



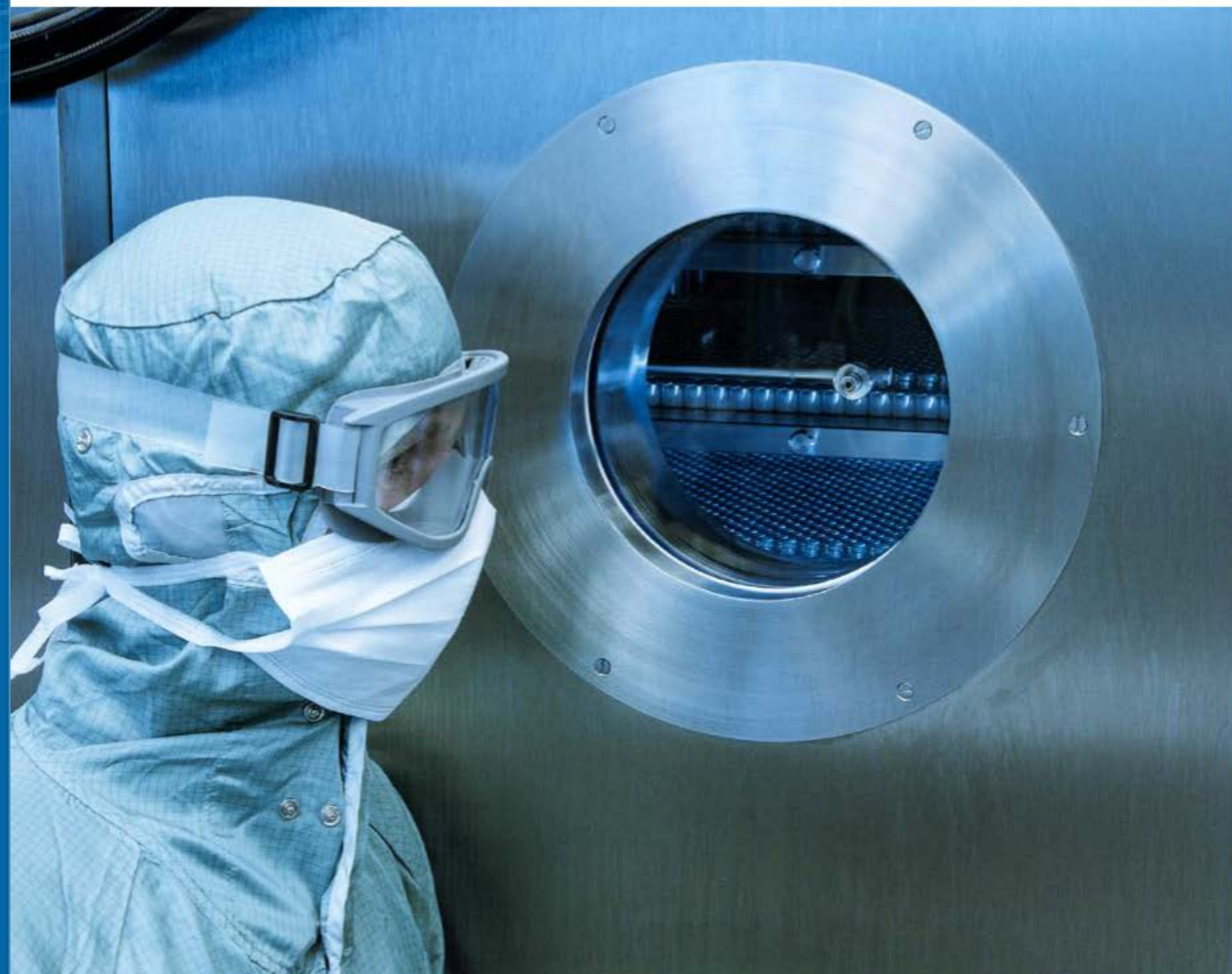
Connecting People, Science and Regulation



pda.org/eu/fdp2019

2019 PDA EUROPE TRAINING

Freeze Drying in Practice



25-29 MARCH 2019
OSTERODE (HARZ), GERMANY

CONNECTING
PEOPLE
SCIENCE AND
REGULATION®

REGISTER BEFORE 16 DECEMBER 2018 AND SAVE!



Company portrait

Lyo Engineering is your partner in pharmaceutical industry and medical engineering in the areas of management / quality assurance / engineering with more than 10 years of experience in pharmaceutical plant engineering and construction in the fields of project handling and quality assurance.

