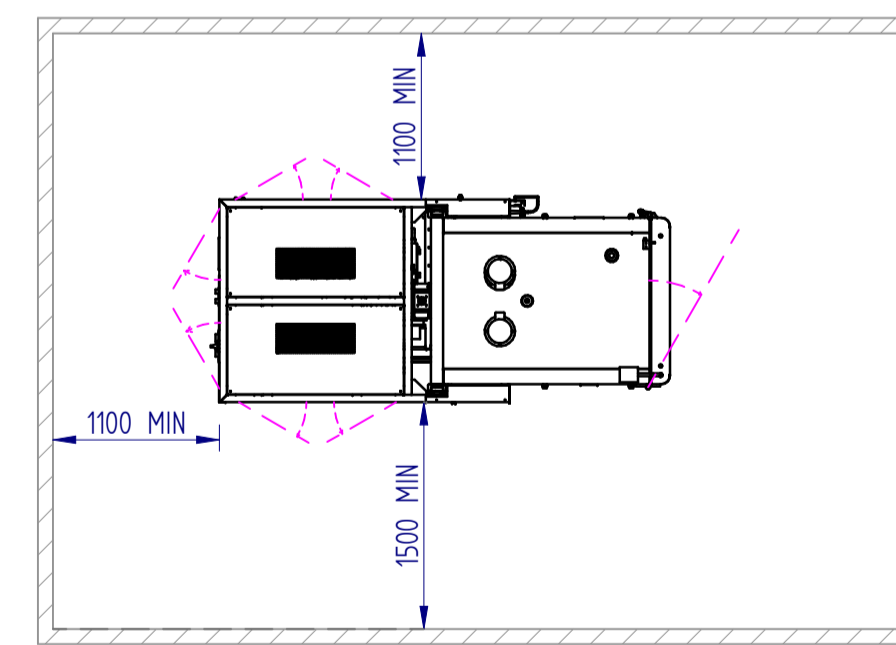


STANDARD CONFIGURATION

SECTION A-A

SECTION B-B



150 SUGGESTION FOR THE INSTALLATION

DRAWING FOR INFORMATION ONLY
GENERAL TOLERANCE ± 5 mm

SUPPLY LIMITS: ∇ Customer
Angelantoni Test Technologies

LEGEND	
1: INSPECTION WINDOW 450x450 mm	25: FLOOR WITH HOLE FOR VERTICAL VIBRATION TEST (T. max 180°C)
2: EVAPORATOR/DEHUMIDIFICATOR	26: ETHERNET PORT
3: POWER SUPPLY CONNECTION (cables)	27: CONNECTOR FOR AUXILIARY CONTACTS
4: EMERGENCY PUSH-BUTTON	28: HANDLING PORTHOLE (OPTIONAL)
5: RS232 INTERFACE	27: PORTHOLE Ø150mm
6: MAIN SWITCH	29: REFRIGERATING UNIT
7: MIN/MAX ELECTRONIC THERMISTAT	30: STEAM GENERATOR (ONLY FOR CLIMATICS)
8: ELECTRICAL HEATERS	30: IN2 RAILS 5 m FOR MANUAL/AUTOMATIC MOVEMENT OF THE CHAMBER (OPTIONAL)
9: TEMPERATURE PROBE	31: FLOOR PLUG
10: CAPACITIVE PROBE (ONLY FOR CLIMATICS)	32: ELECTROMAGNETIC LOCK WITH GATEKEEPER SYSTEM (OPTIONAL)
11: TOWN / TOWER WATER INLET (PIPES AT CUSTOMER CARE) (1)	33: HEAD EXTENDER (AT CUSTOMER CARE)
12: MODELS AV800 (T) S, AV800 (T) C) S, 1" G	34: SILICONE GASKET (AT ACS CARE)
MODELS AV800 (T) C) S, AV800 (T) C) S, 1.1/4" G	35: HUMIDIFICATION-WATER INLET (ONLY FOR CLIMATICS) approx consumption 3 kg/h, connection 1/2" G (1)
13: TOWN / TOWER WATER OUTLET (PIPES AT CUSTOMER CARE) (1)	36: COLLAR WITH CLAMP (AT ACS CARE)
MODELS AV800 (T) S, AV800 (T) C) S, 1" G	36: RING TO FIX SILICON GASKET TO THE FLOOR (AT ACS CARE)
MODELS AV800 (T) C) S, AV800 (T) C) S, 1.1/4" G	37: COMPRESSED AIR INLET FOR DEEP DEHUMIDIFICATION KIT 1/2" G (OPTIONAL) (1)
14: HUMIDIFICATION-WATER INLET (ONLY FOR CLIMATICS) approx consumption 3 kg/h, connection 1/2" G (1)	38: CHAMBER MOVING SYSTEM CONTROLS
15: CONDENSATE DRAIN (COUNTER PRESSURE FREE) 1/2" G	39: 3/8" MALE CONNECTION FOR RUBBER WITH VALVE
16: PORTHOLE Ø90mm	40: RESET BUTTON
17: HELICOIDAL FAN	41: FAN KIT, FILTER AND GRID
18: FAN MOTOR	42: WI-FI REMOVABLE ANTENNA
19: SHEET FOR CONDENSATE DRAIN OF THE DOOR	43: UNITS CONNECTION
20: INTERNAL LAMP (60W)	44: TOUCH SCREEN CONTROL PANEL

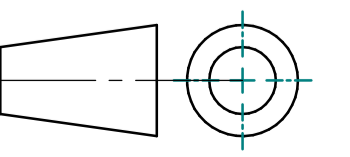
NOTE (1)
Reference to 0002094

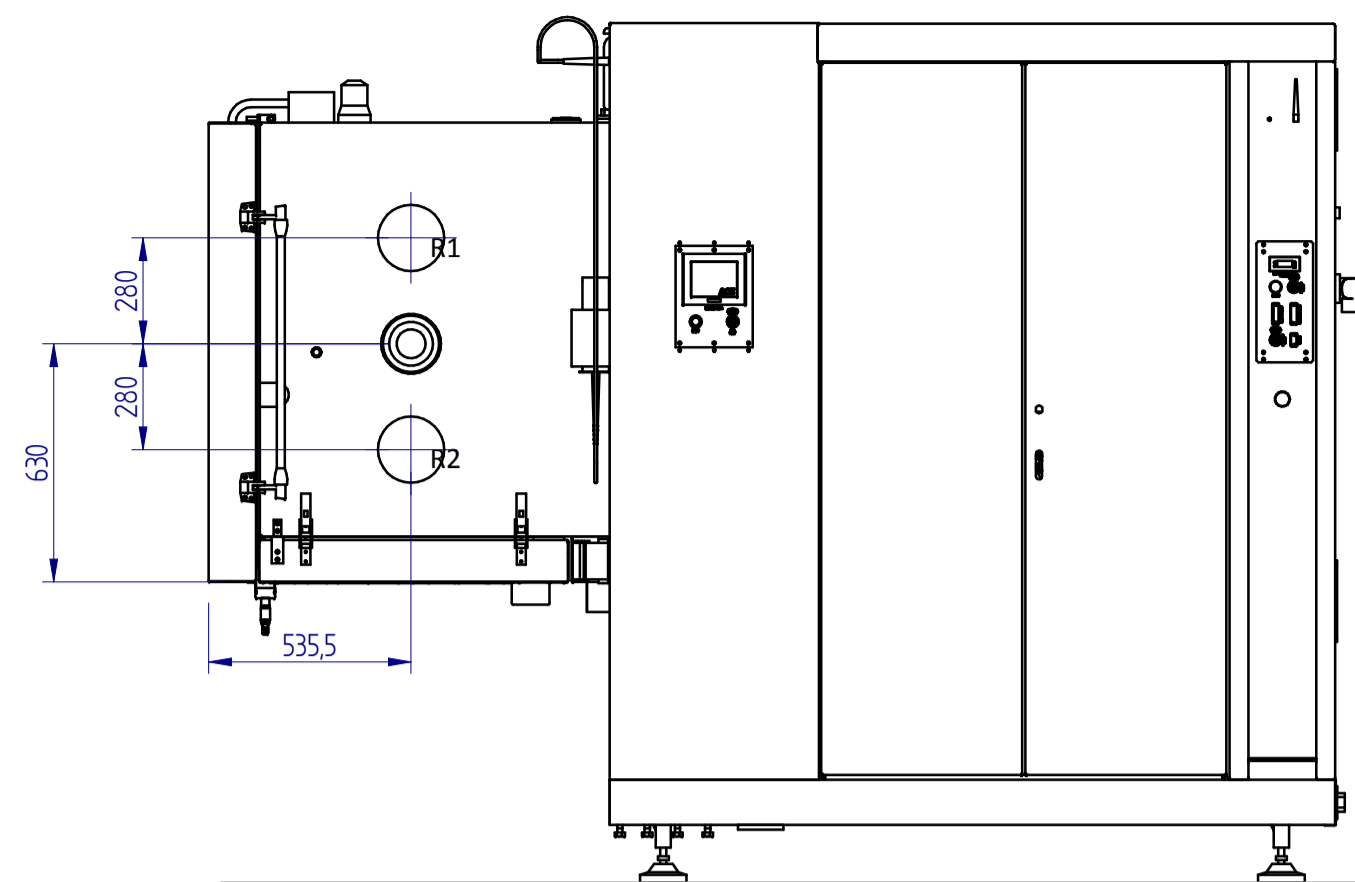
Description
Description
Designation
Beschreibung

