



ANGELANTONI
GROUP
MORE THAN
YOU THINK



Hospital Equipment Technology
MD.STM (Medical Device)



The Infection Control Culture



MD.STM – Saturated Steam Sterilizer



ANGELANTONI
GROUP
MORE THAN
YOU THINK

Series 1-2-4



Series 1.80 VSD
Series 1.100 VSD



Series 2.150 VSD



Series 2.200 VSD
Series 2.250 VSD



Series 2.220 VSD



Series 4.300 VSD
Series 4.450 VSD
Series 4.600 VSD
Series 4.700 VSD
Series 4.900 VSD

Compact dimensions, versatility and rapidity



Series 2.150 HSD



Series 2.220 HSD



Series 4.300 HSD
Series 4.450 HSD
Series 4.600 HSD
Series 4.900 HSD

Ergonomic loading.



Series 6



Complete range, high productivity.



Series 6.500 HSD
Series 6.700 HSD
Series 6.900 HSD



Savings



The constant research for greater productivity and efficiency distinguishes and accompanies us on a design journey aimed at “Safety”, “Total quality” and “Savings”.

“Savings” is one of the aims that we set ourselves in the design phase; savings in operating consumption and maintenance with devices, solutions and components of high quality and reliability and long service life.

Water savings, compared to similar equipment, is reduced by **95%**, energy consumption is reduced by **40%**. More than 80% of the equipment is stainless steel, therefore **100%** recoverable; the others commercial components are always recoverable and recyclable according to the procedures provided by the manufacturers.



- 95%
Water consumption



- 40%
Energy consumption



100%
Recycling



- 25%
Total cycle time

+50%
Service life





Savings

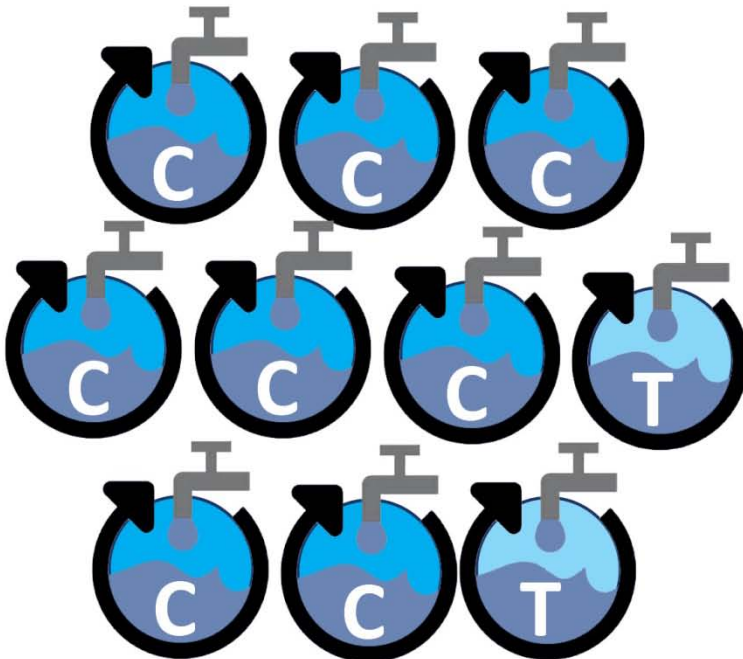


CYCLE



**500 liters saved
each machine
each cycle**

Water savings of about **95%** (calculated 8 cycles/day + 2 test cycles/day) based on water consumption of a traditional **steam autoclave 600 liters capacity (8US)**.
The only consumption is related to the osmotic water used to generate steam, equivalent to **5%** (20 liters).



10
CYCLE



**5000 liters saved
each day**



Savings



SAVED



Highlights



- Chamber totally in stainless steel **AISI 316Ti**, thickness 8 mm, easy to clean and fully drainable.
- Jacket totally in stainless steel **AISI 316Ti** , thickness 5 mm.
- Door totally in stainless steel **AISI 316Ti**, thickness 30 mm.
- Electro-polished chamber and doors with **mirror** polished finish.
- Chamber and doors surface **reduction of 35%** after electro-polishing.
- Jacket with chamber **total covering**. No **cold spots** inside the chamber means uniform drying.
- **20 years** warranty for the chamber.
- Piping totally in stainless steels **AISI 316**
- «**Air chamber**» gasket. Perfect seal and **long life**.



Highlights



- Totally insulated with **fire retardant mattress, silicone** and **Kevlar**.
- **Faster** sterilization cycles (42 min/cycle).
- **Fully dry** vacuum pump. Water consumption for generating vacuum is **zero**. Compatible with steam. **5 years** warranty
- Commercial components supplied by world-wide Leading Companies. Interchangeability with **future** versions.
- **High performance** steam generator.
- **Industrial** construction concepts.
- **Remote** maintenance control device.
- Ability to operate in accordance with **21 CFR Part 11 FDA**.
- **B&D Test** Electronic / Automatic.



Main technical features



- 1 Frame and panels totally in stainless steel ASI 304.
- 2 Sterilization chamber totally in stainless steel AISI 316ti, thickness 8 mm, easy to clean and fully drainable.
- 3 Collecting chamber bottom and central filtering.
- 4 AISI 316ti stainless steel, 5 mm thick chamber Interstice.
- 5 Interstice with chamber total covering.
- 6 Door totally in stainless steel AISI 316TI or superior, thickness 30 mm.
- 7 Mirrored finishing for internal chamber and doors.
- 8 Automatic sliding device for vertical/horizontal door/s.
- 9 Door closure by dynamic «air chamber» gasket.
- 10 Chamber and steam generator isolated with fire retardant mattress , covered with stainless steel panels.
- 11 Condensation line and steam line totally isolated with silicon material with internal fibers of Kevlar.
- 12 Bio-seal shield: separation between sterile side and clean side.
- 13 Electrical steam generator totally in stainless steel AISI 304 with automatic drain device (E).
- 14 AISI 304 stainless steel or superior steam thermal exchange generator (SE).
- 15 Direct steam to the chamber (S).
- 16 Electrical direct steam generator (ES).