Among other things our business activities include project management for international freeze drying projects in pharmaceutical industry, planning and monitoring of technical transfer projects of fill- / finish areas and all aspects of GMP quality assurance, for instance classification of equipment components in accordance with GMP risk analysis as qualification basis, GMP-based employee training, performance of external and internal audits, planning and monitoring of acceptance tests (FAT / SAT) and qualification phases (DQ / IQ / OQ / PQ), as well as the creation of the pharmaceutical technical documentation.

We gladly support you in the successful implementation of projects in regulated environments from the URS to the handover to the production.



Lyo Engineering
GMP is our passion!



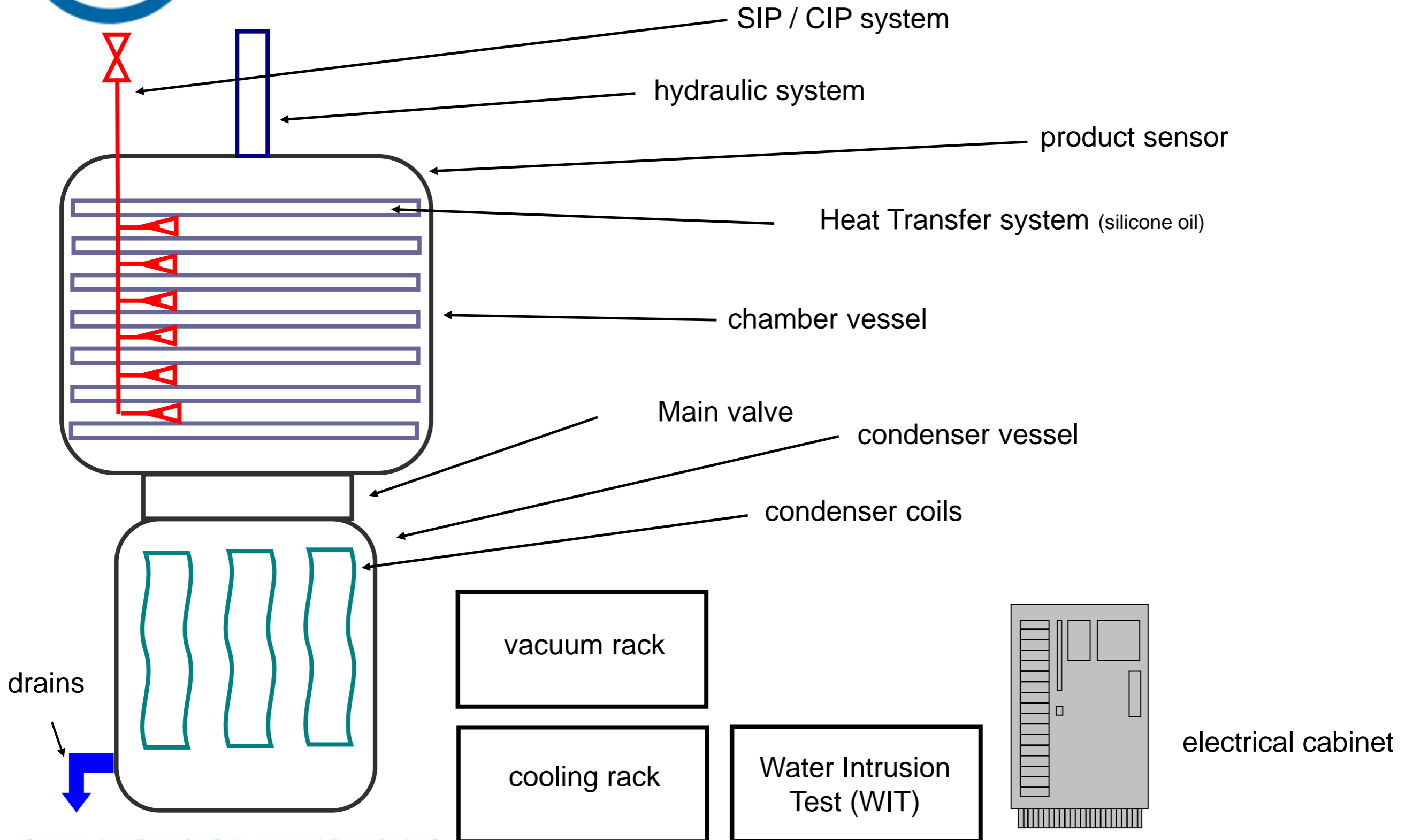
Theory 5:

