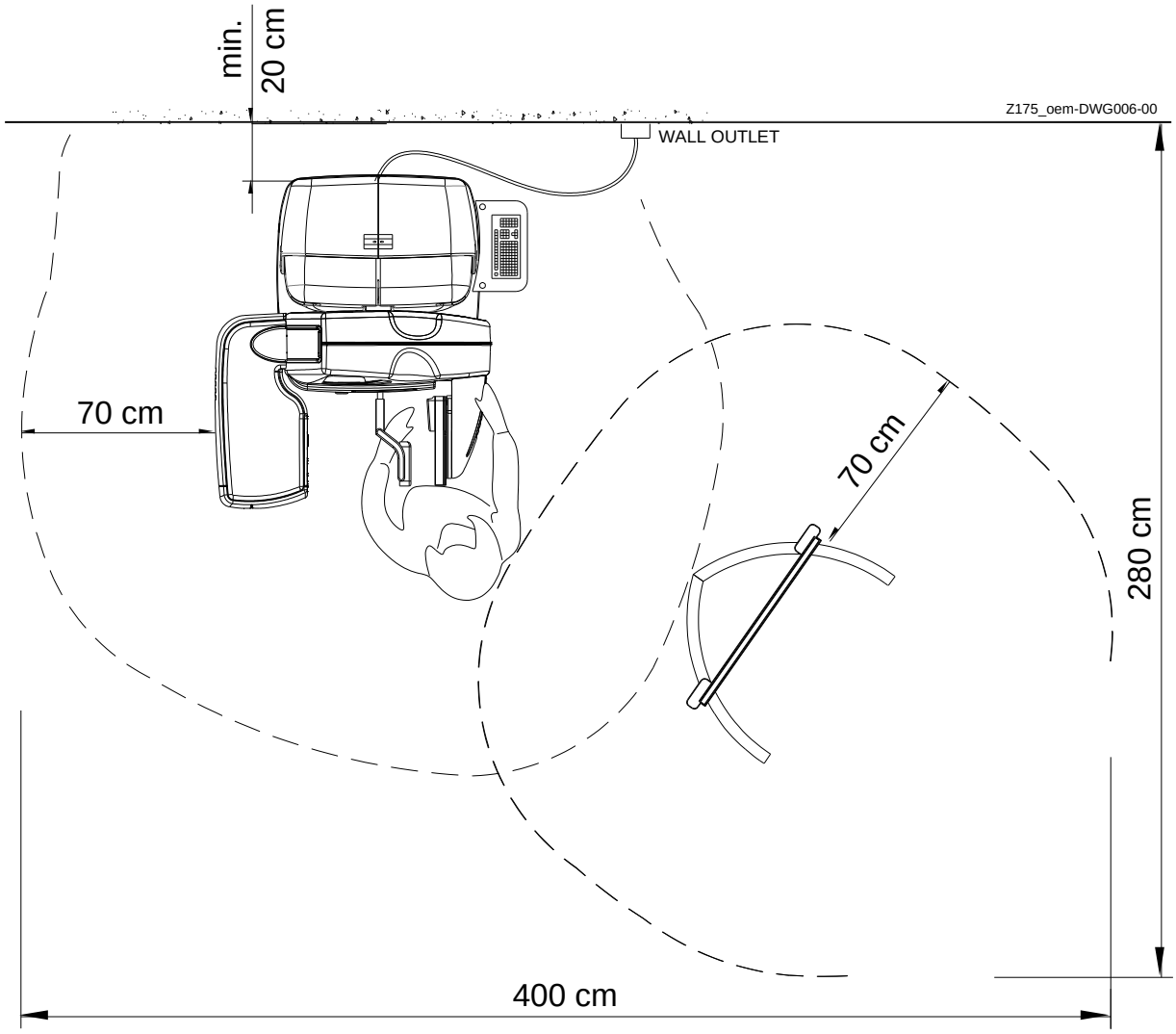
- The patient is on view throughout examination time;
- Mammo TSD indications are on view;
- Patient and emergency cut off buttons are immediately accessible.

It’s essential that protective barrier and operator be close to the unit.



CAUTION Provide adequate storage for system components

The drawings with mammography unit (with consolle) and anti-x barrier similar to the previous case are shown below:



3.6 - ROOM PLANNING: ENVIRONMENT CONDITIONS

Operating Conditions	Temperature (a-Se detector): +20° C / + 25° C Temperature (a-Si detector): +5°C /+ 40°C Temperature (SOLO DM detector): +10°C÷+40°C relative humidity (a-Se detector): 30% / 75% relative humidity (a-Si detector): 30% / 85% relative humidity (SOLO DM detector): 10% / 65% barometric pressure 700 hPa/1060hPa
Detector Maximum rate of temperature change	10°C in 20 min

Moreover it must work within ± 2°C from the calibration temperature for best quality images.