LAYOUT VIBRATION 600

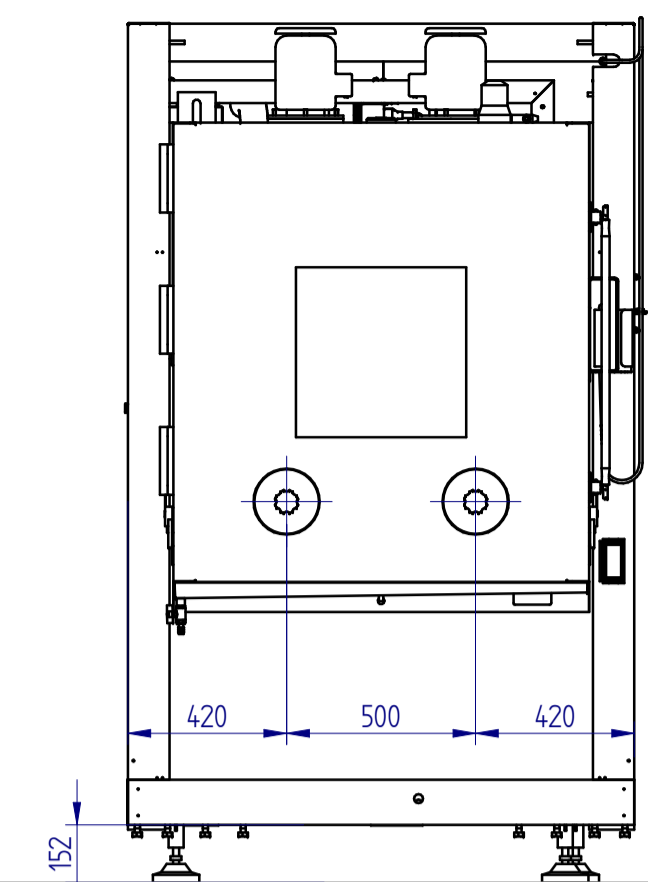
Drawing No. D0010575
Revision Scale Q
Sheet 1 of 3

Standards Approval	M.F.	Date	09/05/2011
Technical Manager	P.Q.	Date	09/05/2011
Inspected by	P.Q.	Date	09/05/2011
Drawn by	G.M.	Date	09/05/2011

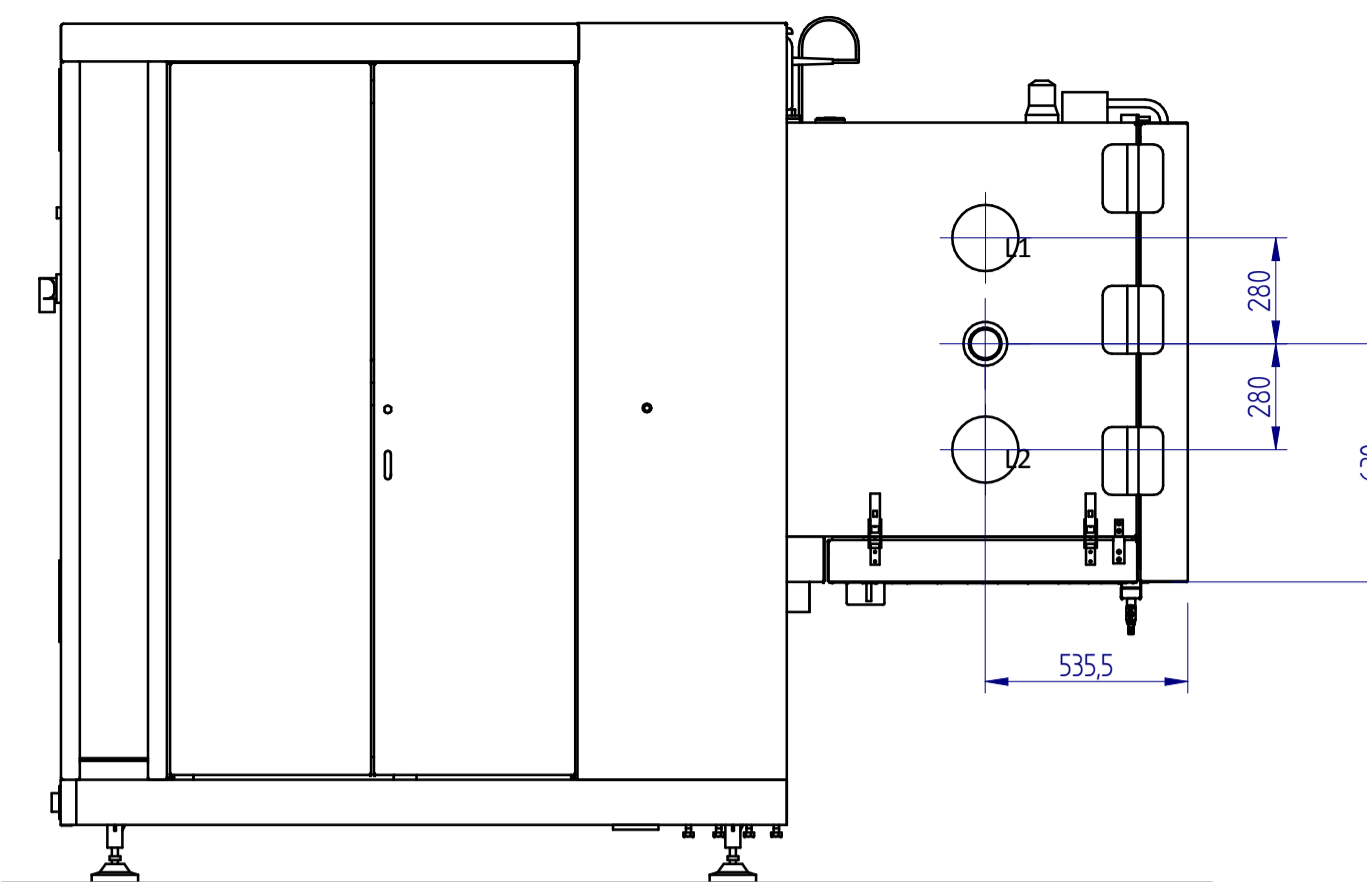




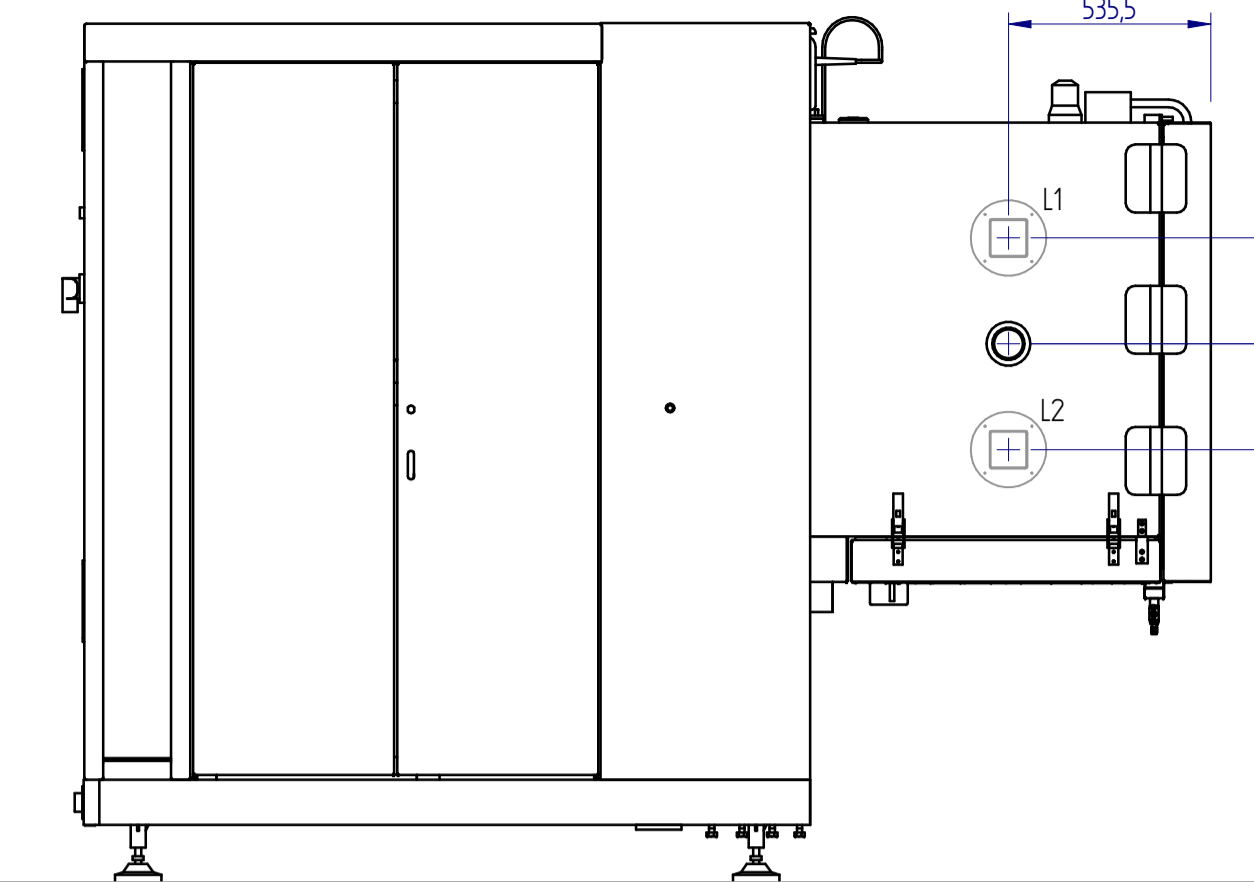
ADDITIONAL PORTHOLES POSITION (AVAILABLE SIZE: $\phi 80$ OR $\phi 150$ OPTIONAL)



HANDLING PORTHOLES POSITION (OPTIONAL)



ADDITIONAL PORTHOLES POSITION (AVAILABLE SIZE: $\phi 80$ OR $\phi 150$ OPTIONAL)



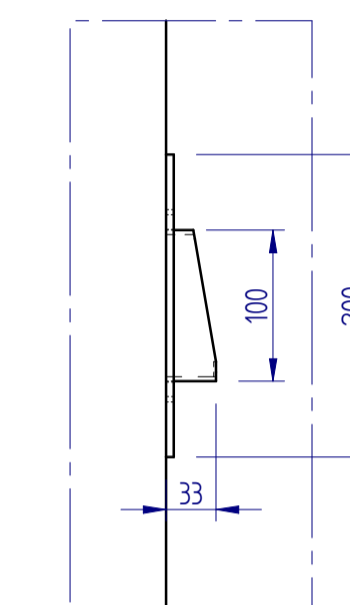
ADDITIONAL COMPENSATION VALVES POSITION - SIZE: 100X100 (OPTIONAL)

COMPENSATION VALVES ARE LOCATED IN THE POSITION OF SOME OPTIONAL PORTHOLES, WHICH THEREFORE CAN NOT BE SELECTED.