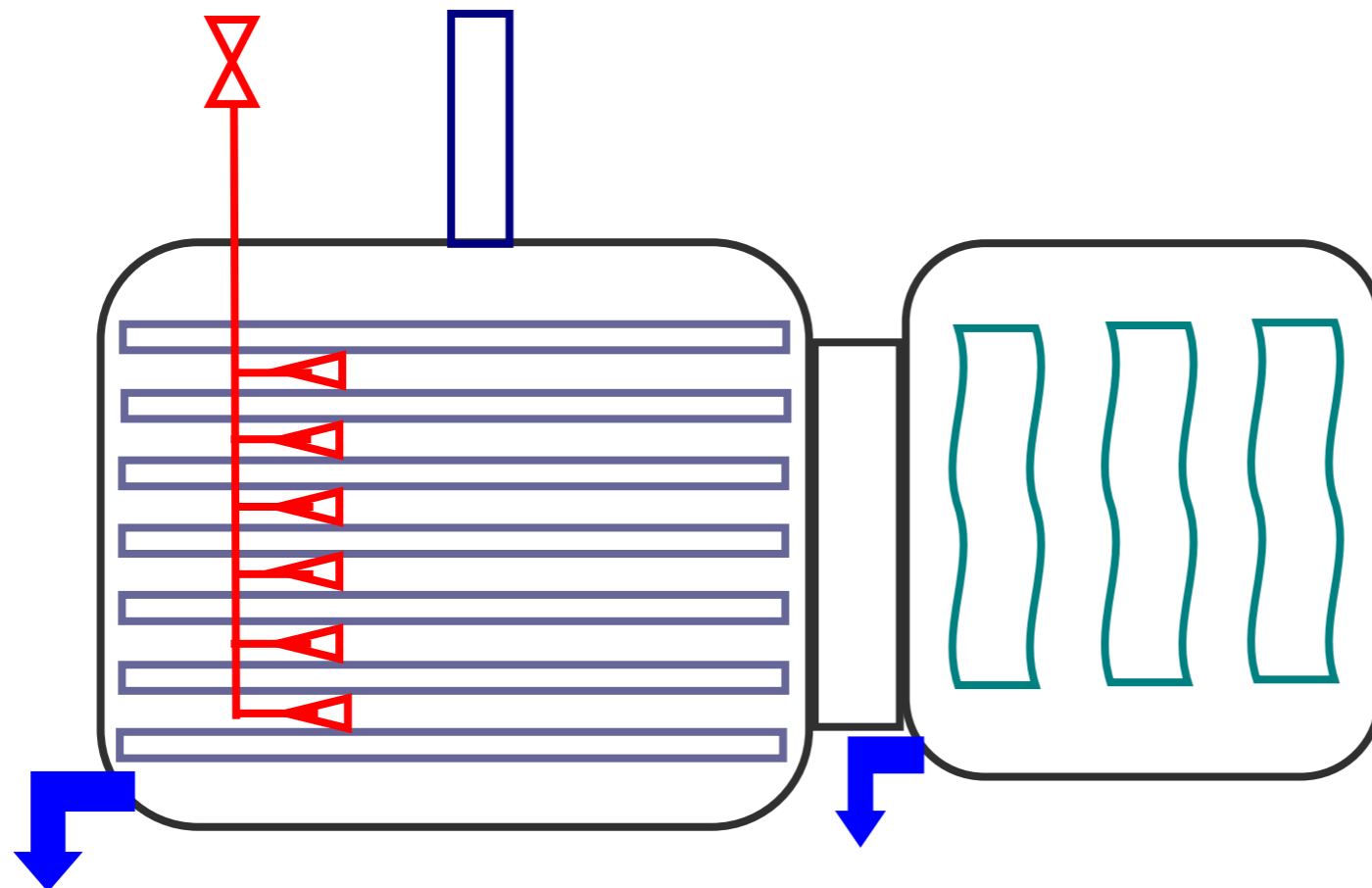
Construction of freeze dryers

- construction of freeze dryers
- systems of freeze dryers
- different types of freeze dryers
- existing lines of freeze dryers
- parameters of freeze dryers