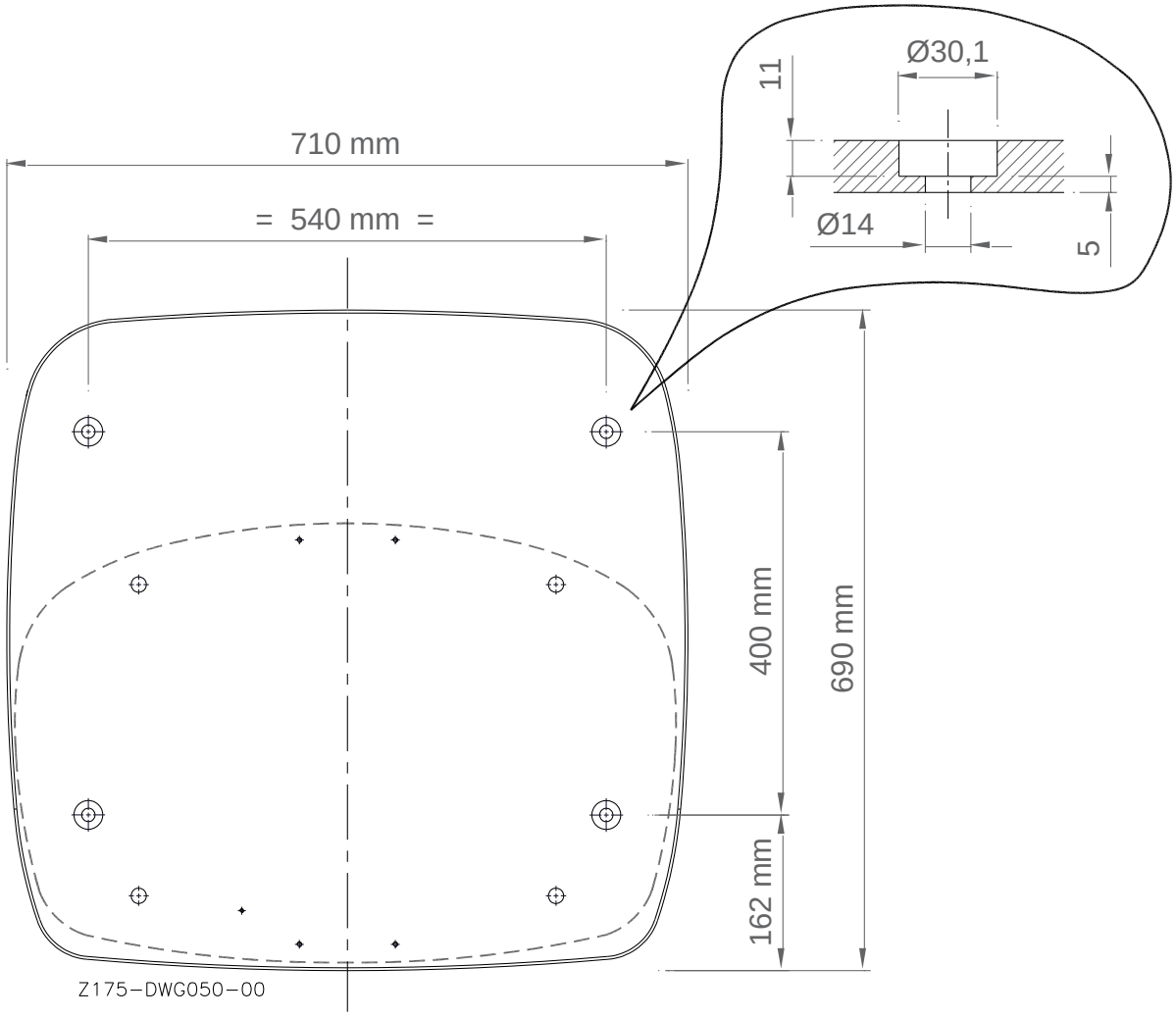
CAUTION CHECK if room climatic conditions match with those shown in table above

The integrity and the feature of the DETECTOR depend on the ambient conditions that have to be settled round the clock by an adequate air-conditioning system.
In particular, the operating temperature has to be kept between indicated in the above table while the temperature, during the not operating time, has to be kept between the limits indicated in the first row of the table in paragraph “3.2-Detector shipping conditions” to not damage irrevocably the vulnerable part of the DETECTOR.
Before using the device, it is necessary to level off, for at least two hours, the temperature operating range with the DETECTOR turned on.

CAUTION Using the mammography unit outside operating conditions can result in bad quality images.

3.7– BOLTING THE STAND TO THE FLOOR

Should a permanent fastening to the floor be required due to local regulations (for example in earthquake areas) or due to the quality of the floor covering, the stand can be secured to the floor by means of safety dowels (type M10, recommended FISHER part number 050510). When bolting the stand to the floor, the fixing screws shall pass through the hollow levelling screws. After bolting the stand put in place plastic covers on the external fixing holes.



Position the stand and mark out appropriate fixing holes on the floor, using the base plate as a template or mark floor according to the above dimensional drawing.