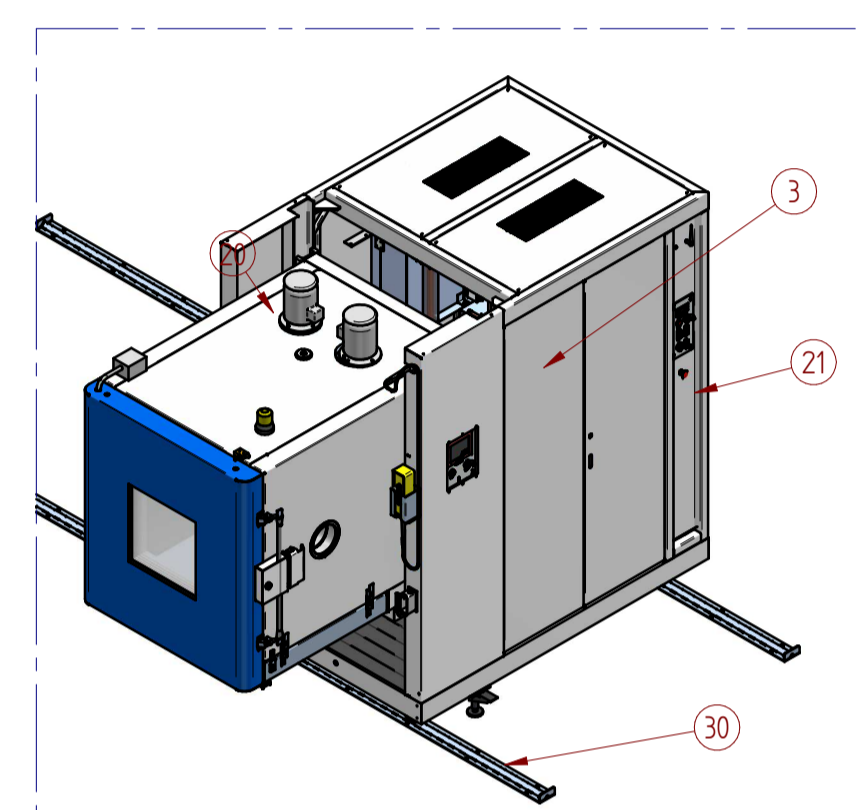
THE AIM OF THESE COMPONENTS IS TO INCREASE AIR EXCHANGE FLOW BETWEEN THE CHAMBER USEFUL VOLUME AND OUTSIDE; THIS MAY LEAD TO SOME EFFECTS:

- THIS CAN LEAD TO PERFORMANCE REDUCTION AT NEGATIVE TEMPERATURE (CAPABILITY OF THE CHAMBER TO HOLD TEMPERATURE SETPOINT FOR A LONG TIME) AND MAY CAUSE CONDENSATION OR ICE FORMATION INSIDE THE CHAMBER.

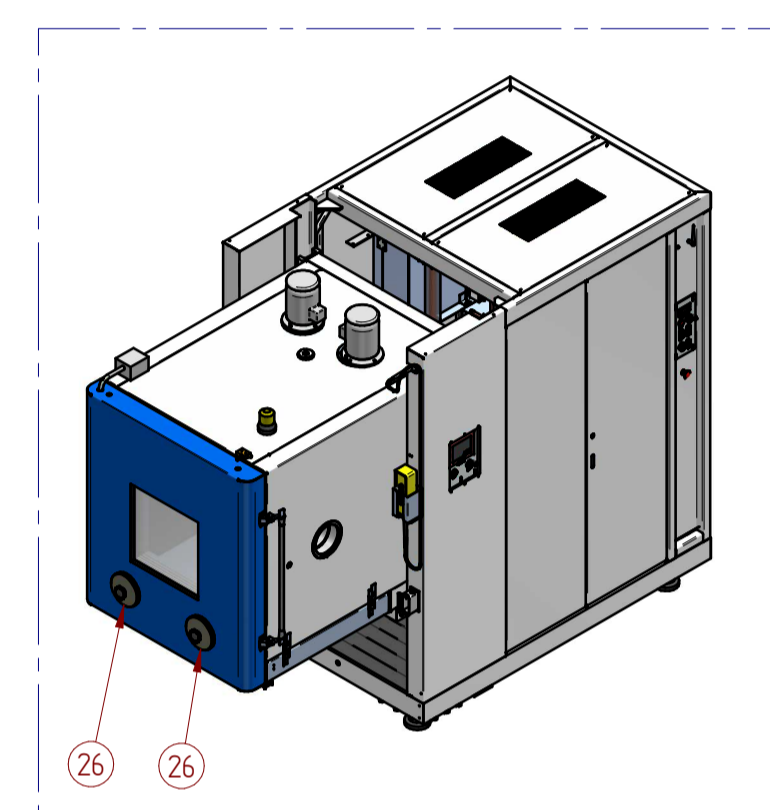
- IF THE CHAMBER OR THE SPECIMEN IS EQUIPPED WITH ACCESSORIES THAT MODIFY THE AIR COMPOSITION INSIDE THE CHAMBER (FOR EXAMPLE LIQUID OR GASEOUS NITROGEN), IT IS REQUIRED A SPECIFIC RISK ASSESSMENT BY THE PLANT MANAGER.