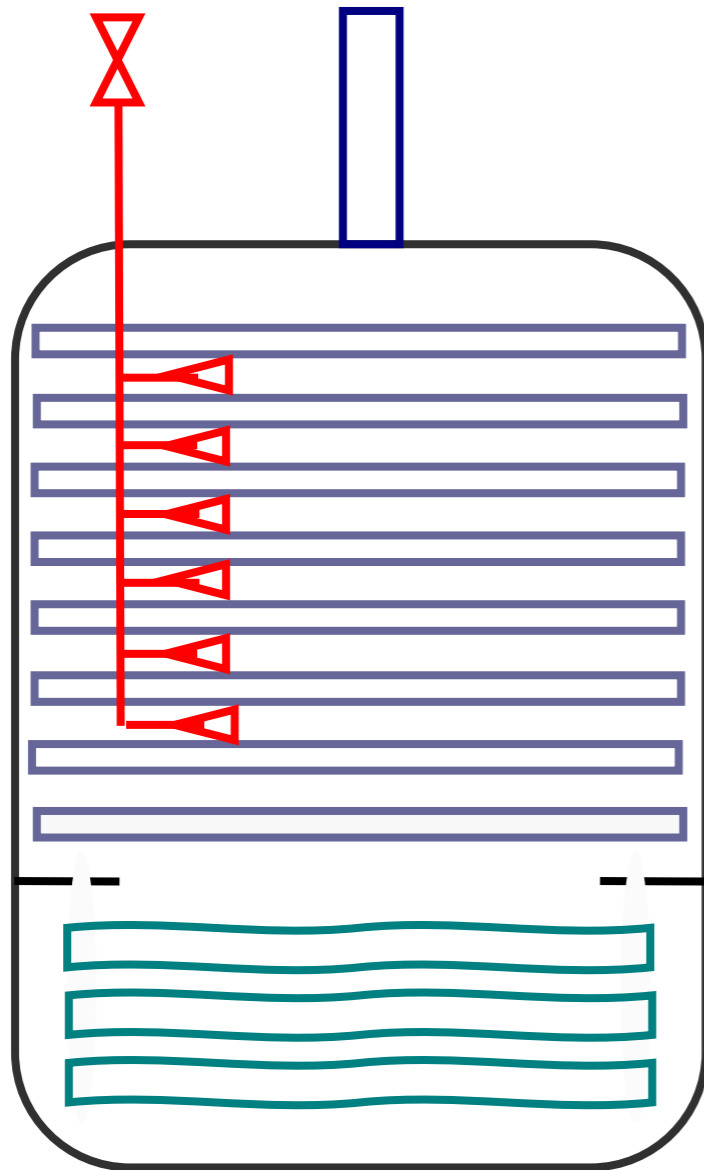
Lyophilisator





Side mounting of ice condenser:

- installation on one level
- potential risks for are the Radiation effects of the condenser to the vials which stand nearby the Main Valve