Main technical features



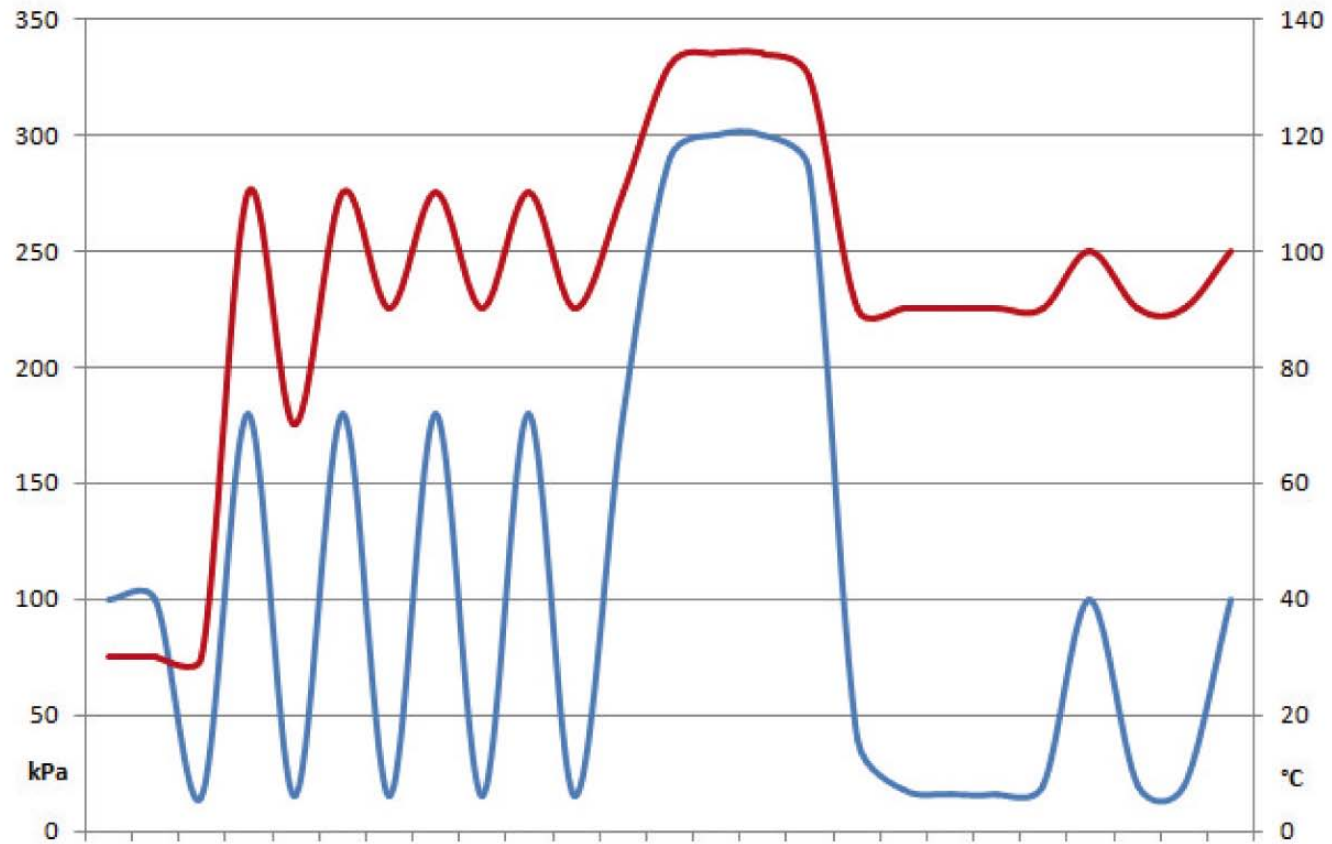
- 17 Disconnection water device. (optional)
- 18 Generator water preheating, Energy recovery system, Water generator de-gassing system. (optional)
- 19 Air-check steam control device (quality steam). (optional)
- 20 Drain temperature control device. (optional)
- 21 Mechanical dry vacuum pump, 5 years warranty.
- 22 Double data process system.
- 23 PLC Siemens - Medical Device classification.
- 24 HD Siemens touch screen monitor.
- 25 Built-in alphanumeric printer.
- 26 Remote maintenance control device. (optional)
- 27 Ability to operate in accordance with 21 CFR Part 11 FDA.
- 28 B&D Test Electronic / Automatic. (optional)
- 29 Front access for routine maintenance.
- 30 Second touch-screen on unloading side. (optional)
- 31 Steam filter system device. (optional)
- 32 Liquid cycle with natural cooling device. (optional)



Graphic process



Temperature ■
Pressure ■



Graphic of sterilization process

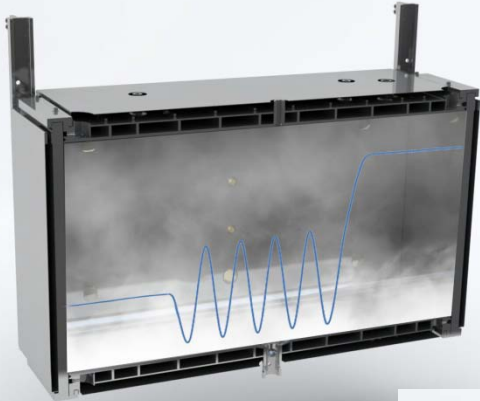


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Sterilization process

AIC
SCHLUNBOHN

Air removal phase.



1

The material is in direct contact with saturated dry steam.



3

Pre-heating phase.



2

Drying phase.



4



Main technical features



1 Frame and panels totally in stainless steel ASI 304.



2 Sterilization chamber totally in stainless steel AISI 316Ti, thickness 8 mm, easy to clean and fully drainable.



3 Collecting chamber bottom and central filtering.



Main technical features



4 AISI 316ti stainless steel, 5 mm thick chamber Interstice.



5 Interstice with chamber total covering.





Main technical features



6 Door totally in stainless steel AISI 316TI , thickness 30 mm.



7 Mirrored finishing for internal chamber and doors.





Main technical features



8 Automatic sliding device for vertical door/s.



Automatic sliding device for horizontal door/s.