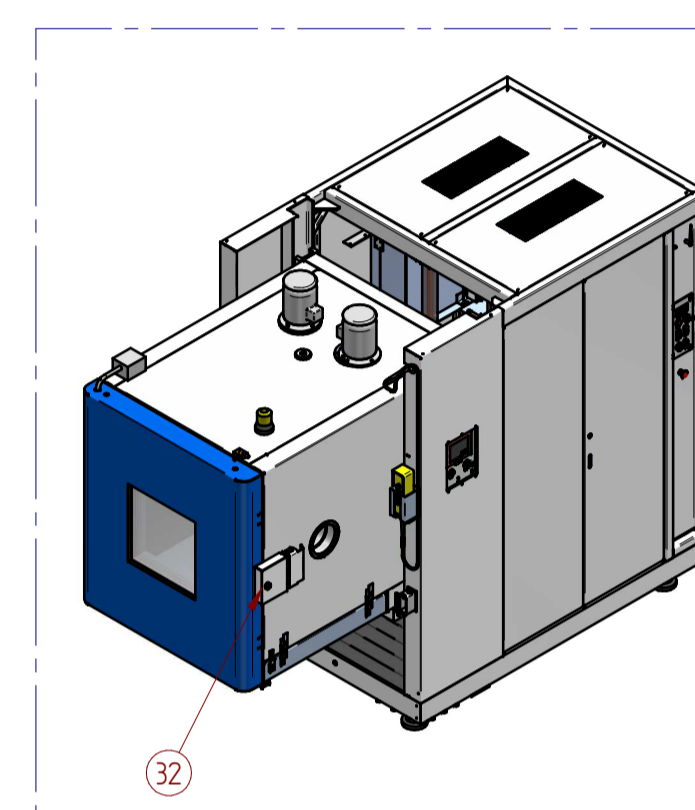
COMPENSATION VALVE SIDE VIEW



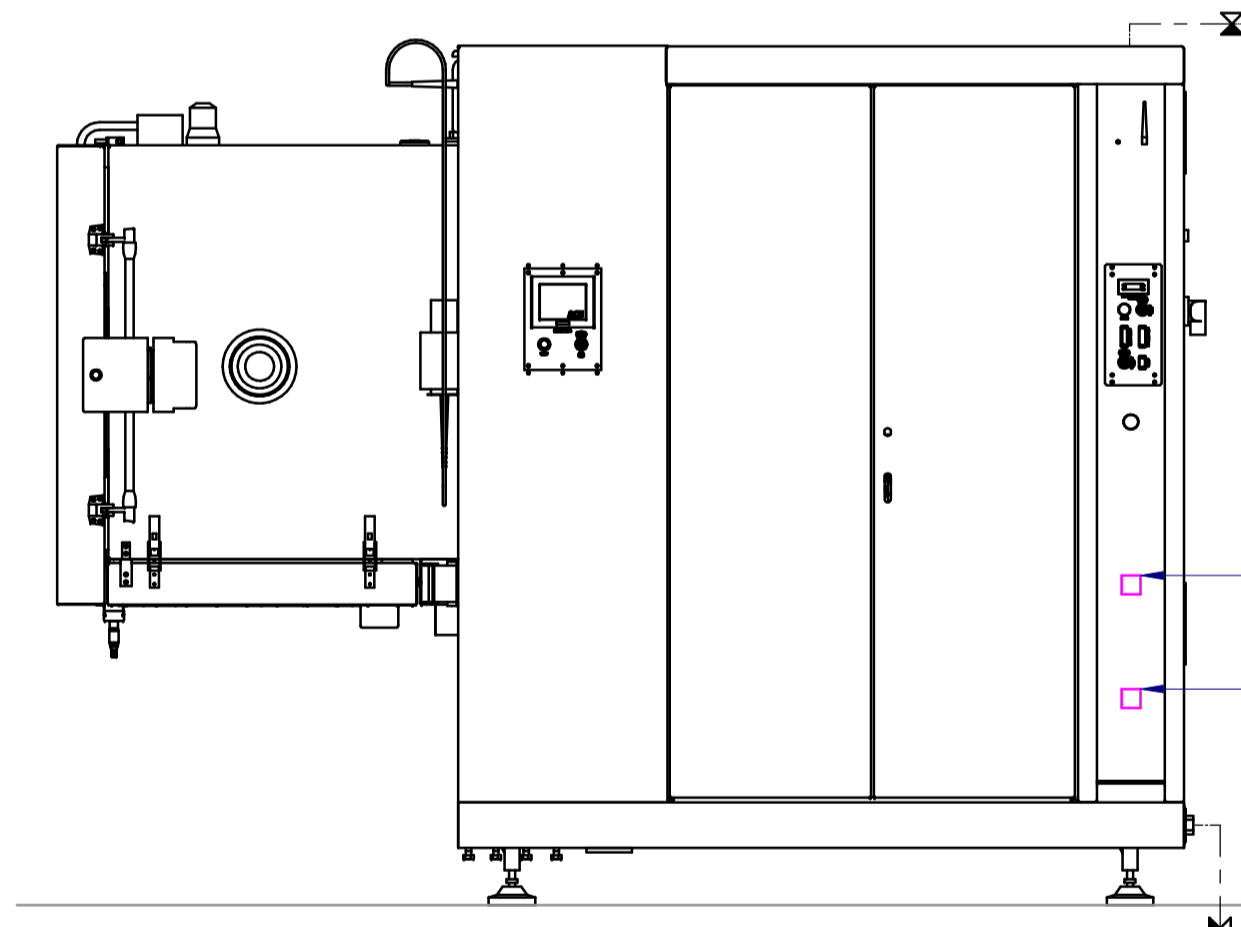
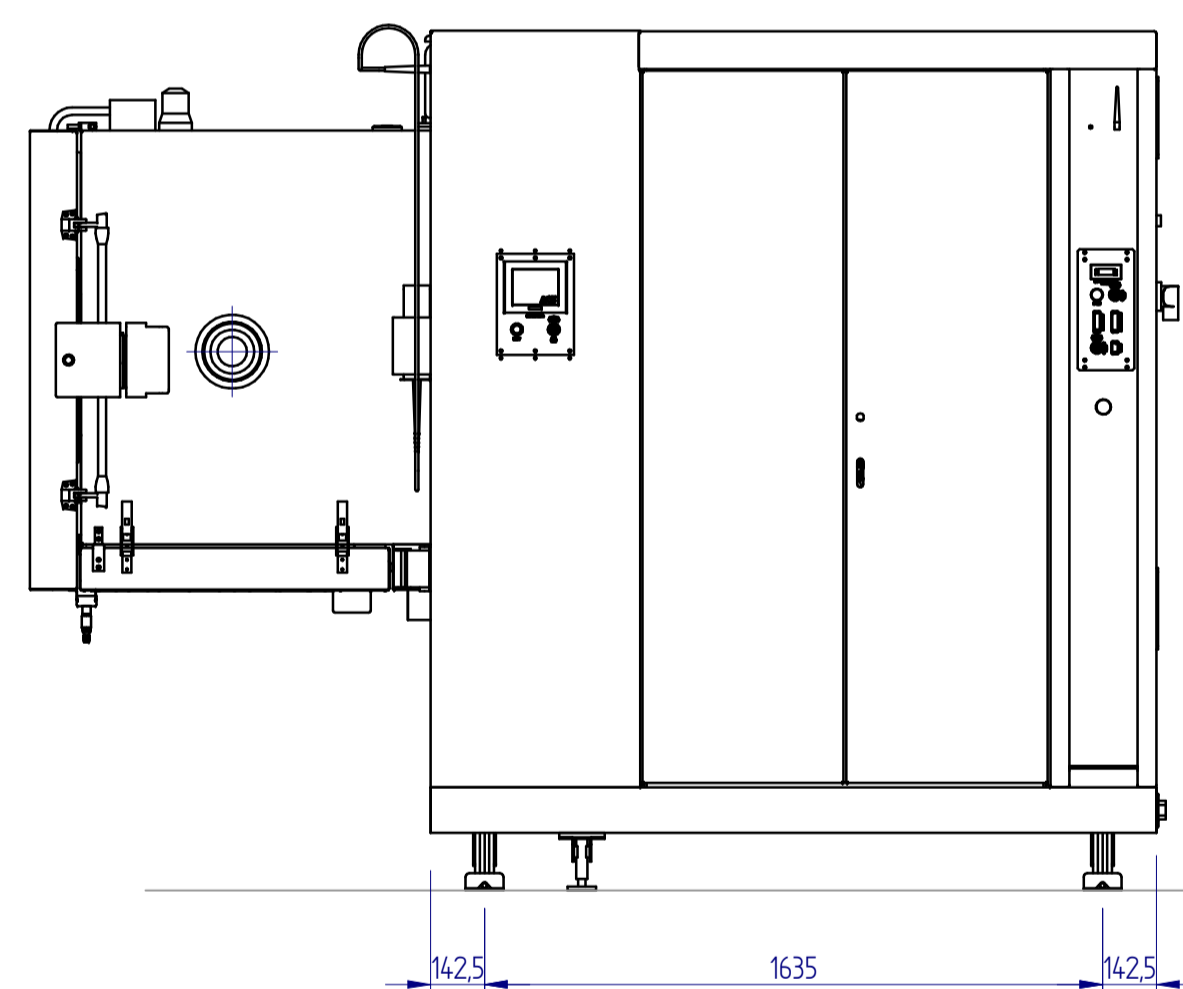
RAIL VERSION (OPTIONAL)



PORTHOLES FOR EXTERNAL HANDLING VERSION (OPTIONAL)



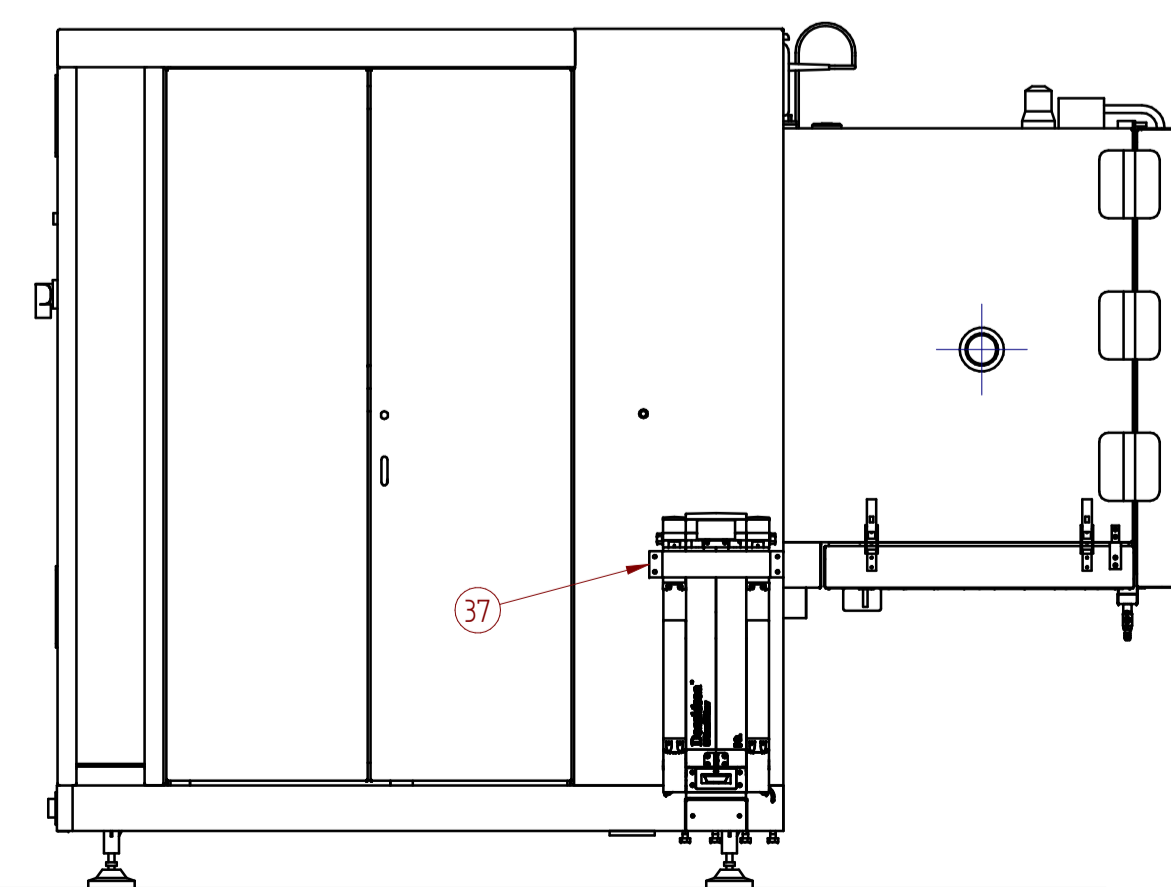
DOOR ELECTRO-MAGNETIC C.S. VERSION (OPTIONAL)



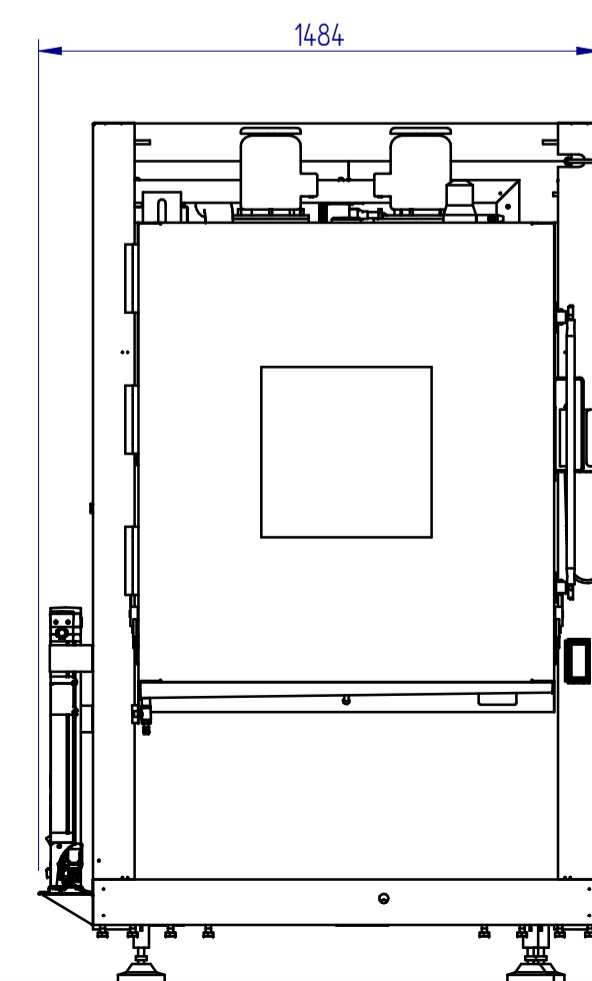
SPECIMEN SWITCHING OFF IN CASE OF CHAMBER ALARM (OPTIONAL)

POWER OUTPUT FOR "SPECIMEN SWITCHING OFF IN CASE OF CHAMBER ALARM": 230V 10A

CUSTOMER'S POWER INPUT FOR "SPECIMEN SWITCHING OFF IN CASE OF CHAMBER ALARM": 230 V - 10A



VISTA C



DEEP DEHUMIDIFICATION KIT (OPTIONAL)