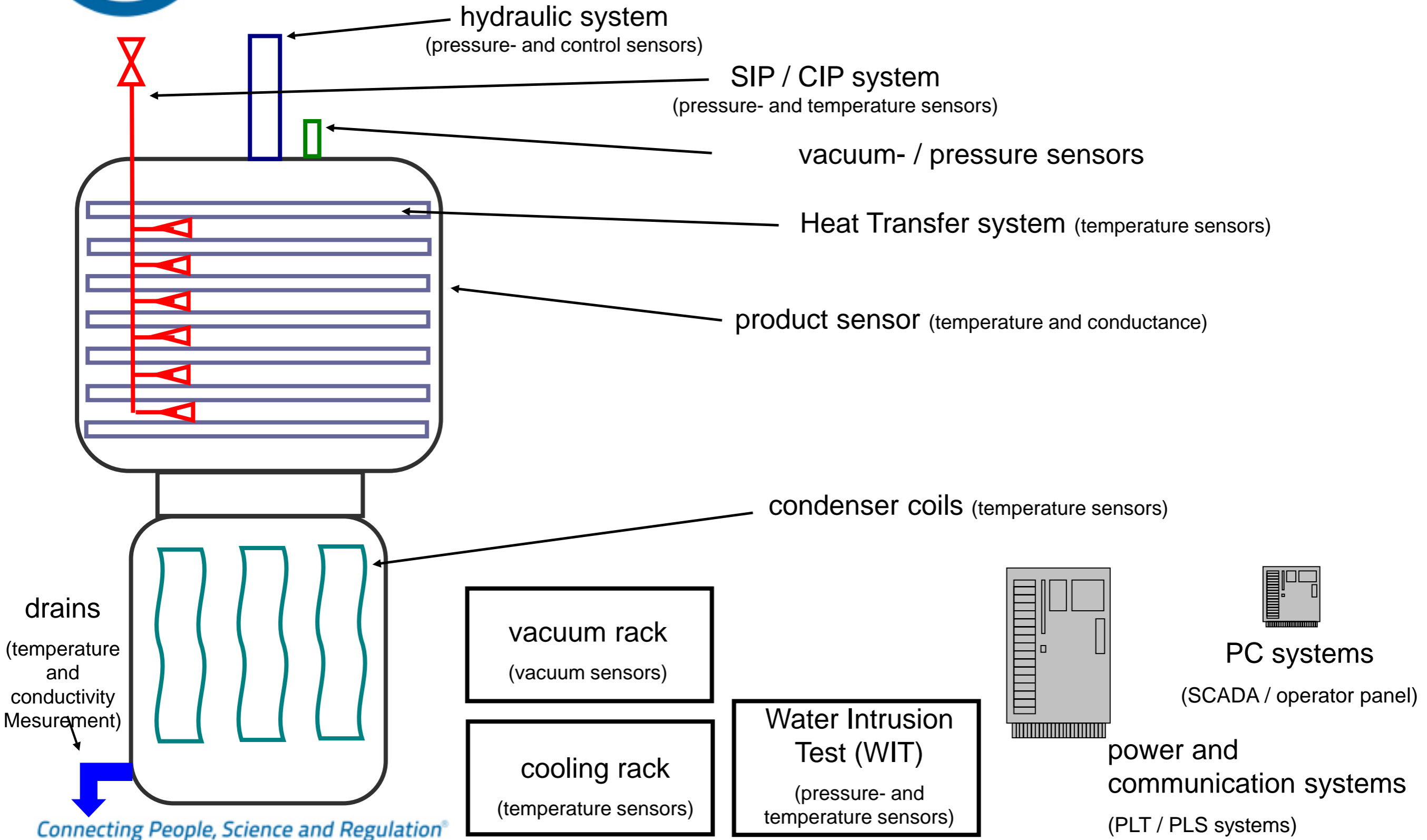


Compact design / one-chamber design:

- installation on one level
- compact design
- The Main Valve ist mounted on the Shelf Stack