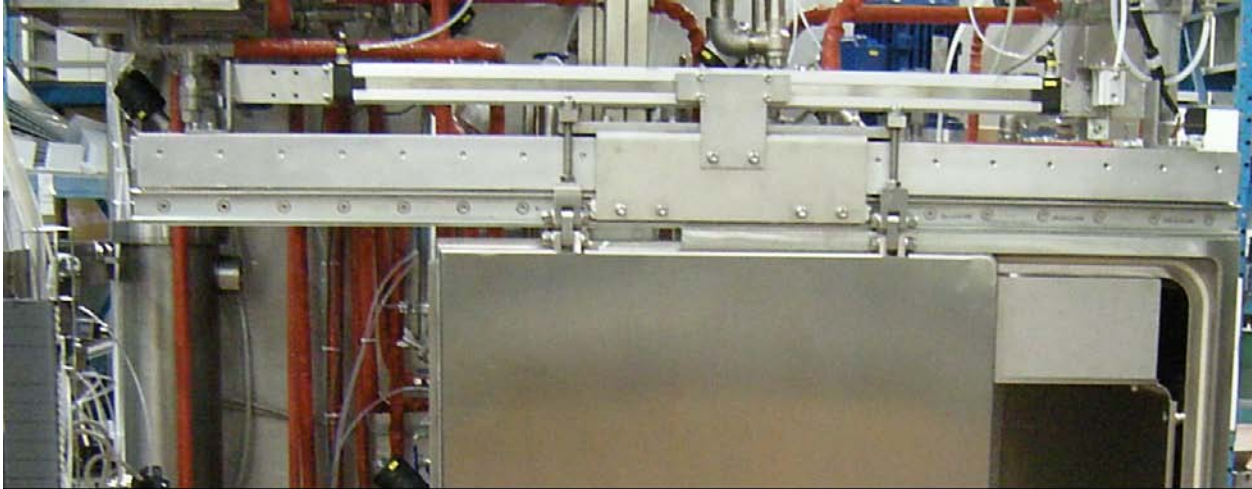




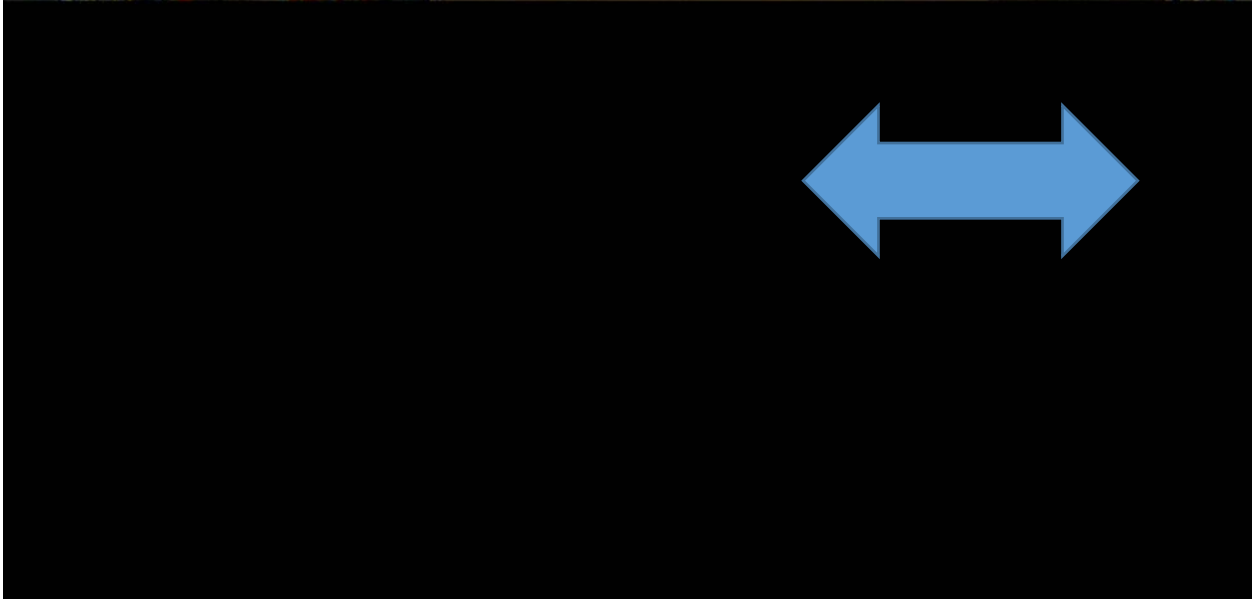
Main technical features



Automatic sliding device for horizontal door/s.



Automatic sliding device for vertical door/s.

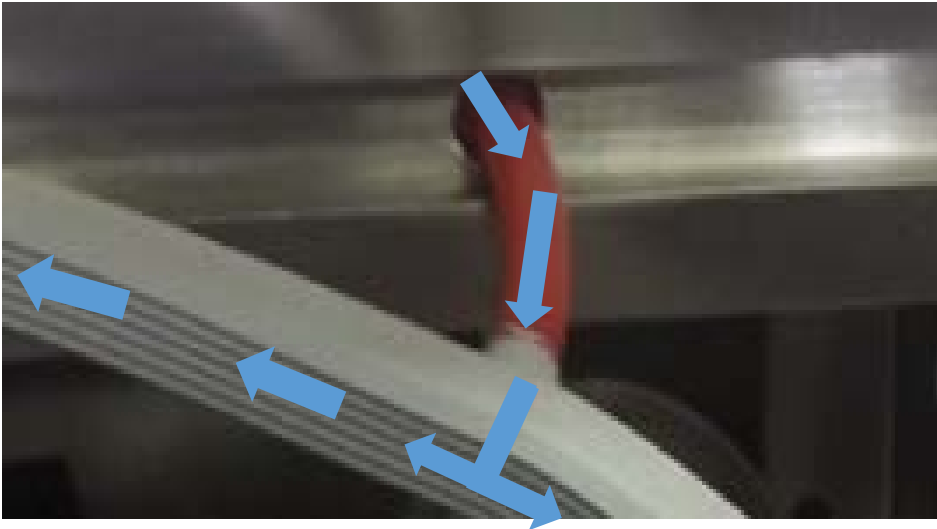
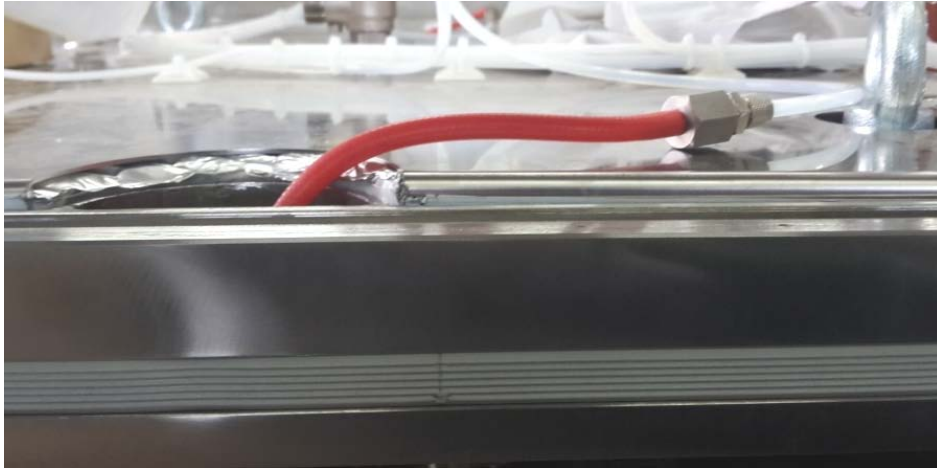