DRAWING FOR INFORMATION ONLY
GENERAL TOLERANCE ± 5 mm

SUPPLY LIMITS: Customer
Angelantoni Test Technologies

LEGEND	
1) INSPECTION WINDOW 450x450 mm	25) FLOOR WITH HOLE FOR VERTICAL VIBRATION TEST (T. max 180°C)
2) EVAPORATOR/DEHUMIDIFICATOR	26) ETHERNET PORT
3) POWER SUPPLY CONNECTION (with plug)	27) CONNECTOR FOR AUXILIARY CONTACTS
4) EMERGENCY PUSH-BUTTON	28) HANDLING PORTHOLE (OPTIONAL)
5) RS232 INTERFACE	29) PORTHOLE $\phi 50$ mm
6) MAIN SWITCH	30) REFRIGERATING UNIT
7) MIN/MAX ELECTRONIC THERMOSTAT	31) STEAM GENERATOR (ONLY FOR CLIMATICS)
8) ELECTRICAL HEATERS	32) IN2 RAILS 5 m FOR MANUAL/AUTOMATIC MOVEMENT OF THE CHAMBER (OPTIONAL)
9) TEMPERATURE PROBE	33) FLOOR PLUG
10) CAPACITIVE PROBE (ONLY FOR CLIMATICS)	34) ELECTROMAGNETIC LOCK WITH GATEKEEPER SYSTEM (OPTIONAL)
11) TOWN / TOWER WATER INLET (PIPES AT CUSTOMER CARE) (1)	35) HEAD EXTENDER (AT CUSTOMER CARE)
12) MODELS AV800 (T) S, AV800 (T) C) S, 1" G	36) SILICONE GASKET (AT ACS CARE)
13) MODELS AV800 (T) C) S) S, AV800 (T) C) S) S, 1.1/4" G	37) COLLAR WITH CLAMP (AT ACS CARE)
14) TOWN / TOWER WATER OUTLET (PIPES AT CUSTOMER CARE) (1)	38) RING TO FIX SILICONE GASKET TO THE FLOOR (AT ACS CARE)
15) MODELS AV800 (T) C) S) S, AV800 (T) C) S) S, 1.1/4" G	39) HUMIDIFICATION WATER INLET (ONLY FOR CLIMATICS) approx consumption 3 kg/h, connection 1/2" G (1)
16) CONDENSATE DRAIN (COUNTER PRESSURE FREE) 1/2" G	40) COMPRESSED AIR INLET FOR DEEP DEHUMIDIFICATION KIT 1/2" G (OPTIONAL) (1)
17) PORTHOLE $\phi 80$ mm	41) CHAMBER MOVING SYSTEM CONTROLS
18) HELICOIDAL FAN	42) FAN MOTOR
19) FAN MOTOR	43) 3/8" MALE CONNECTION FOR RUBBER WITH VALVE
20) SHEET FOR CONDENSATE DRAIN OF THE DOOR	44) RESET BUTTON
21) INTERNAL LAMP (60W)	45) FAN KIT, FILTER AND GRID
22) MACHINE UNIT	46) WI-FI REMOVABLE ANTENNA
23) ELECTRICAL CABINET	47) UNITS CONNECTION
24) TOUCH SCREEN CONTROL PANEL	48)

NOTE (1)
Reference to 0002094

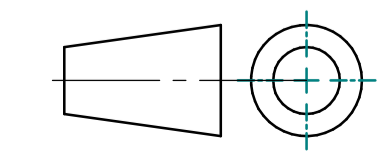
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Designation
Beschreibung

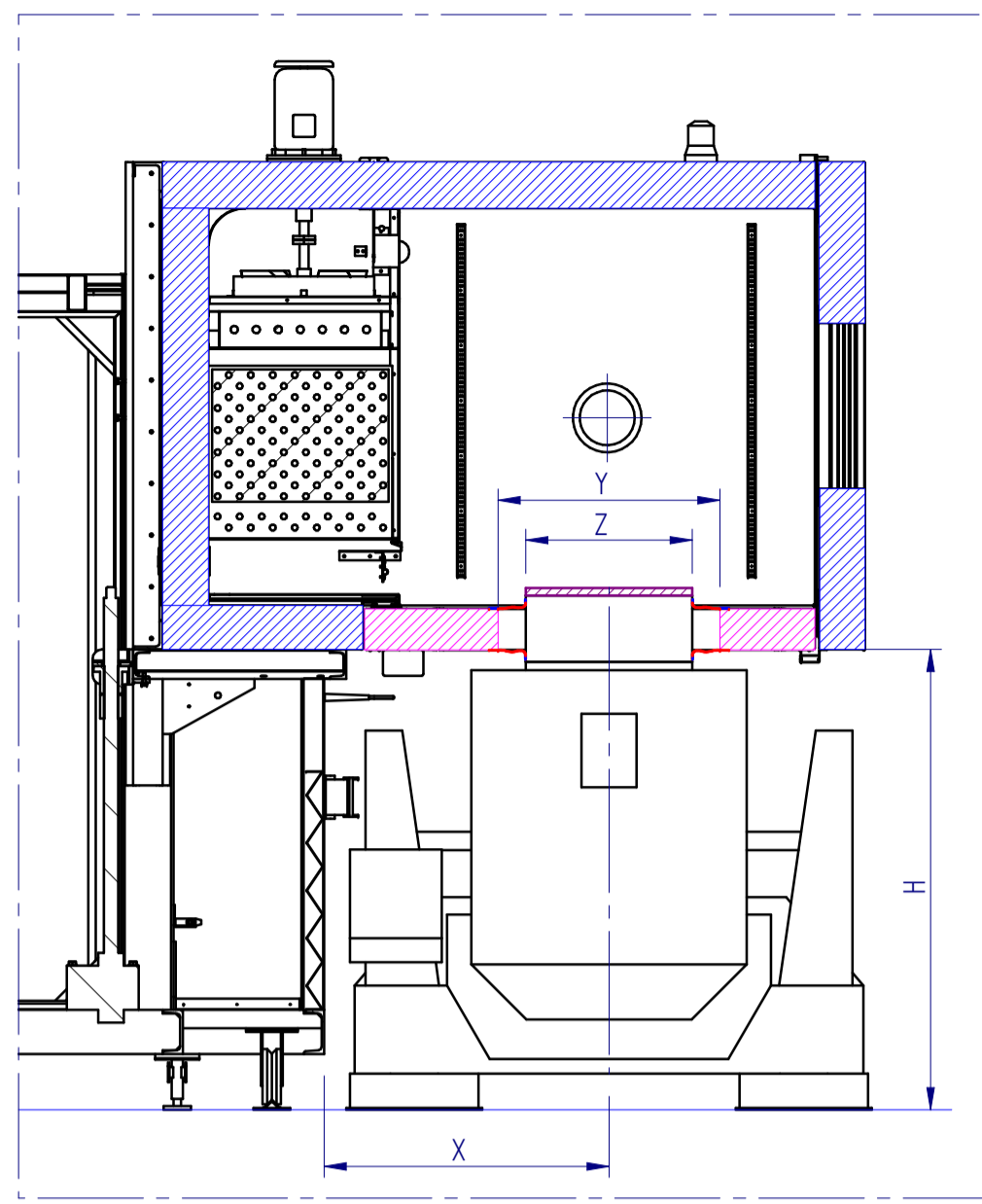
LAYOUT VIBRATION 600

Drawing No. D0010575
Revision Q
Scale 1:20
Sheet 2 of 3

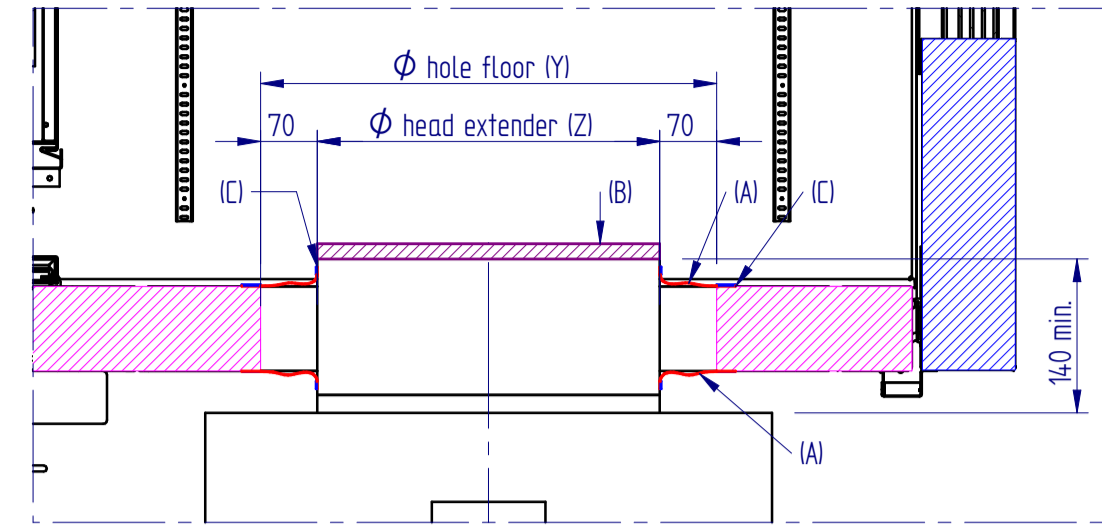
Standards Approval M.F. Date 09/05/2011
Technical Manager P.Q. Date 09/05/2011
Inspected by P.Q. Date 09/05/2011
Drawn by G.M. Date 09/05/2011