Lyophilisator

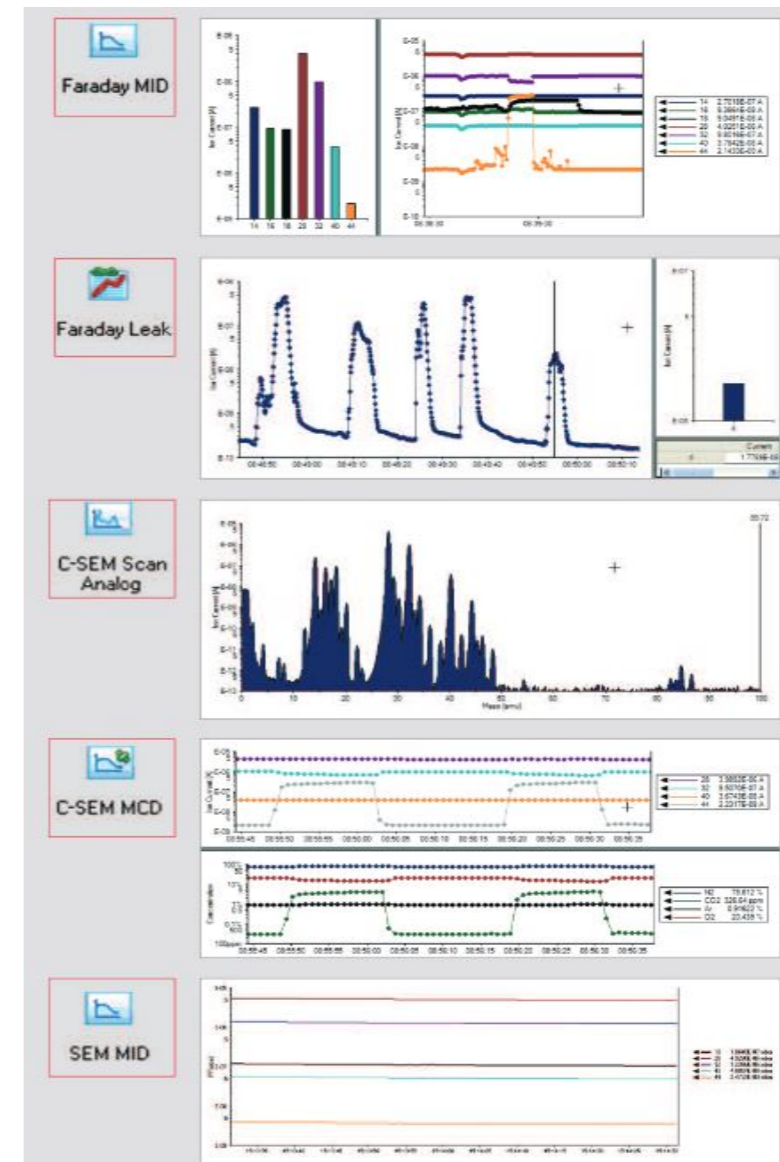




Lyophilisator

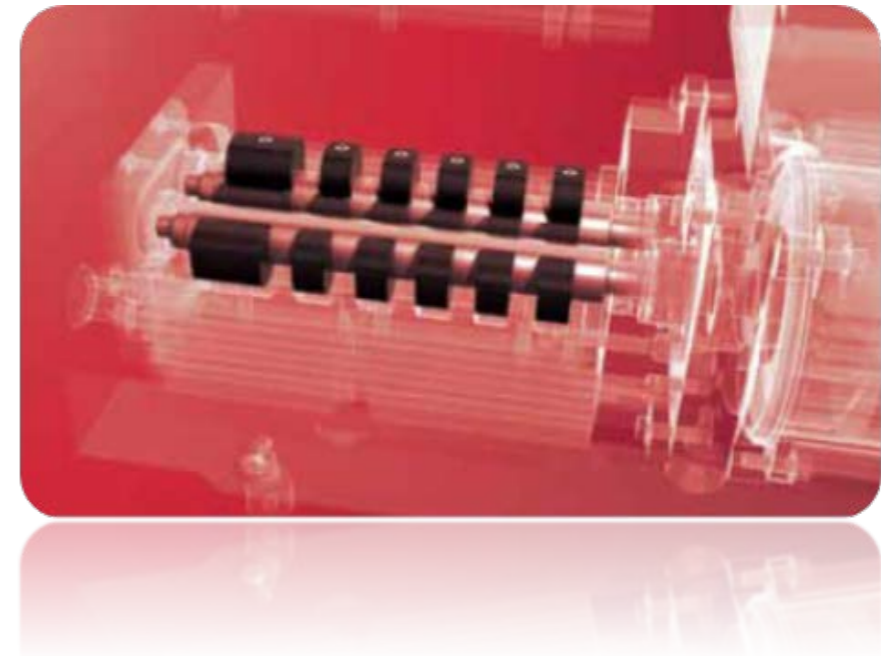
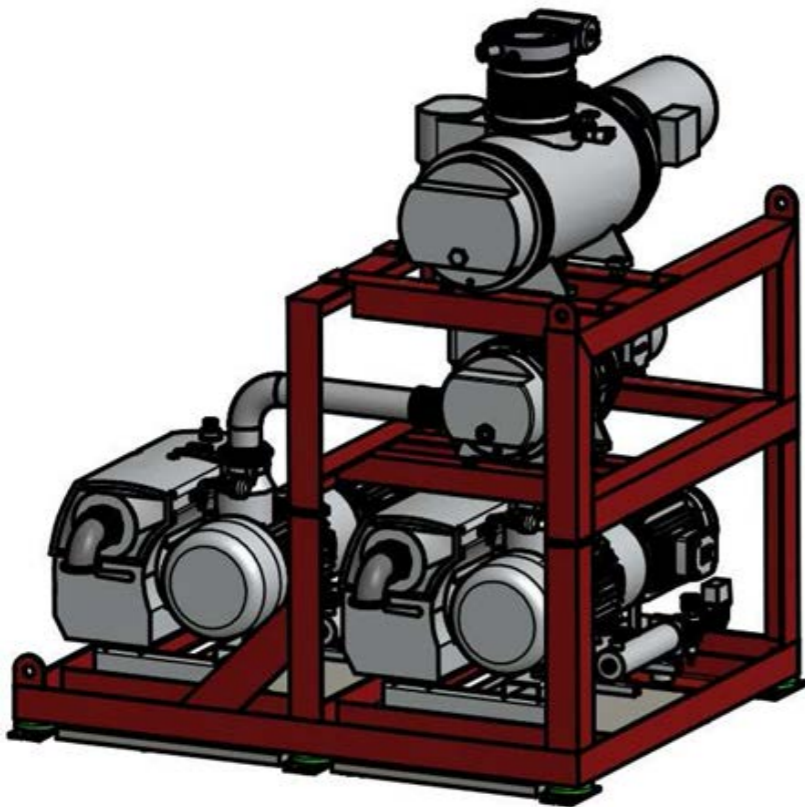
Special Sensor