NOTE The stand shall be secured with at least four screws each (two on each side).

Drill the holes, insert dowels, position the stand, insert screws and tighten the screws to 10Nm. Dowels and screws must be supplied by local technician, compatible with stand fixing holes (see above drawings) and according to floor characteristics and local laws regulations.

CAUTION Make sure that the screws do not come in contact with any conductive material such as reinforcing iron.

3.8 - DETECTOR UNPACKING

3.8.1 GENERAL INFORMATION

CAUTION Extreme care should be taken during detector unpacking to prevent damage

CAUTION All components of original packing must be kept available and in perfect conditions for eventual reuse.
This is the only approved packing for detector shipment.

CAUTION Keep temperature sensor always together with detector before installation

ESD Handling the Detector with care to reduce hazard of ESD

NOTE

The detector shipping container is specially designed to minimize shipping device and to facilitate storage. A temperature monitoring device is included in the shipping container.

3.8.2 TEMPERATURE SENSOR

Two datalogger models are available with equivalent performances:

Yellow model allows to view 4 different alarms (LL and HH alarms are warning alarms that required an immediate action; L and H alarm are cautions alarm to warn you to pay more attention to temperature conditions during transit and storage)

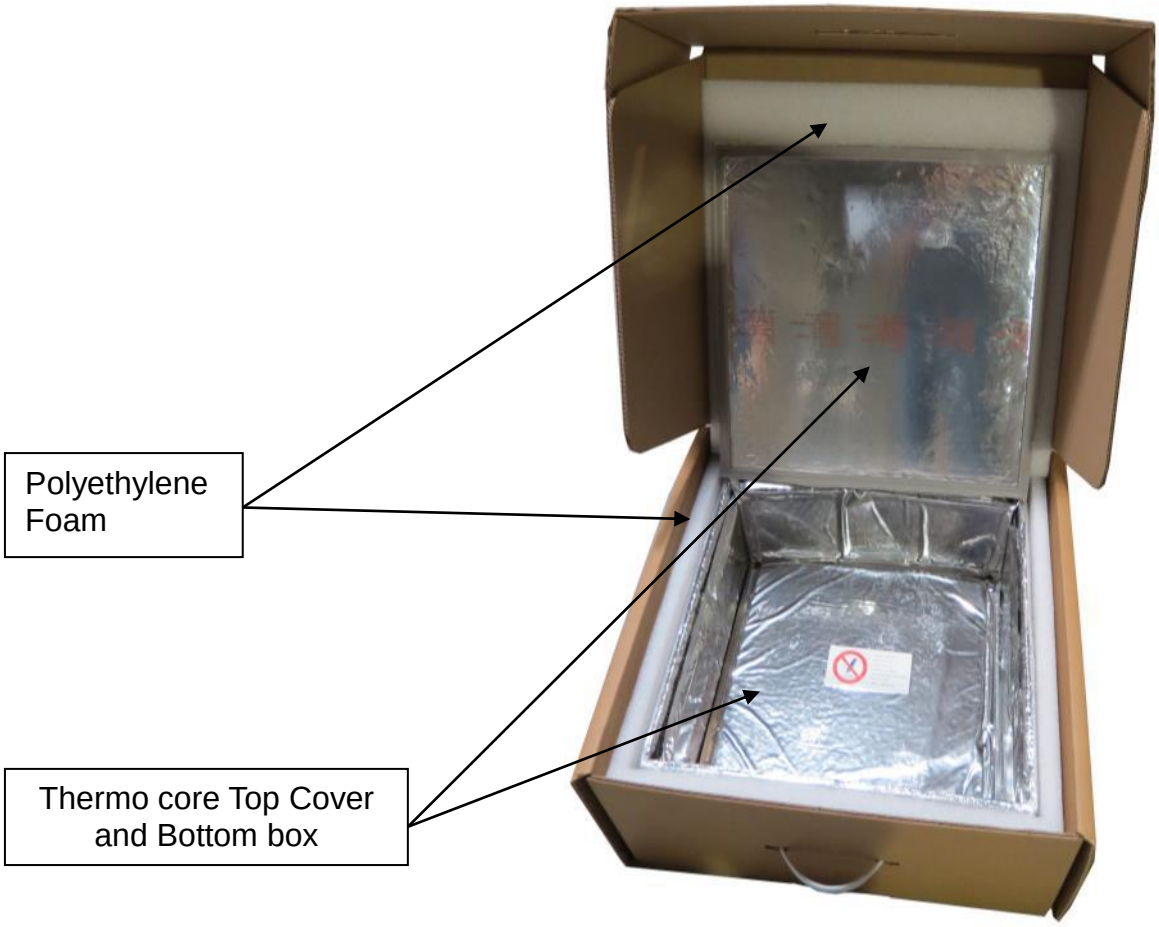
Blue model shows only LL and HH alarms: it allows to view warning temperature (in pdf file connecting it to a PC by a USB cable)

3.8.3 SHIPPING CONTAINER

Detector shipping container is composed by particular materials:

The following figure shows all different parts that make up the shipping crate:

- Shows the placement of top and side polyethylene foam
- Thermo core top cover and bottom box
- The “Phase 18C PCN Pack” the 4 sides, Top and Bottom



Figures **A** and **B** show the material “Phase18C PCM Pack” out of the shipping crate.