Main technical features



9 Door closure by dynamic «air chamber» gasket.



10 Chamber and steam generator isolated with fire retardant mattress, covered with stainless steel panels.

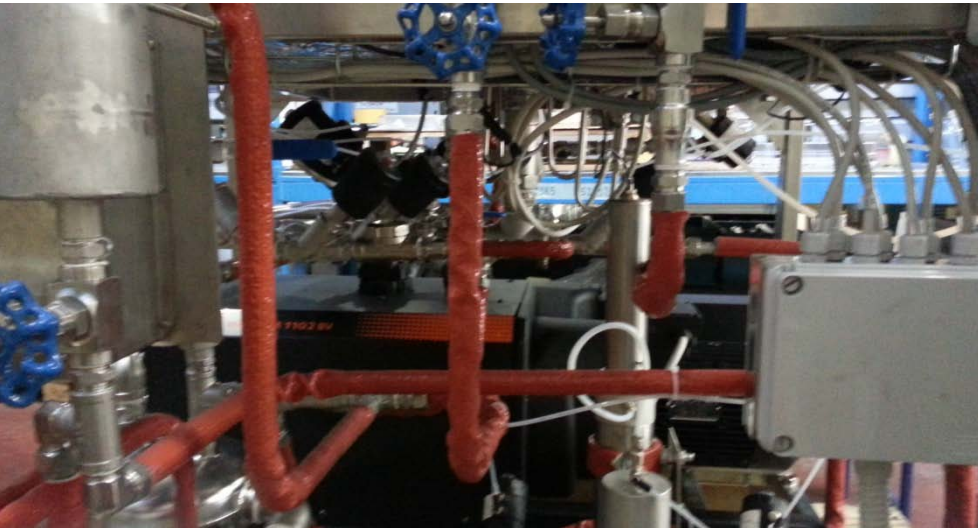




Main technical features



11 Condensation and steam line totally isolated with silicone material with internal fibers of Kevlar.





Main technical features



12 Bio-seal shield: separation between sterile side and clean side.

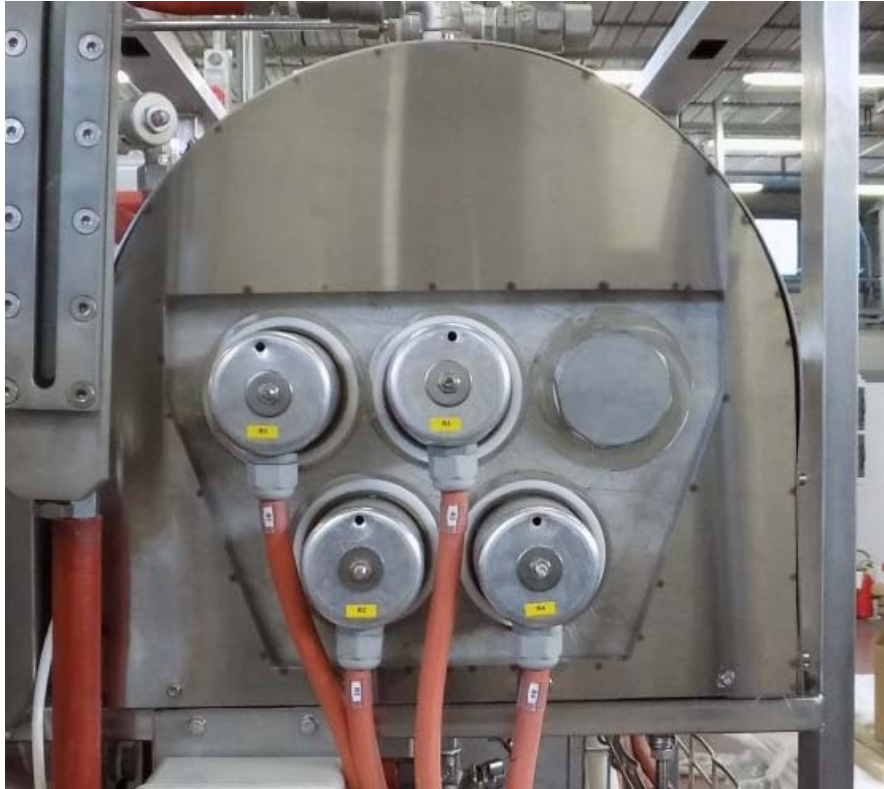




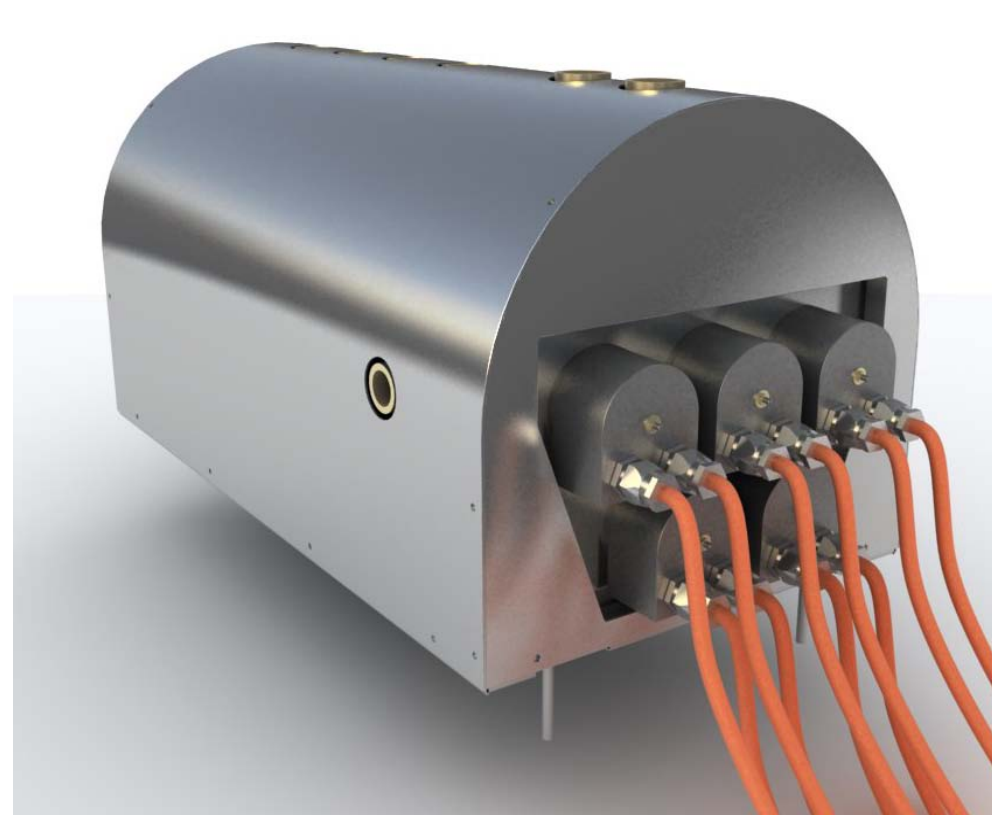
Main technical features



13 Electrical steam generator totally in stainless steel AISI 316L with automatic drain device and water acidity control device (E).