Mass spectrometer Sensors for silicone oil detection mounted in the Main Valve



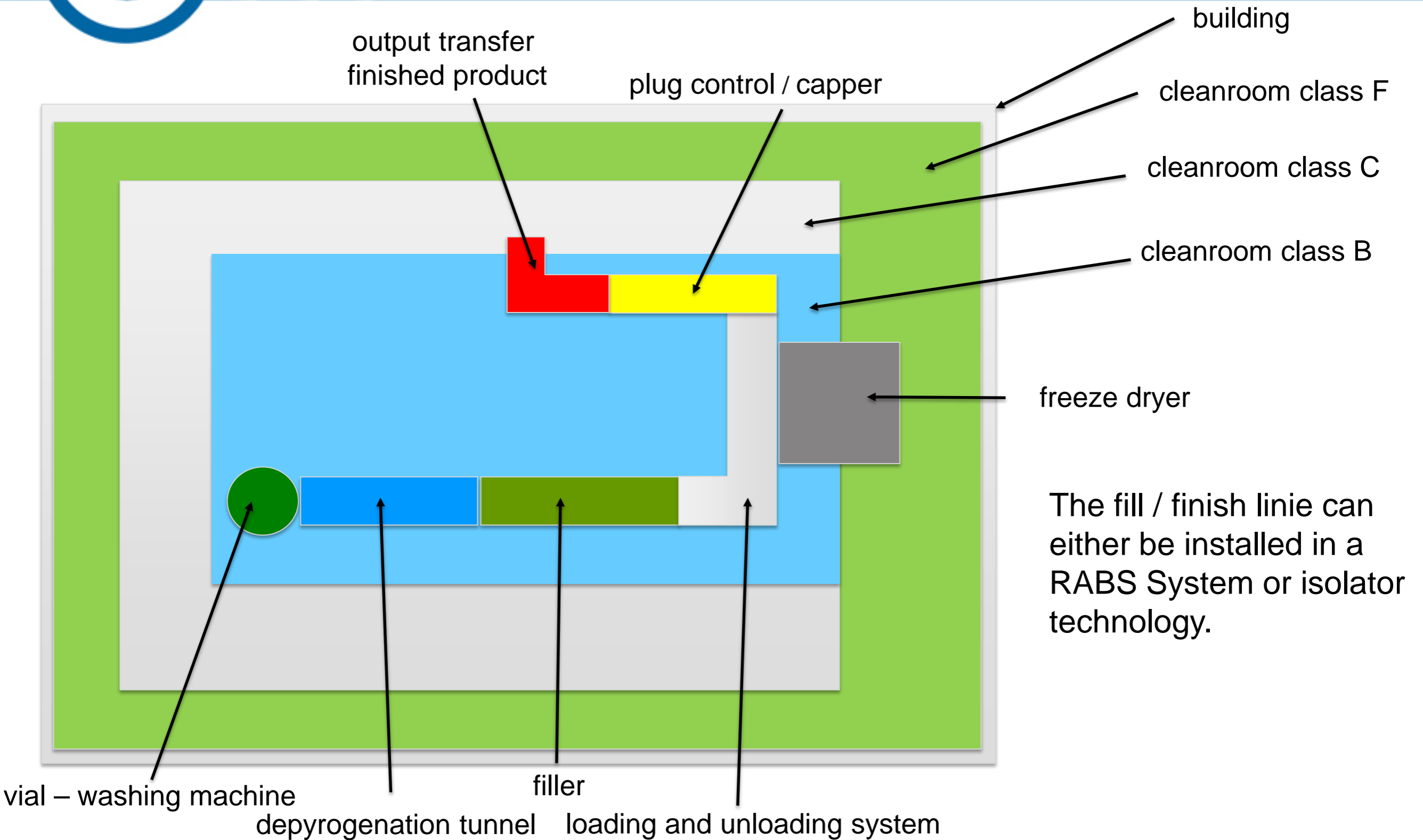
Lyophilisator

vacuum pump units





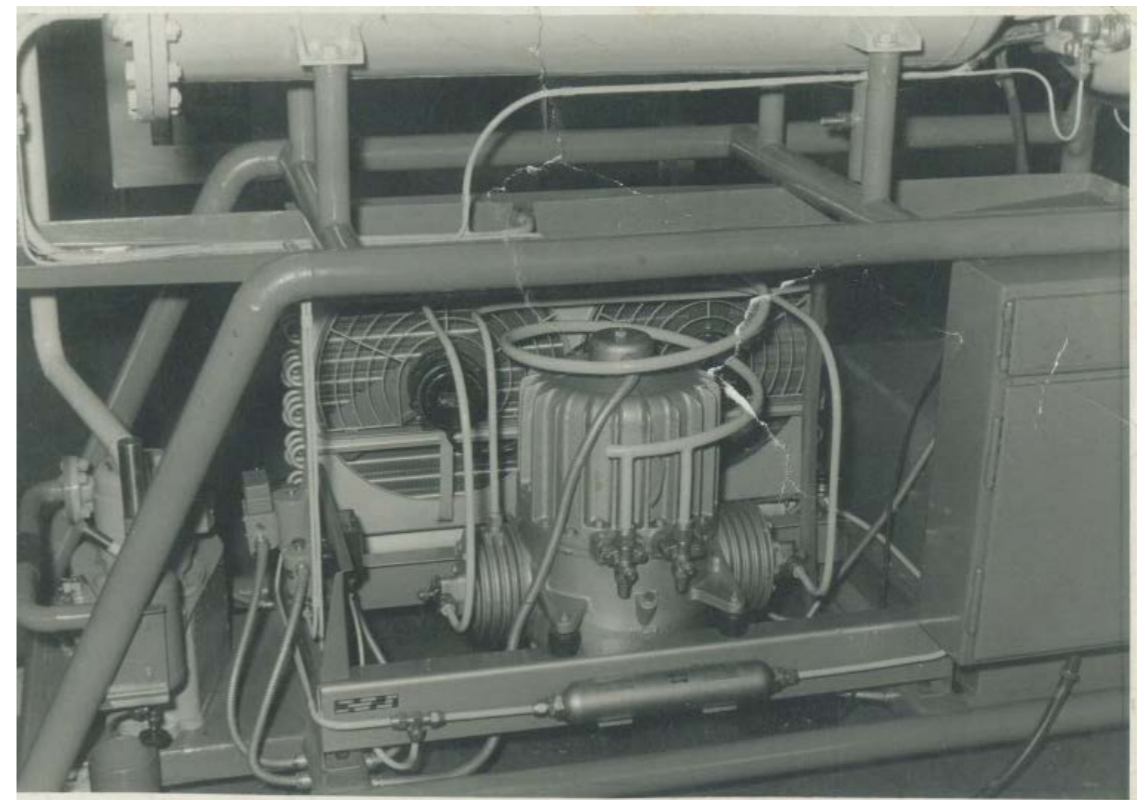