There are six pieces:

- One placed on the “TOP”
- One placed on the “Bottom”
- Four pieces on the sides

The identification label tells the position of each one:

- **A** shows the pack which can be used for both “top” and “Bottom” sides as specified on the identification label. The One that has the warning label (see figure 2) is considered the “Top”
- **B** shows the 4 pieces that are marked “side”

FIGURE 2

This is Phase 18C PCM Pack out of the Crate. It's the **Top** because of this warning label to be careful when manipulating.
The actual identification label shows that it can be used in both places.

FIGURE: 2

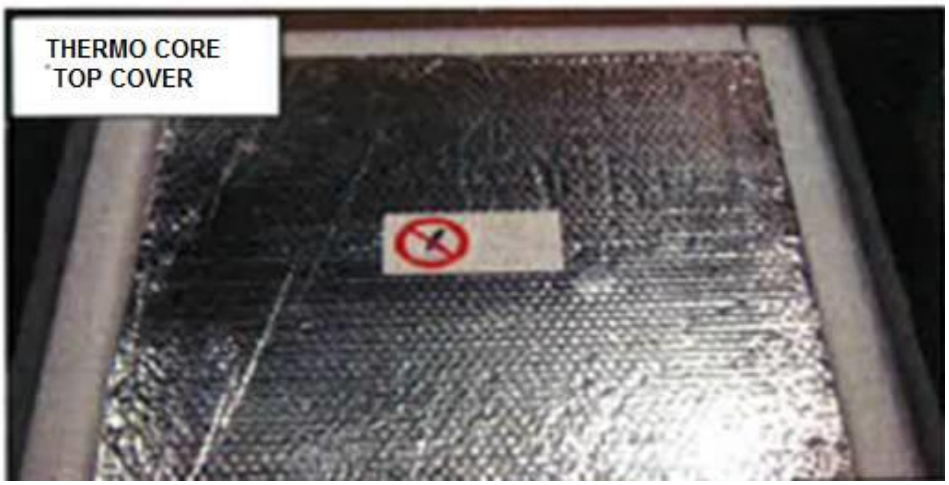
- This is Phase 18C PCM Pack out of the Crate. These are the 4 pieces that are marked **Side**.

3.8.4 UNPACKING PROCEDURES

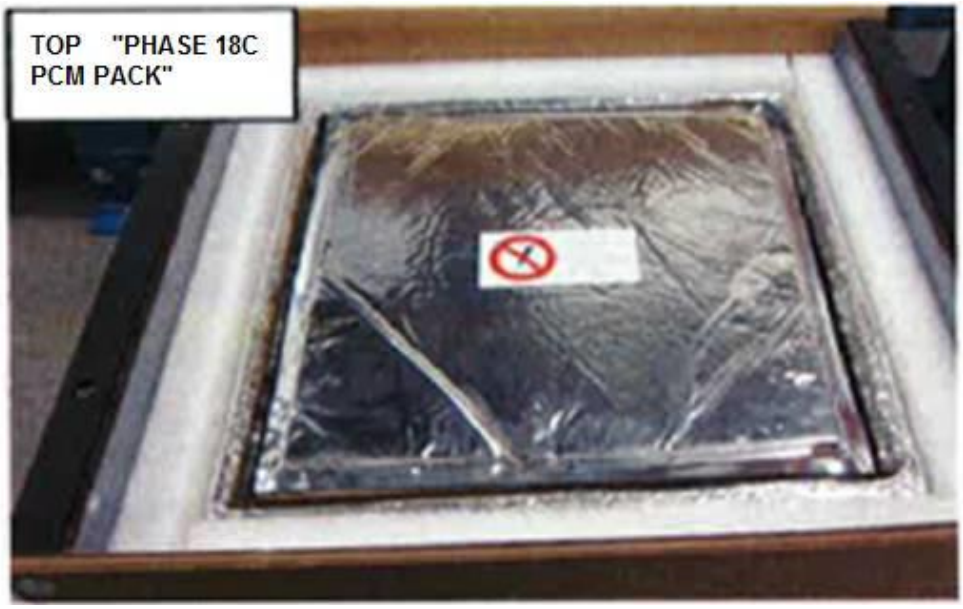
1) For installation, move shipping container to the installation room having controlled temperature within 20°C-25°C
2) Open the shipping container

3) Lift the cover and remove the upper polyethylene foam

4) Remove the thermo core top cover



5) Remove the TOP “Phase 18C PCM Pack”