14 AISI 304 stainless steel steam thermal exchange generator. (SE)





Main technical features



15 Direct steam to the chamber (S).



16 Electrical direct steam generator (ES).



17 Disconnection water device . (optional)





Main technical features



18 Generator water preheating, Energy recovery system and Water generator de-gassing system. (optional)



19 Air-check steam control device (quality steam). (optional)



20 Drain temperature control device. (optional)

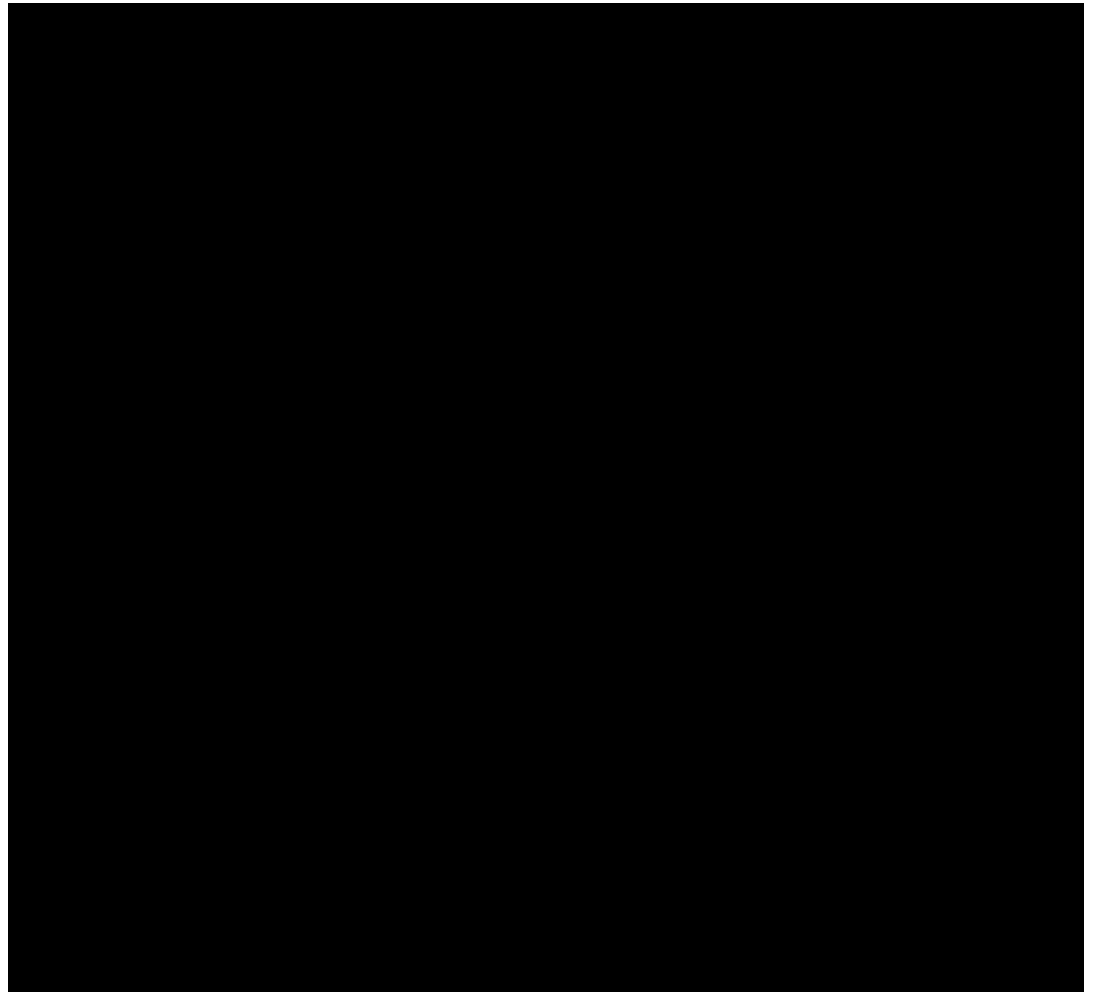




Main technical features



21 Mechanical dry vacuum pump. 5 years warranty.





Main technical features



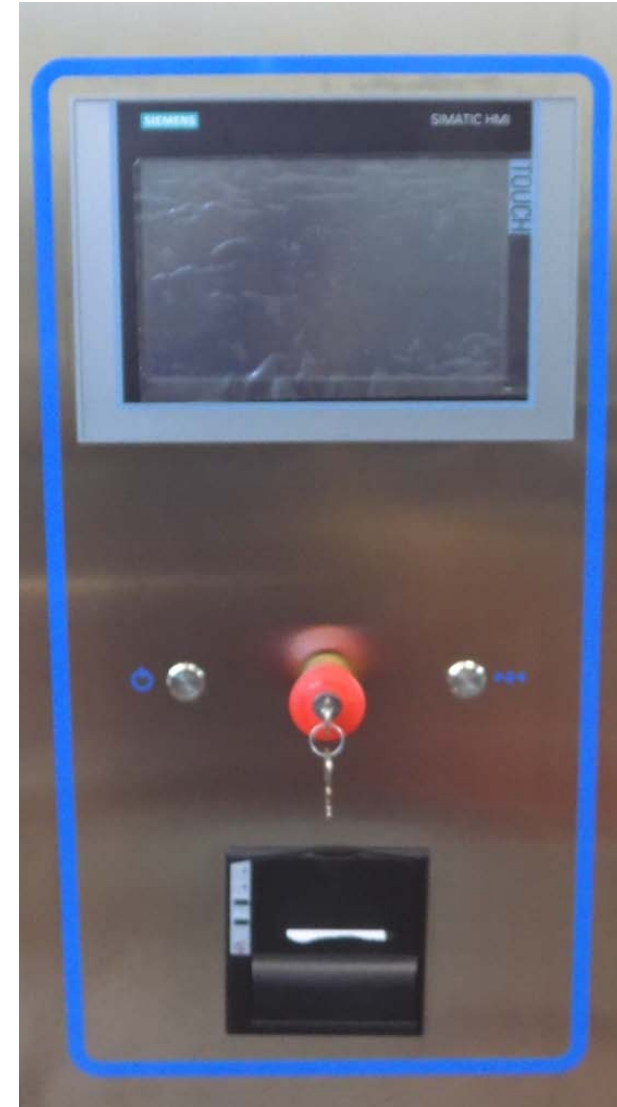
22 Double data process system.