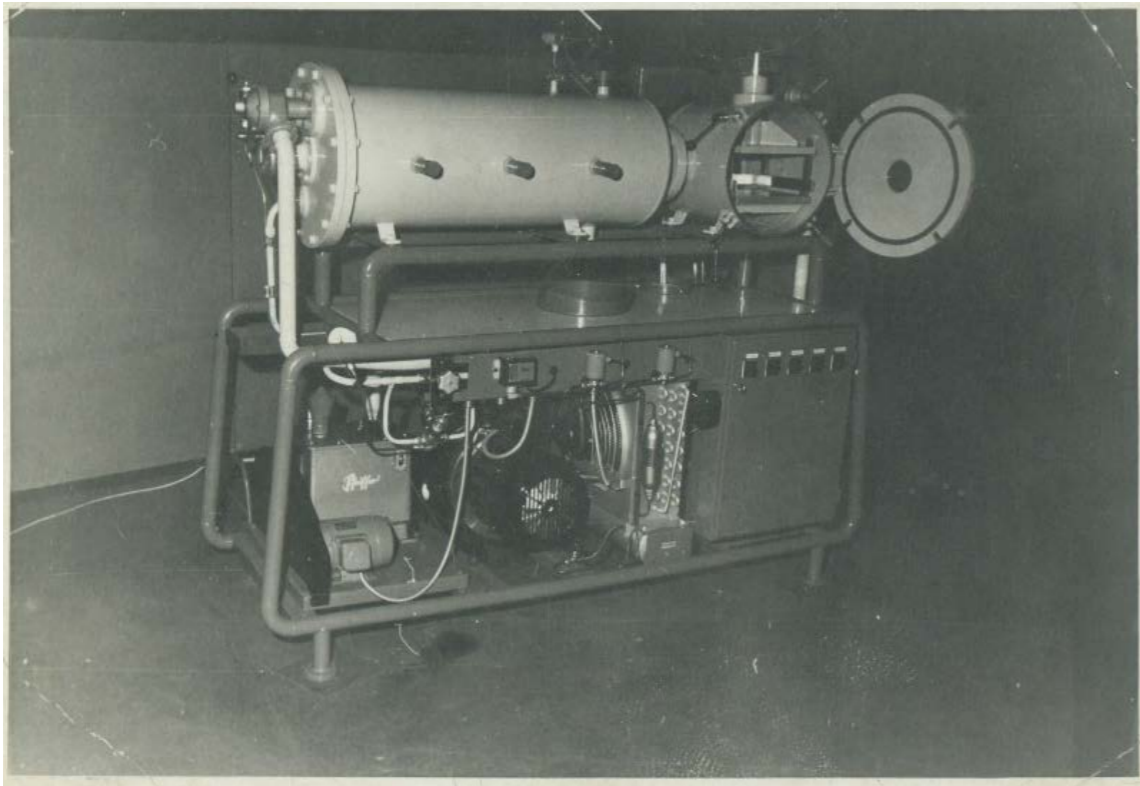
Exemplary construction of GT range



The fill / finish line can either be installed in a RABS System or isolator technology.



Old treasures





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