6) Lift slightly the Detector Box and put it on a flat and safe surface

WARNING

The detector has a very strict range of temperature and must be removed from its original packing only after installation room has reached operating temperature (see the table of paragraph “3.6- Room Planning: Environment Conditions”)

7) Open the box and draw the Datalogger of the temperature

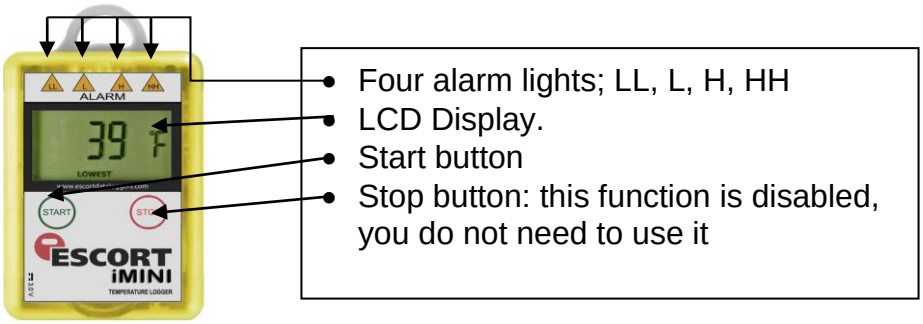
DATA LOGGER OF TEMPERATURE

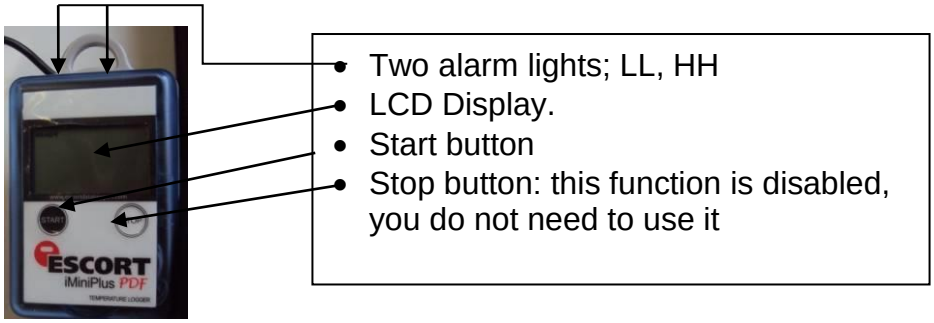
8) **Check for any alarms on the recorder to any immediate objection to carrier/shipping company: the overcoming of the limits will invalidate your warranty of detector panel**

If the IMINI® Temperature Logger has any alarms, a LED corresponding to any of the four alarms on the top of the unit, will be flashing. The alarm name will also be displayed on the LCD screen:

- Low temperature alarms are shown by means of a blinking blue alarm
- High temperature alarms are shown by means of a blinking red alarm