24 HD Siemens touch screen monitor.



23 PLC Siemens - Medical Device classification.





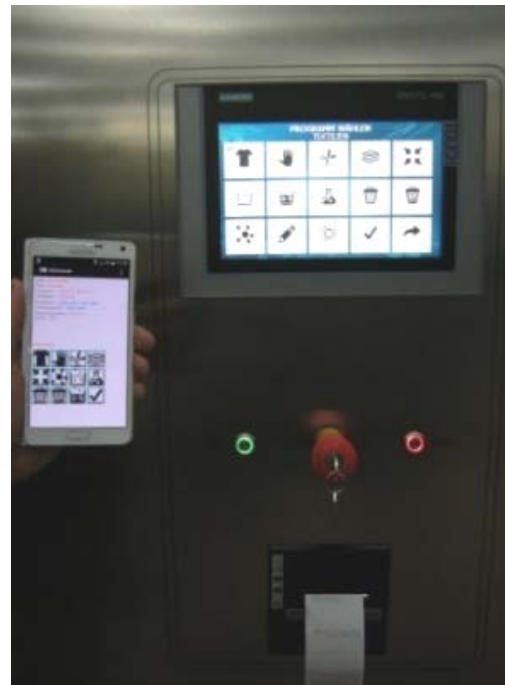
Main technical features



25 Built-in alphanumeric printer.

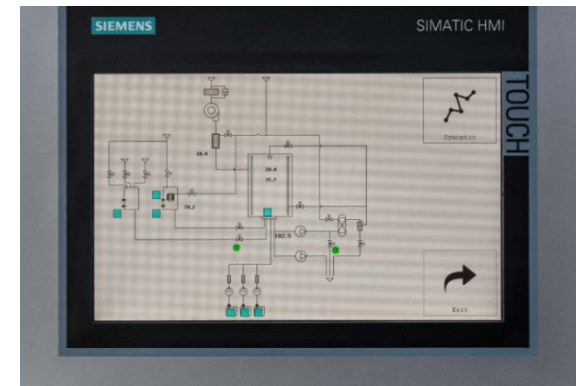


26 Remote maintenance control device. (optional)



27 Ability to operate in accordance with 21 CFR Part 11 FDA.

28 B&D Test Electronic / Automatic. (optional)





Main technical features



29. Front access for routine maintenance.

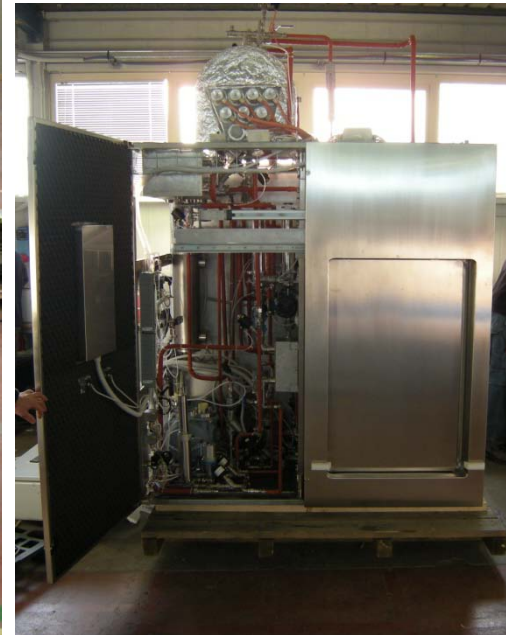
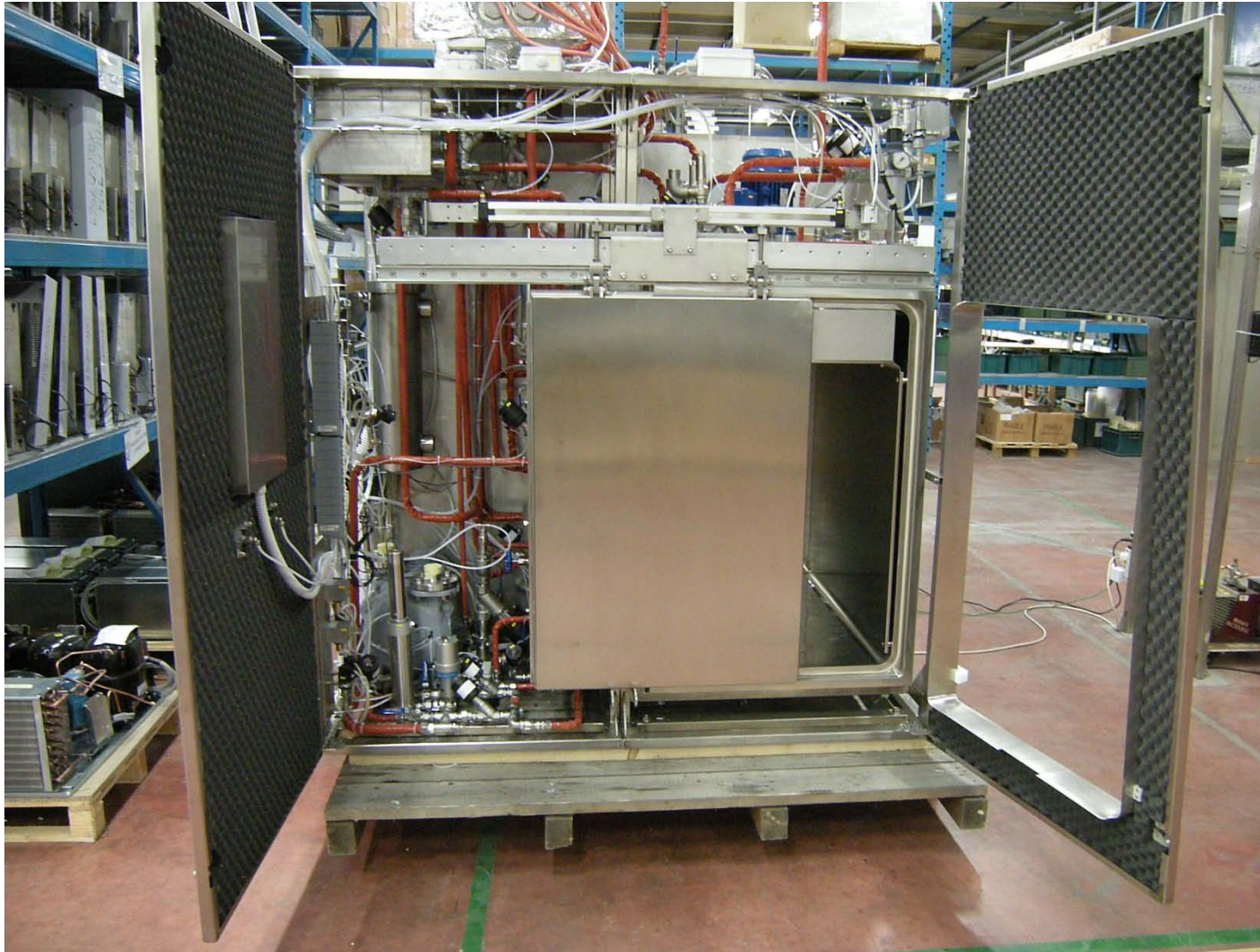




Main technical features



29. Front access for routine maintenance.





Main technical features



30. Second touch-screen on unloading side. (optional)



31. Steam filter system device. (optional)



32. Liquid cycle with natural cooling device. (optional)





Industrial construction



The position of the components, main functional units and the operational phases are designed to **facilitate** pre-assemblies and general assemblies, to significantly **reduce times** and **costs** in the serial production. The reduction of phases and the repetition of assembly operations, together with the optimization of the semi-finished products, advantage the industrialization of the production process and guarantee the **constant high quality standards** of the finished product.