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www.acstestchambers.com



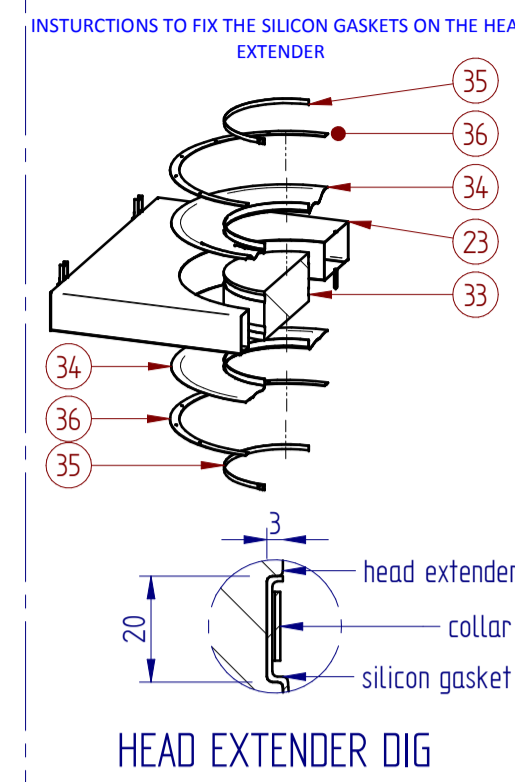


VERTICAL VIBRATION (with head extender)



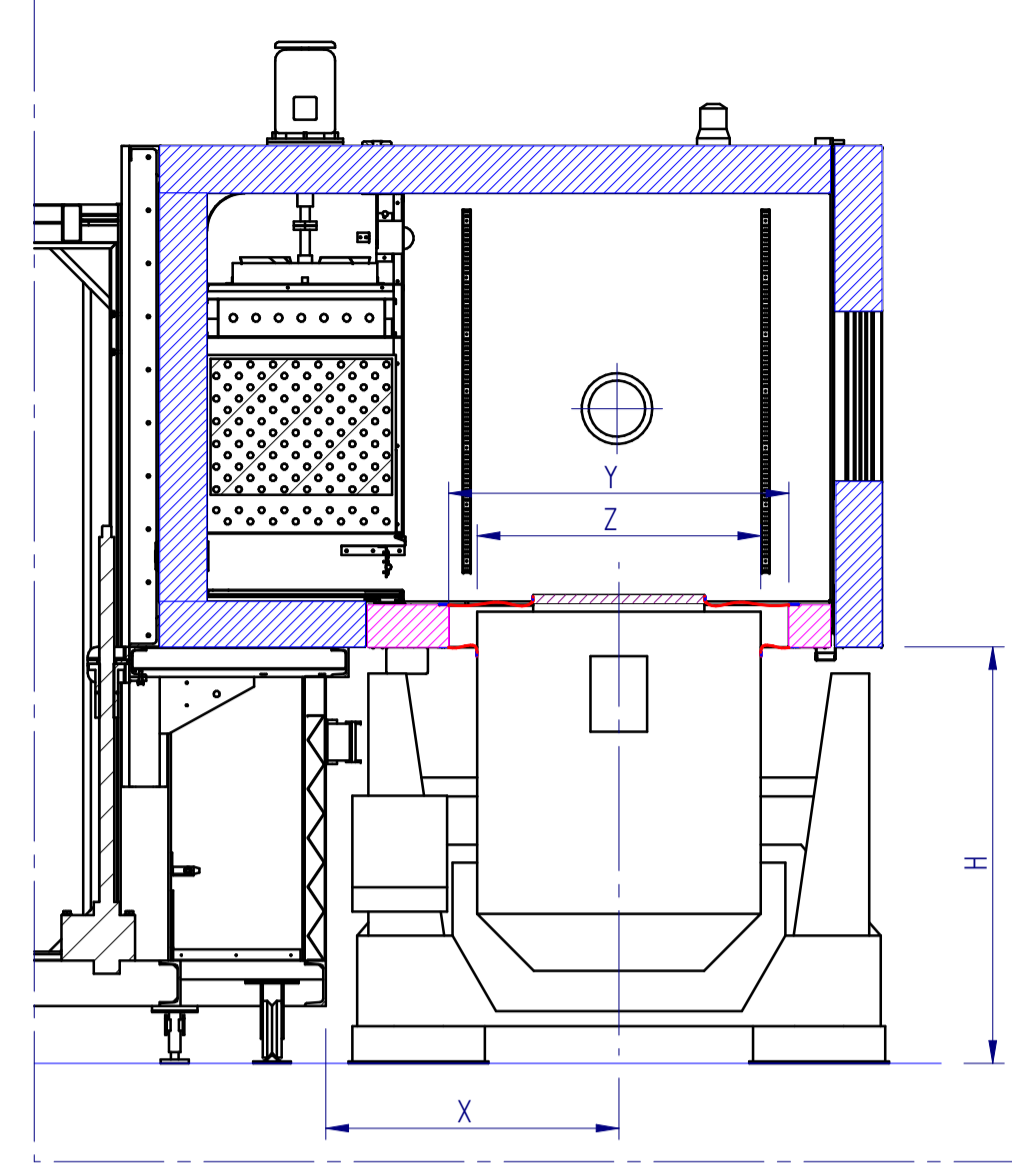
VERTICAL VIBRATION (with thermal insulated head extender)

VERTICAL VIBRATIONS STD SOLUTION AV600	
Item	Description
X [mm]	575
H [mm]	min 650...max 1430
Hole floor diameter (Y)	Shaker diameter (Z) with height 140 mm
Ø360 mm	Ø180 or Ø240 mm
Ø480 mm	Ø340 mm
Ø580 mm DEFAULT	Ø440 mm
Item	Description
A	Silicon Gasket (at ATT care)
B	Thermal Barrier (at Customer care)
C	Steel frame (at ATT care)
Shaker limitations for vertical vibrations	
1. Max stroke p-p 50mm and anyway the ratio of displaced shaker volume and useful chamber volume equal to 0.5% (1% extension available on request - with the supply of No. 2 compensation valves 100x100mm)	
2. Operations in the frequency range 5...30Hz only possible for short periods of times (it is the resonance range of the structure)	
Note	
Head extender 140 mm height and two silicone gaskets both fixed around the head extender for full temperature range applications -75...+180°C also for continuous tests.	

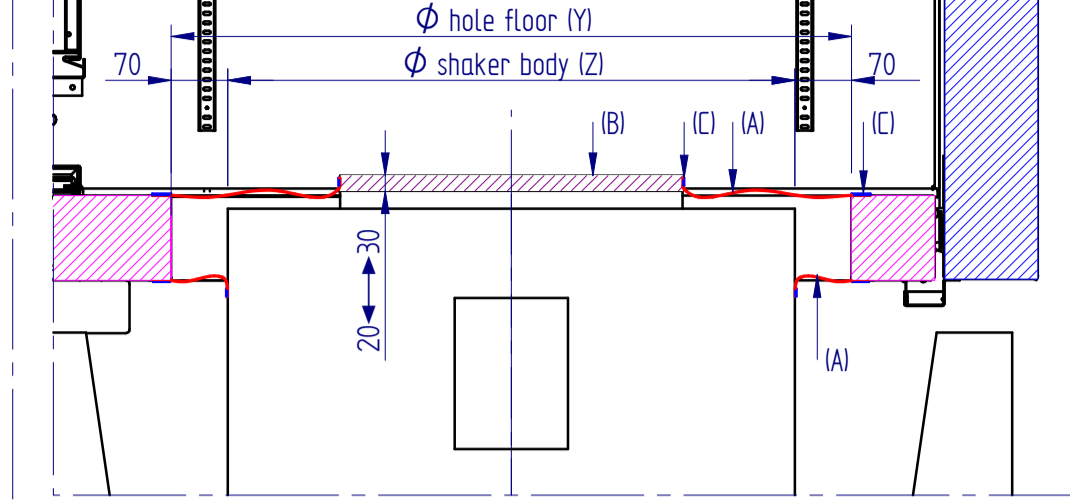


HEAD EXTENDER DIG

- Cut n.2 silicon gasket parts (34): internal diameter should be 20 mm smaller than external diameter of shaker head extender; external diameter should be 50 mm bigger than the diameter of the hole floor
- Fix bottom gasket (34) on the floor (23) (overturnd on the table) with the ring (36)
- Install the floor (23) to the chamber
- Open the door and fix the bottom gasket (34) to the head extender (33) (to make detailed dig, at customer care) throw the floor hole with the collar (35)
- Install upper gasket (34) to the floor (23) with the ring (36)
- Fix upper gasket (34) to head extender (33) (to make detailed dig, at customer care) with the collar (35)