Note: The alarm name will also be displayed on the LCD screen

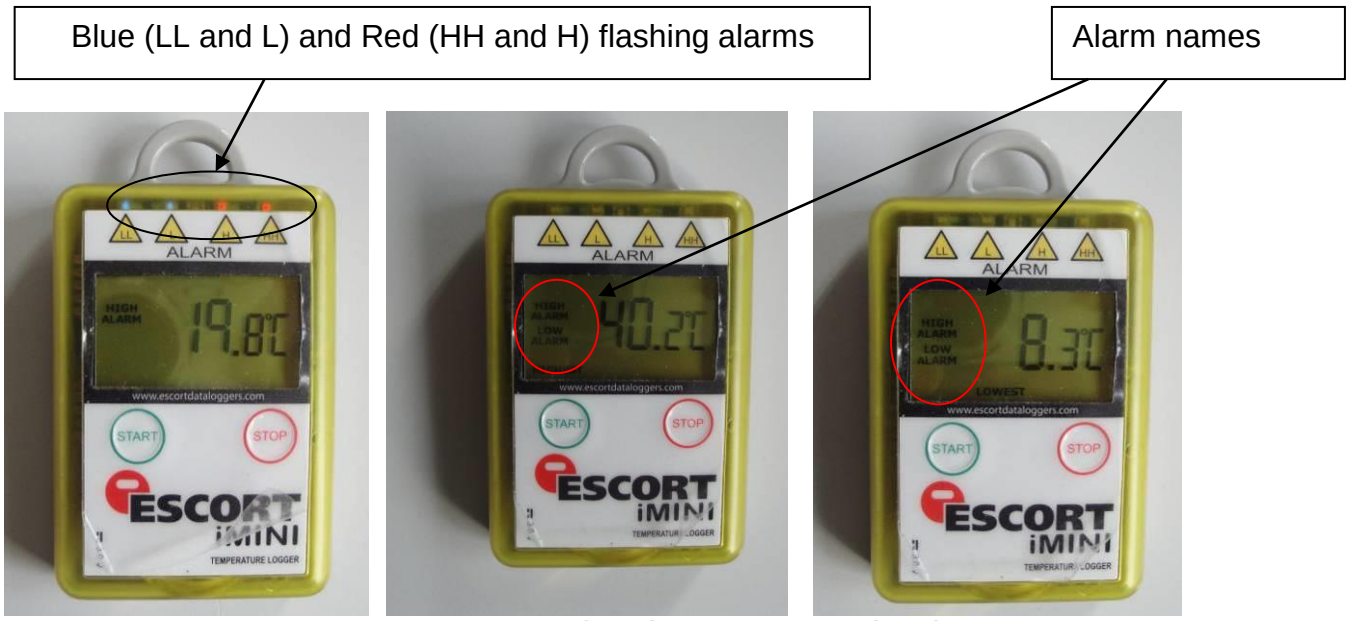




9) The LL (< +5°C) and HH (> +40°C) for a-Se detector, LL (< -15°C) and HH (> +65°C) (for a-Si detector) and LL (< -5°C) and HH (> +55°C) (for SOLO DM detector) are critical alarms**: you need immediately to contact carrier/shipping Company for objection. After detector reception, send datalogger to Metaltronica S.p.A for data downloading and identification of exact overcoming of the temperature conditions. It will not possible to complete installation because of a temperature alarm and you'll need ask to manufacturer for a restore password**

The L (< +10°C) and H (> +37°C) for a-Se detector, L (< 0°C) and H (> +50°C) (for a-Si detector) and L (< 0°C) and H (> +50°C) (for SOLO DM detector) are just

controls to give you a warning that an event occurred but the product is not affected. This is a control because if your environment sets off these controls is close to the limits. You need always to advice your shipping company to improve transport conditions next time. **After detector reception, send datalogger to Metaltronica S.p.A for data downloading, identification of exact temperature overcoming conditions and improve on the base of these data transport conditions during next shipping procedures.**



In the event that the recorder should contain failure indication, faults, blank display, useless reading, notify Metaltronica S.p.A immediately.

10) Keep datalogger always together with detector before and during installation.

In particular, if the installation is immediate, verify that the difference between the ambient temperature and the temperature indicated by the datalogger is not more than 5 degrees to avoid thermal shock to the detector.

In the case where the temperature difference is greater than 5°C it is recommended to remove the detector from the external crate, but keeping it in its internal packing and let it so stabilize for three hours at room temperature.

If the installation will not take place on the same day of unpacking, please close it and place it in an environment with temperature suitable for storage (see next paragraph).

11) Unpack the DETECTOR, inspect unit for damage and take care of avoiding any mechanical shock.
12) Lift the DETECTOR from the shaped compartment and put it on the C-Arm of the mammography unit.

3.8.5 PRE-INSTALLATION STORAGE

SHORT TIME STORAGE

Keep the detector in its original packaging (in perfect state) and place it in the same air-conditioned installation environment.

LONG TIME STORAGE

Keep the detector in its original packaging (in perfect state) and place it in closed environments where there is guaranteed a temperature inside the range indicated in the first row of the table in paragraph “3.2-Detector shipping conditions”, making sure the temperature is stable and not always next to the specified limits.

CAUTION All components of original packing must be kept available and in perfect conditions for eventual reuse. This is the only approved packing for detector shipment.

4 - DETECTOR PACKING INSTRUCTIONS

If the detector has to be shipped back to Metaltronica S.p.A for service operations, the below procedure must be followed reusing ONLY the original shipping crate provided.

4.1 GENERAL INFORMATION

CAUTION The Packing procedure must be performed in a room having controlled temperature within the range indicated in the paragraph “3.2- Detector shipping conditions”.

CAUTION The original packing is the only approved for DETECTOR shipment. All components of original packing must be kept available and in perfect conditions for eventual reuse. This is the only approved packing for detector shipment.

ESD Handling the Detector with care to reduce hazard of ESD

CAUTION Keep temperature sensor always together with detector before installation

The detector shipping container is specially designed to minimize shipping device and to facilitate storage. A temperature monitoring device is included in the shipping container.

The “Phase 18C PCM Pack does not require a pre-heating for use; it requires a storage in ambient “room” with a temperature ideally between 20°C and 30°C.
Two options are allowed for storage: packs can be left inside the crate or placed on a clean flat surface:

1) The “Phase 18C PCM Pack” can be left in the crate as received, but this option requires at least 72 hrs of storage for re-generation before use;
2) The “Phase 18C PCM Pack” can be removed from inside the crate and placed on a clean flat surface; this option requires 12hrs of storage for re-generation before use:

4.2 DETECTOR PACKING PREPARATION

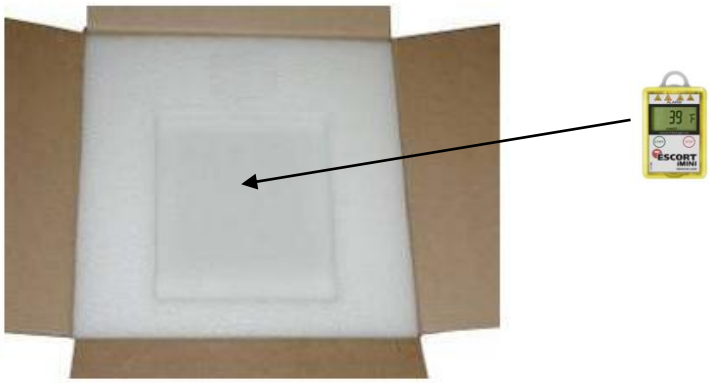
1) Open the internal box and remove the top foam as shown in the following figures

2) First place the detector in ESD bag. Then place the detector with TFT oriented up (carbon fiber window facing up) on the foam inside the box.