Industrial construction



All the commercial components are manufactured by
leading companies worldwide and easily available on the market.



SIEMENS

ROLLON®
Linear Evolution



elesa



Technetics
GROUP
EnPro Industries companies



CUSTOM®



simaco

blum®



spirax
sarco

Rexroth
Bosch Group



Installation



Installation





Installation



Example of installation





Installation



Example of installation





Installation



Example of installation





Installation



Example of installation





Installation



Example of installation





Steam Sterilizer range of products



Complete range of Medical Device Steam Sterilizer with vertical sliding doors.

1- 1,5
STU



Series 1.80 VSD
Series 1.100 VSD

2 STU



Series 2.150 VSD

3-4
ISO



Series 2.200 VSD
Series 2.250 VSD

3 ISO



Series 2.220 VSD

4-6-8-10-12
STU



Series 4.300 VSD
Series 4.450 VSD
Series 4.600 VSD
Series 4.700 VSD
Series 4.900 VSD

Compact dimensions, versatility and rapidity



Steam Sterilizer range of products



Complete range of Medical Device Steam Sterilizer with horizontal sliding doors.

2 STU



Series 2.150 HSD

3 ISO



Series 2.220 HSD

4-6-8-12
STU



Series 4.300 HSD
Series 4.450 HSD
Series 4.600 HSD
Series 4.900 HSD

Ergonomic loading, versatility and rapidity



Steam Sterilizer range of products



Complete range of Medical Device Steam Sterilizer with horizontal sliding doors.

6-9-12
STU



8-12-16
STU

Series 6.500 HSD
Series 6.700 HSD
Series 6.900 HSD

Series 8.600 HSD
Series 8.900 HSD
Series 8.1200 HSD

30-36-48
STU



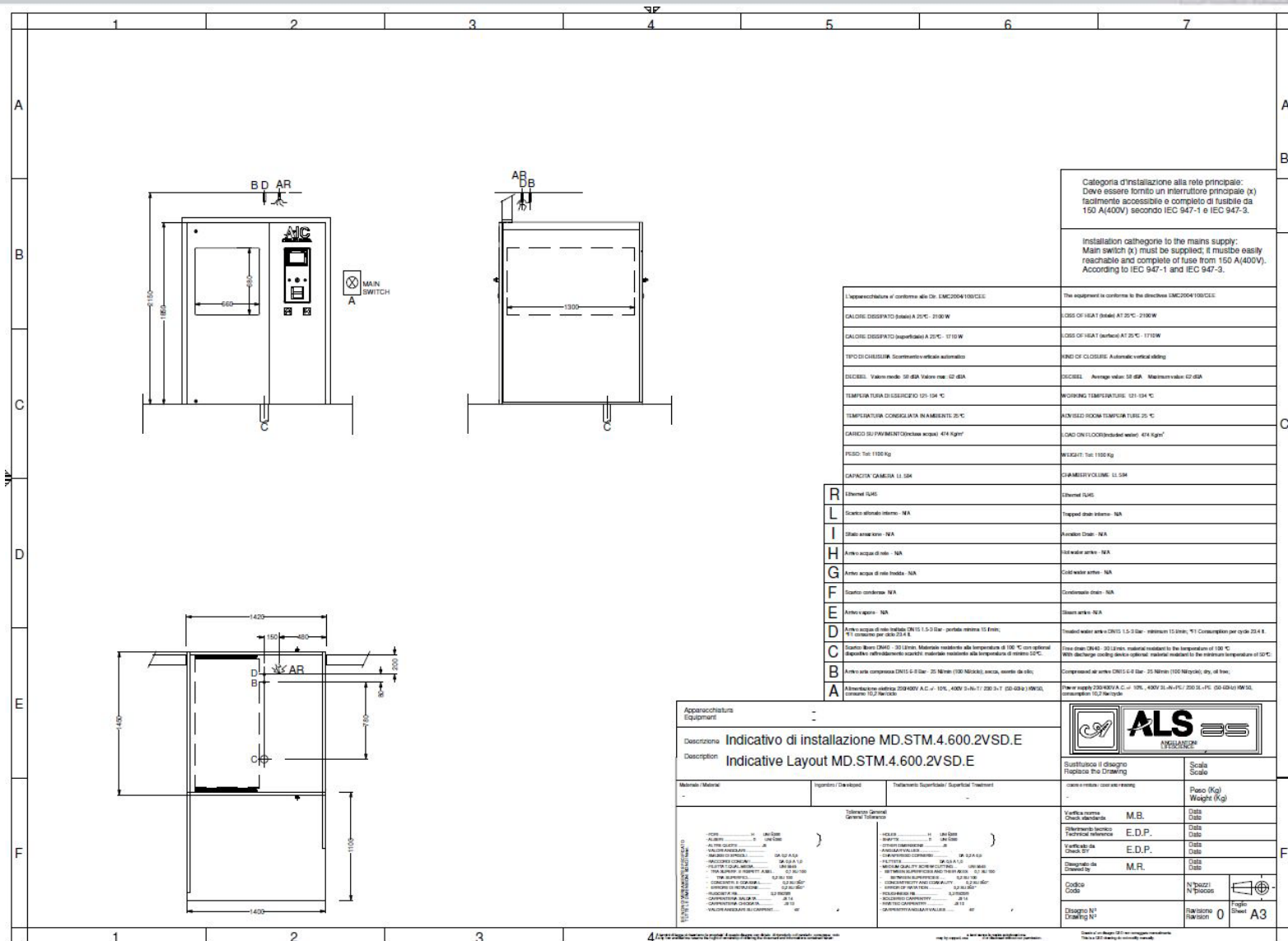
Series 12.2000 HSD
Series 12.3000 HSD
Series 12.3500 HSD