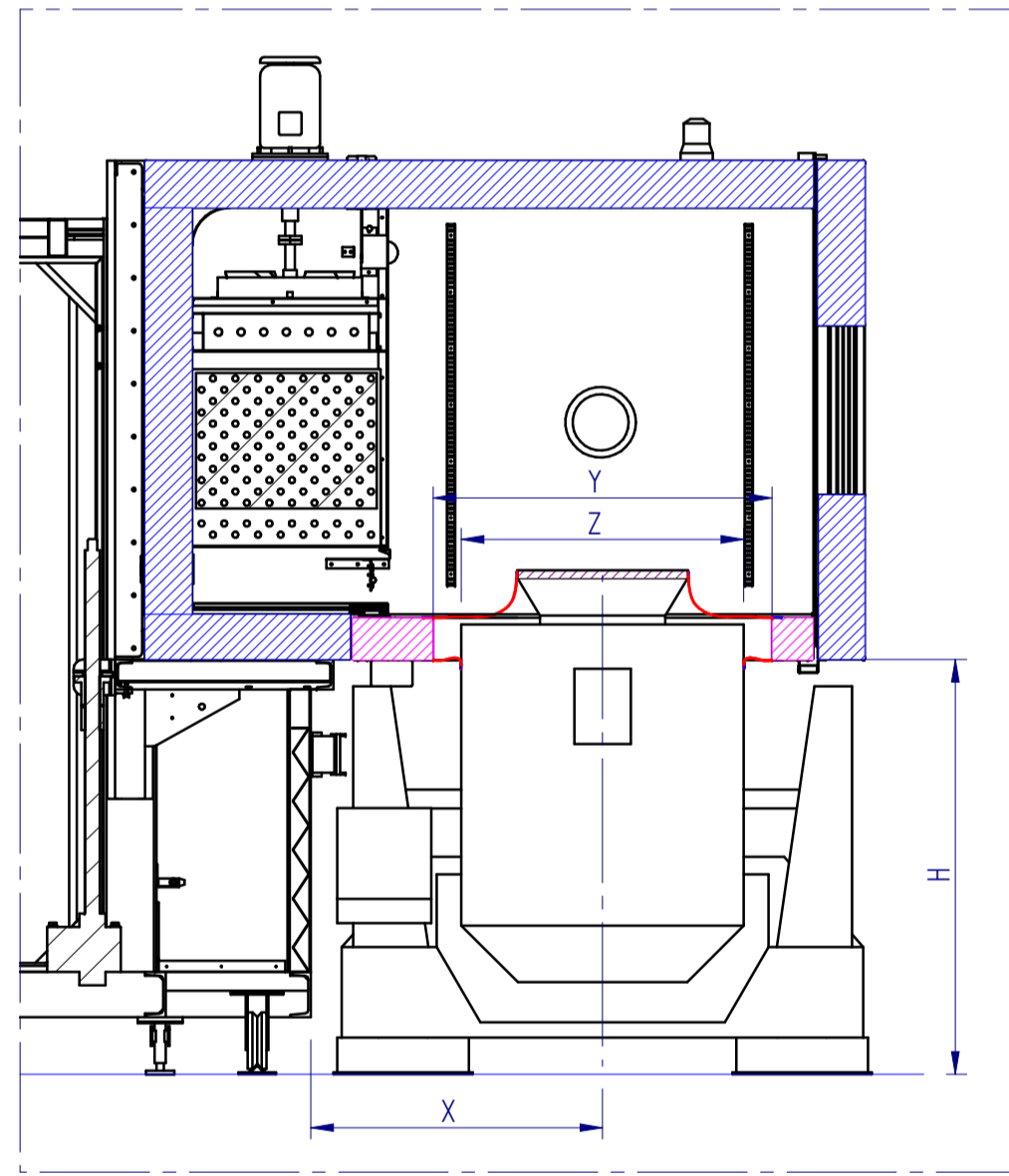


VERTICAL VIBRATION (without head extender)

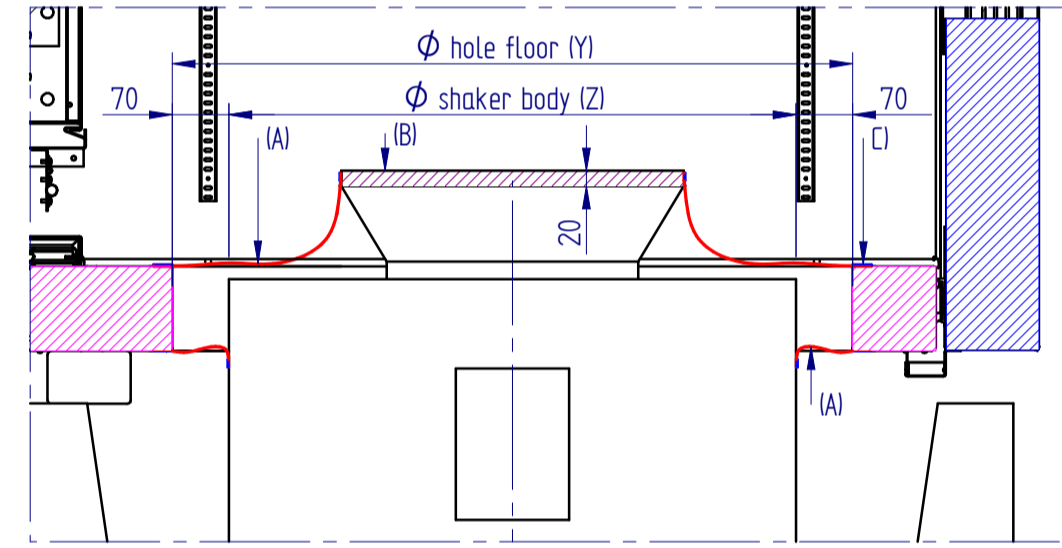


VERTICAL VIBRATION (without head extender)

VERTICAL VIBRATIONS STD SOLUTION AV600	
Item	Description
X [mm]	575
H [mm]	min 650...max 1430
Hole floor diameter (Y)	Shaker diameter (Z)
Ø360 mm	Ø180 or Ø240 mm
Ø480 mm	Ø340 mm
Ø580 mm DEFAULT	Ø440 mm
Item	Description
A	Silicon Gasket (at ATT care)
B	Thermal Barrier (at Customer care)
C	Steel frame (at ATT care)
Shaker limitations for vertical vibrations	
1. Max stroke p-p 50mm and anyway the ratio of displaced shaker volume and useful chamber volume equal to 0.5% (1% extension available on request - with the supply of No. 2 compensation valves 100x100mm)	
2. Operations in the frequency range 5...30Hz only possible for short periods of times (it is the resonance range of the structure)	
3. Dew point range +4°C a +59°C	
Note	
20...30 mm thermal barrier and two silicone gaskets, one to be fixed on the thermal barrier and the other around the shaker body. The solution is recommended for chamber performance down to -40°C and 16h continuous tests. Exceeding this range may cause condensation or ice on the shaker.	

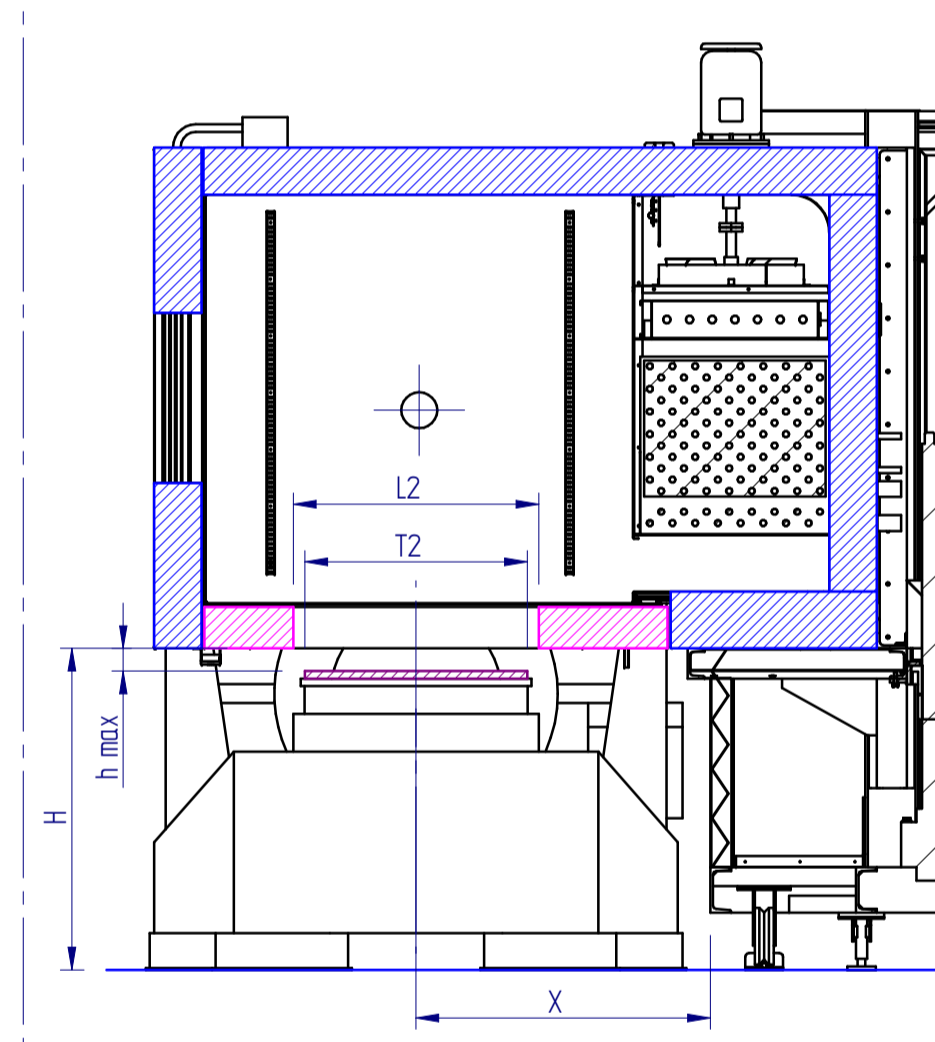


VERTICAL VIBRATION (with head expander)



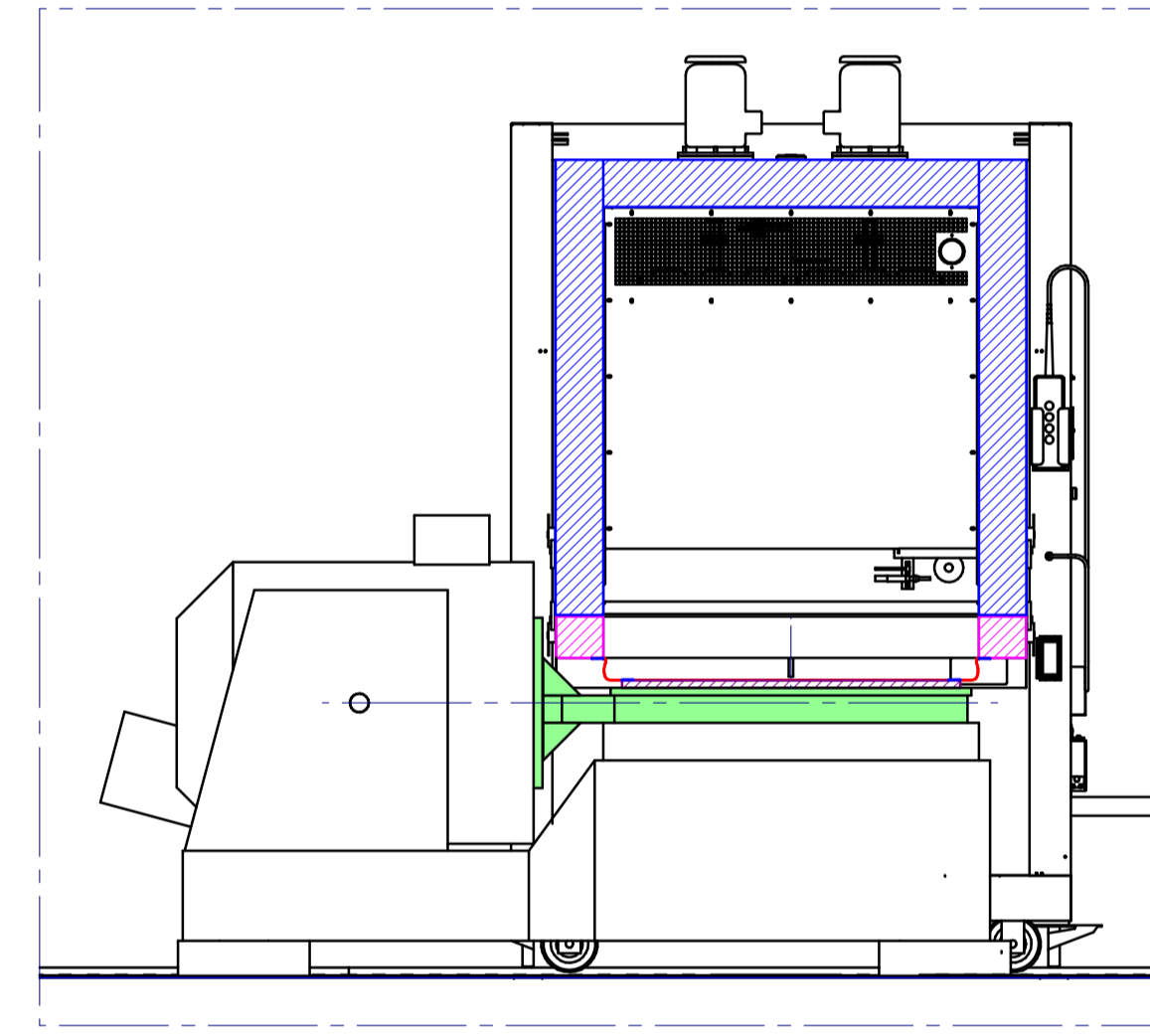
VERTICAL VIBRATION (with head expander)