3) Add the contour foam and make sure the detector is well adjusted and that is not moving

4) Place the top cover foam on the detector, with the opening for temperature sensor (datalogger) facing up.

5) Put the datalogger on the top cover as shown in the following figure by checking its status (please see the following paragraph for detector checking).



6) Close the box as soon as possible and place tape on the joint

4.3 DATALOGGER CHECKING

Before each delivery, please take note of different events for datalogger:

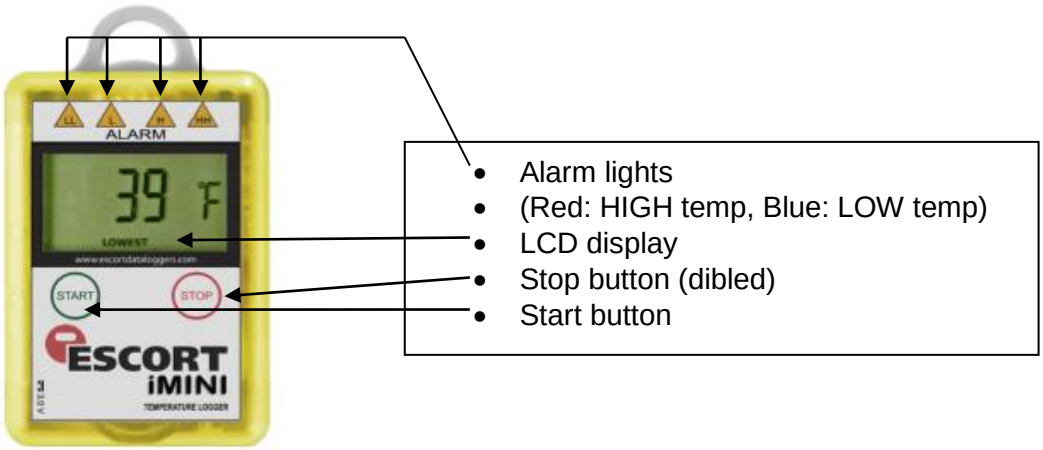
A. DATALOGGER SWITCHED OFF: READY TO START

If datalogger is switched off, (“ready” to start, see the following fig.) hold “start” pushbutton until the first indication of temperature appears: datalogger starts to record temperature data.

B. DATALOGGER SWITCHED ON AND PRESENCE OF FLASHING ALARMS

In any case, check always that no alarms are flashing on datalogger.

If any alarm is present (blue/red alarms) contact Metaltronica S.p.A for checking this event and for a new datalogger.



NOTE if the IMINI temperature logger experiences any alarm (red light: H/HH alarm, blue light:L/LL alarm) please contact Metaltronica on the briefest delay

C. LOW BATTERY ALARM ON LCD DISPLAY

If “low battery” alarm appears please contact Metaltronica for datalogger replacement .

1) Make sure the temperature sensor is activated. On LCD display actual temperature can be read and no alarms must be present.

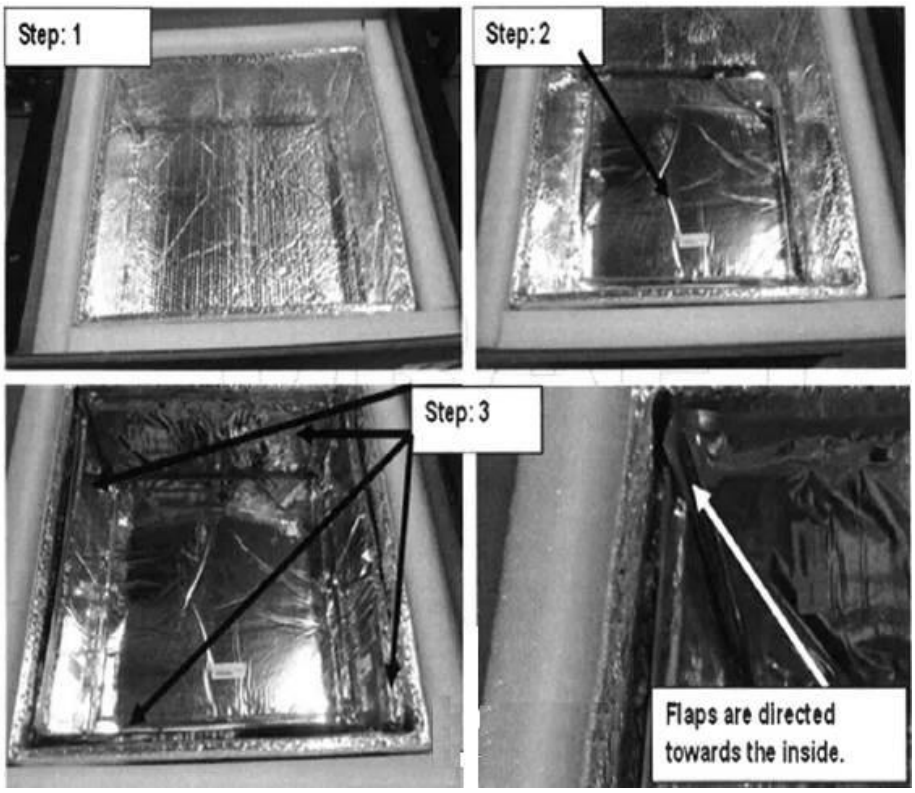
CAUTION Insert always the data logger. Only if the datalogger is placed inside the box, the detector warranty is valid