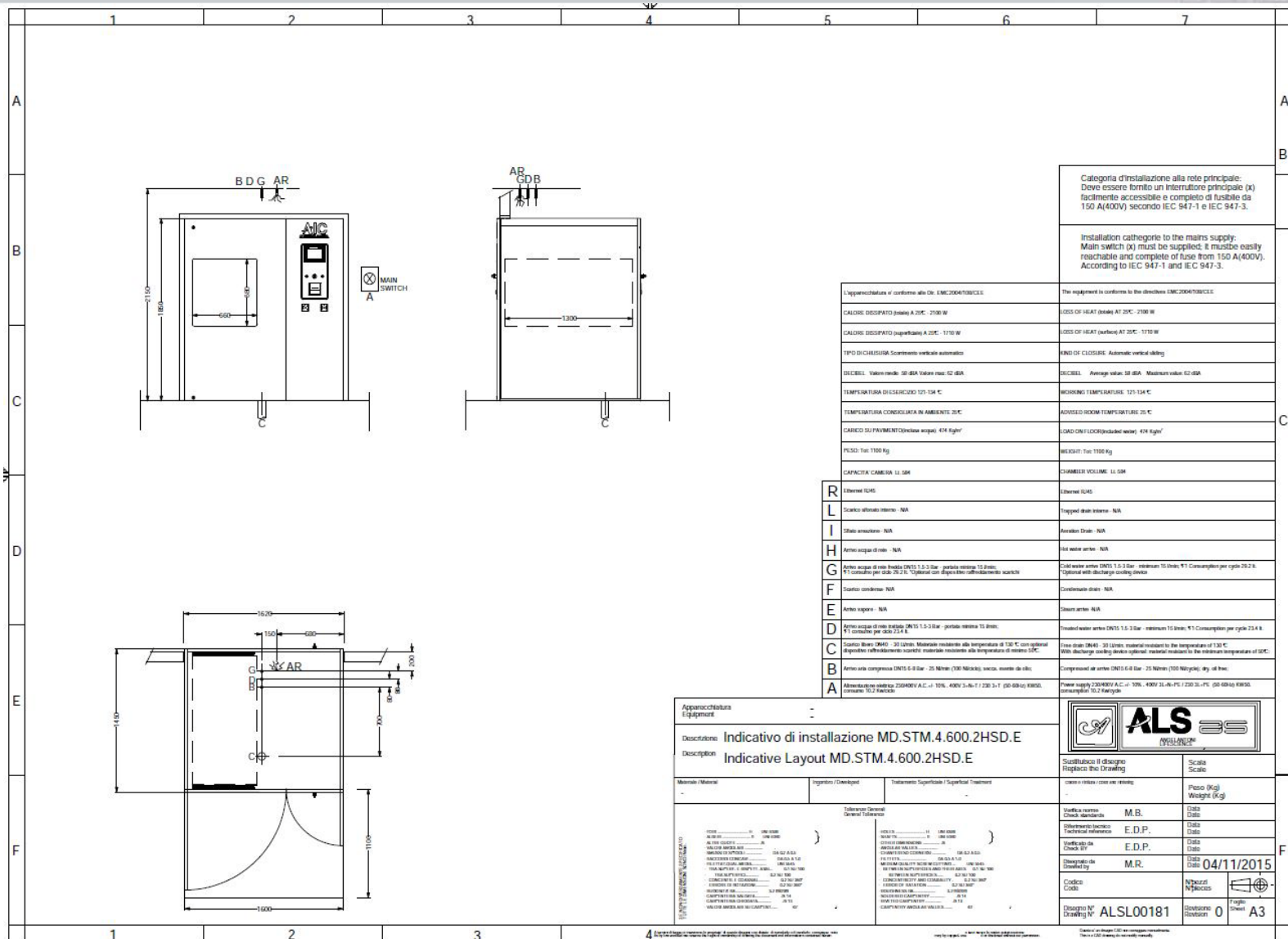
45-54-72
STU

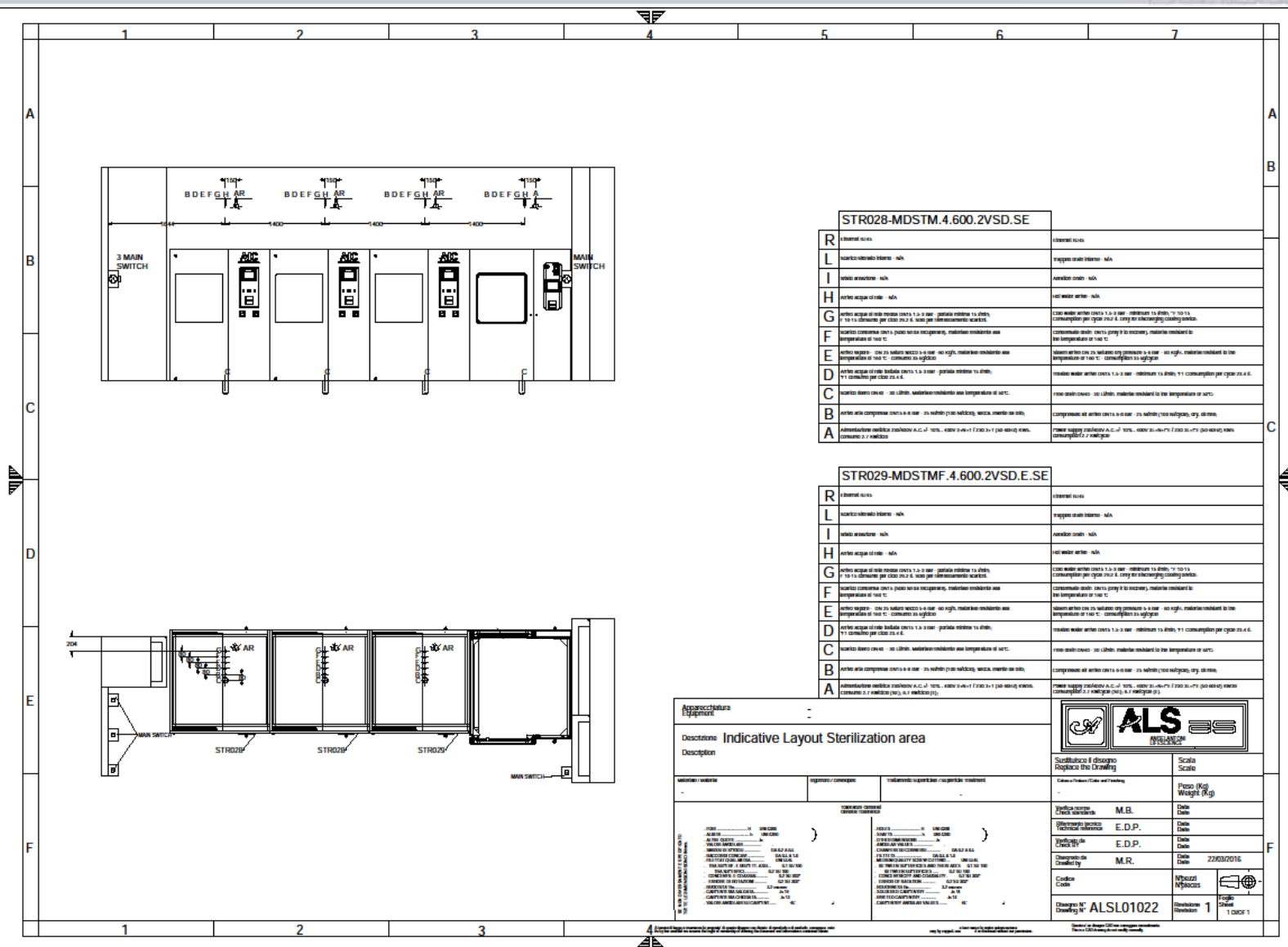


Series 18.3300 HSD
Series 18.4300 HSD
Series 18.5300 HSD

Ergonomic loading, high productivity









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