VERTICAL VIBRATIONS STD SOLUTION AV600	
Item	Description
X [mm]	575
H [mm]	min 650...max 1430
Hole floor diameter (Y)	Shaker diameter (Z)
Ø360 mm	Ø180 or Ø240 mm
Ø480 mm	Ø340 mm
Ø580 mm DEFAULT	Ø440 mm
Item	Description
A	Silicon Gasket (at ATT care)
B	Thermal Barrier (at Customer care)
C	Steel frame (at ATT care)
Shaker limitations for vertical vibrations	
1. Max stroke p-p 50mm and anyway the ratio of displaced shaker volume and useful chamber volume equal to 0.5% (1% extension available on request - with the supply of No. 2 compensation valves 100x100mm)	
2. Operations in the frequency range 5...30Hz only possible for short periods of times (it is the resonance range of the structure)	
3. Dew point range +4°C a +59°C	
Note	
20 mm thermal barrier and two silicone gaskets, one to be fixed on the thermal barrier and the other around the shaker. The solution is recommended for chamber performance down to -40°C and 16h continuous tests. Exceeding this range may cause condensation or ice on the shaker.	

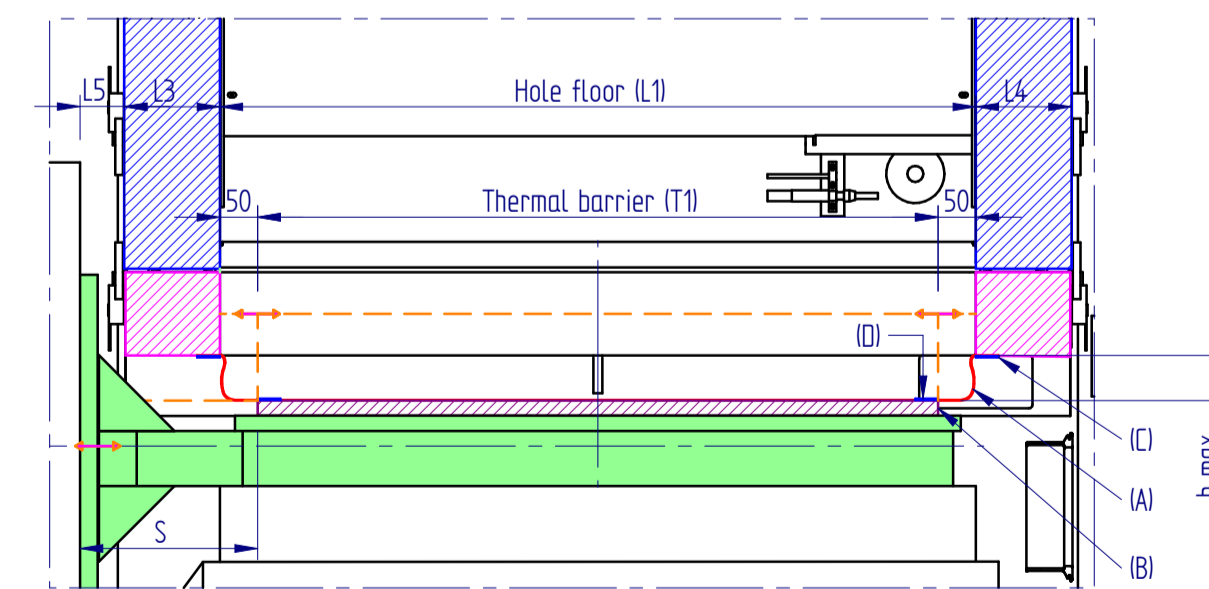


HORIZONTAL VIBRATION

HORIZONTAL VIBRATIONS STD SOLUTION AV600	
Item	Description
X [mm]	575
H [mm]	min 650...max 1430
Item	Description
L1 [mm]	850
L2 [mm]	580
L3 [mm]	125
L4 [mm]	125
T1 [mm]	750 max
T2 [mm]	520 max
S [mm]	175-L5
h max [mm]	515
Item	Description
A	Silicon Gasket (at ATT care)
B	Thermal Barrier (at Customer care)
C	Steel frame (at ATT care)
D	Steel frame (at Customer care)
Shaker limitations for horizontal vibrations	
1. Max stroke p-p 50mm	
2. Operations in the frequency range 5...30Hz only possible for short, short periods of time (it is the resonance range of the structure)	
3. Dew point range +4°C a +40°C	
Note	
One silicon gasket to be fixed under the floor and from there directly to the thermal barrier. For negative temperature tests this configuration may cause condensation or ice on the shaker and gaskets.	



HORIZONTAL VIBRATION



HORIZONTAL VIBRATION (standard solution for optional floor)

DRAWING FOR INFORMATION ONLY
GENERAL TOLERANCE ±5 mm

SUPPLY LIMITS: Customer
Angelantoni Test Technologies

LEGEND	
1) INSPECTION WINDOW 450x450 mm	25) FLOOR WITH HOLE FOR VERTICAL VIBRATION TEST (T. max 180°C)
2) EVAPORATOR/DEHUMIDIFICATOR	26) ETHERNET PORT
3) POWER SUPPLY CONNECTION (with plug)	27) CONNECTOR FOR AUXILIARY CONTACTS
4) EMERGENCY PUSH-BUTTON	28) HANDLING PORTHOLE (OPTIONAL)
5) RS232 INTERFACE	29) PORTHOLE Ø150mm
6) MAIN SWITCH	30) REFRIGERATING UNIT
7) MIN/MAX ELECTRONIC THERMOSTAT	31) STEAM GENERATOR (ONLY FOR CLIMATICS)
8) ELECTRICAL HEATERS	32) N°2 RAILS 5 m FOR MANUAL/AUTOMATIC MOVEMENT OF THE CHAMBER (OPTIONAL)
9) TEMPERATURE PROBE	33) FLOOR PLUG
10) CAPACITIVE PROBE (ONLY FOR CLIMATICS)	34) ELECTROMAGNETIC LOCK WITH GATEKEEPER SYSTEM (OPTIONAL)
11) TOWN / TOWER WATER INLET (PIPES AT CUSTOMER CARE) (1)	35) COLLAR WITH CLAMP (AT ACS CARE)
MODELS AV600 (T) S. AV600 (C) T) S. 1" G	36) HEAD EXTENDER (AT CUSTOMER CARE)
MODELS AV600 (C) T) S. AV600 (C) T) S. L. 1/4" G	37) SILICONE GASKET (AT ACS CARE)
12) TOWN / TOWER WATER OUTLET (PIPES AT CUSTOMER CARE) (1)	38) SILICONE GASKET (AT ACS CARE)
MODELS AV600 (T) S. AV600 (C) T) S. 1" G	39) HUMIDIFICATION WATER INLET (ONLY FOR CLIMATICS) approx consumption 3 kg/h, connection 1/2" G (1)
MODELS AV600 (C) T) S. AV600 (C) T) S. L. 1/4" G	40) CONDENSATE DRAIN (COUNTER PRESSURE FREE) 1/2" G
13) HUMIDIFICATION WATER INLET (ONLY FOR CLIMATICS) approx consumption 3 kg/h, connection 1/2" G (1)	41) RING TO FIX SILICONE GASKET TO THE FLOOR (AT ACS CARE)
14) CONDENSATE DRAIN (COUNTER PRESSURE FREE) 1/2" G	42) COMPRESSED AIR INLET FOR DEEP DEHUMIDIFICATION KIT 1/2" G (OPTIONAL) (1)
15) PORTHOLE Ø100mm	43) CHAMBER MOVING SYSTEM CONTROLS
16) HELICOIDAL FAN	44) 3/8" MALE CONNECTION FOR RUBBER WITH VALVE
17) FAN MOTOR	45) RESET BUTTON
18) SHEET FOR CONDENSATE DRAIN OF THE DOOR	46) FAN KIT FILTER AND GRID
19) INTERNAL LAMP (60W)	47) WI-FI REMOVABLE ANTENNA
20) MACHINE UNIT	48) UNITS CONNECTION
21) ELECTRICAL CABINET	49) TOUCH SCREEN CONTROL PANEL
22) TOUCH SCREEN CONTROL PANEL	50)

LAYOUT VIBRATION 600

Description: Designazione, Designation, Beschreibung

Drawing No.: D0010575, Revision: Q, Scale: 1:20, Sheet: 3 of 3

Standards Approval: M.F., Date: 09/05/2011

Technical Manager: P.Q., Date: 09/05/2011

Inspected by: P.Q., Date: 09/05/2011

Drawn by: G.M., Date: 09/05/2011

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