2) You do not need to stop datalogger for any reason: datalogger is continuous logging and there is no risk of memory overflow.

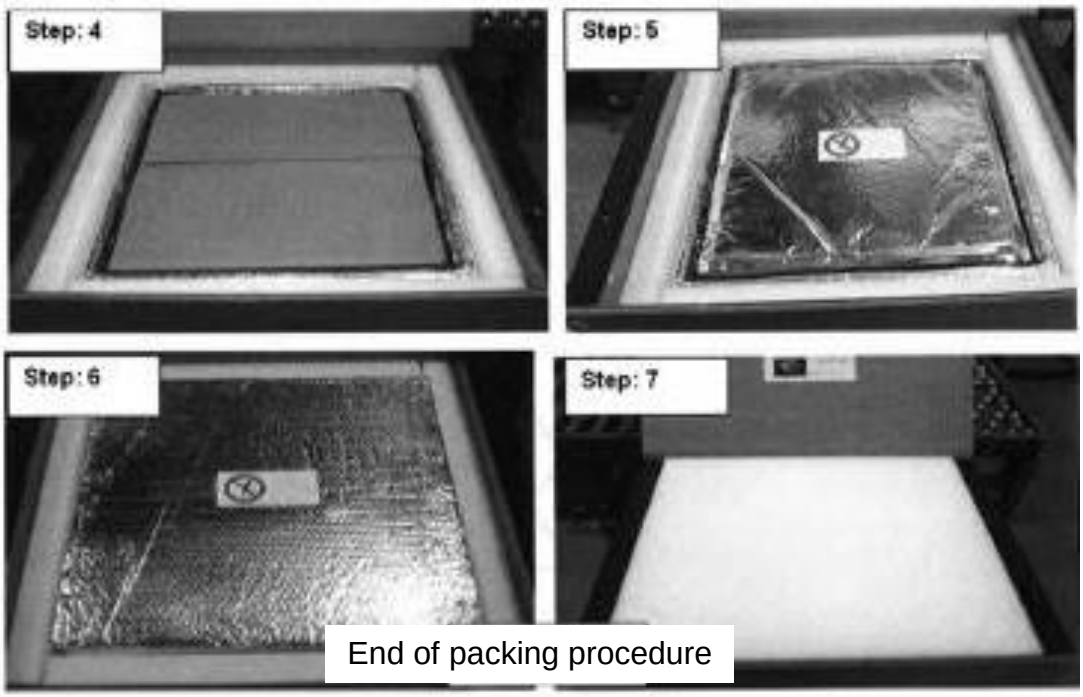
4.4 EXTERNAL CRATE PACKING

Please take care of the following steps:

1) Place on a flat surface the crate with the empty thermo core bottom box inside the crate
2) Next place the “Bottom” Phase 18C PCM Pack inside
3) Place the 4 side Phase 18C PCM Pack inside while making sure that all flaps are directed towards the inside



4) Place the detector box inside
5) Place the top Phase 18C PCM Pack over the detector box covering the whole surface
6) place the thermo core top cover
7) place the Polyethylene Foam on the top and close the cardboard crate
8) The external crate used for the shipment of Detector



CAUTION The insulating cover must be placed as soon as possible.

5 - DETECTOR DELIVERY

Ship the detector the same day by airfreight by means of a courier pick up able to ship the packing in max 2 days (or more depending on climatic and seasonal conditions, see environmental conditions). The shipping container is intended to protect the detector when outside environment is outside storage temperature range indicated in the first row of the table in paragraph “3.2- Detector shipping conditions” for a limited time depending of external temperature. Prolonged exposure to extremely cold and warm environment condition must be avoided and special delivery conditions with temperature controlled tracks and fast custom clearing procedure must be applied.

NOTE Delivery service should be able to assure the following storage environment conditions detailed in the first row of the table in the paragraph “3.2-Detector shipping conditions”.