



MODULECLEAN

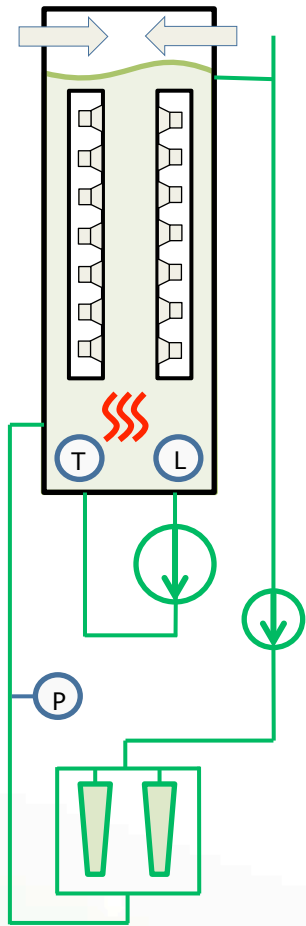


Cleaning and printing solution

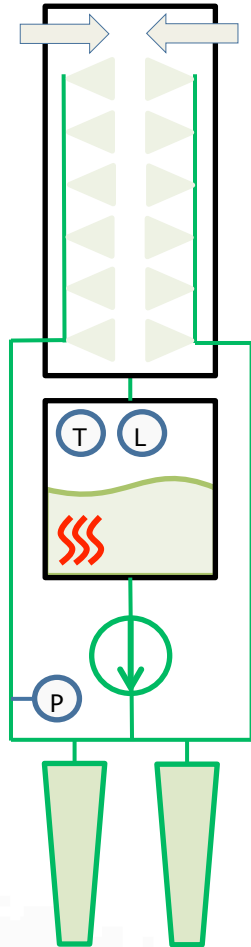


Chambers available

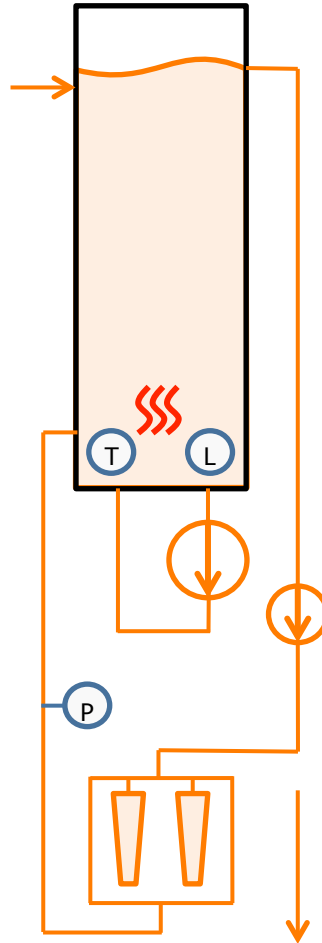
Wash US SUI



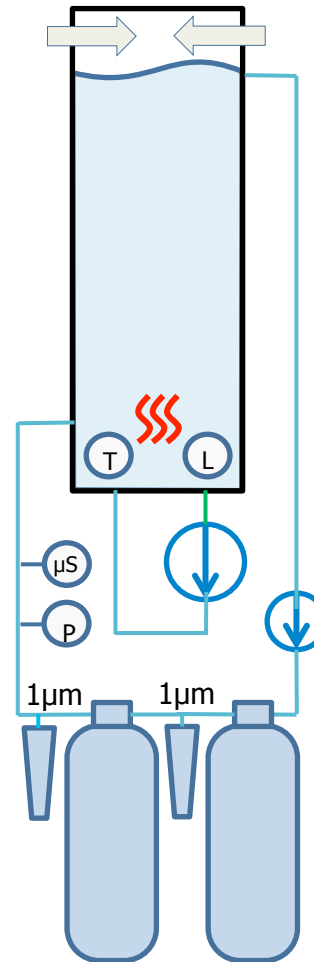
Wash SIA



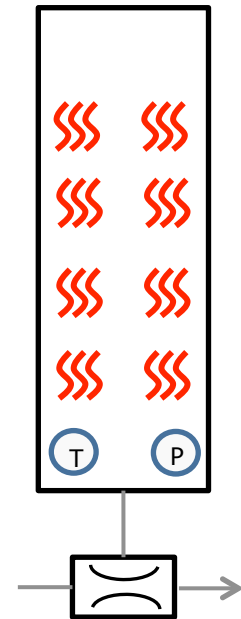
Rinse SUI Water



Rinse SUI DIW



Vacuum Drying

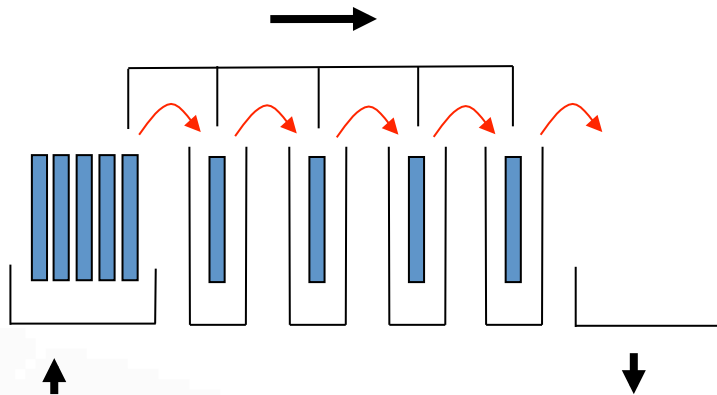




Conveyor options

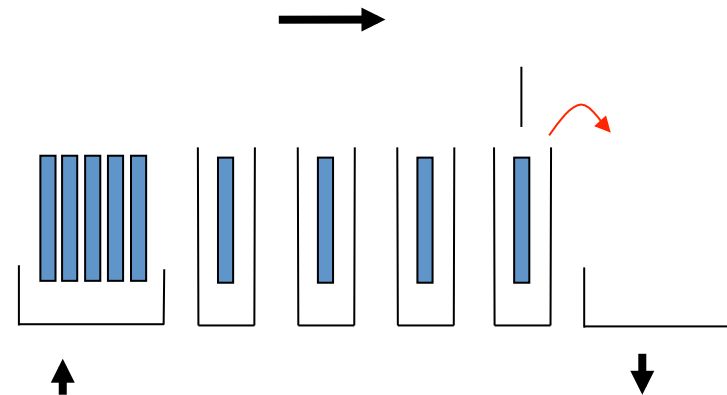
Parallel

- Faster for easy cleaning
- Takt time 6 mins
- Chamber time 4 mins
- Unique process times only



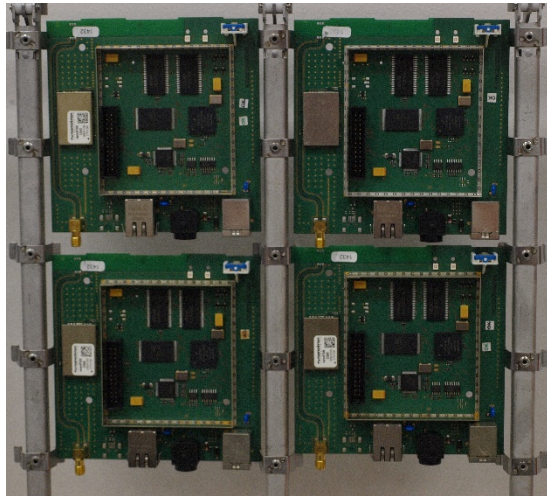
Robot

- Excelent for high-end cleaning
- Takt time 12 mins
- Chamber time 10 mins
- Flexible process times
- Chamber skip

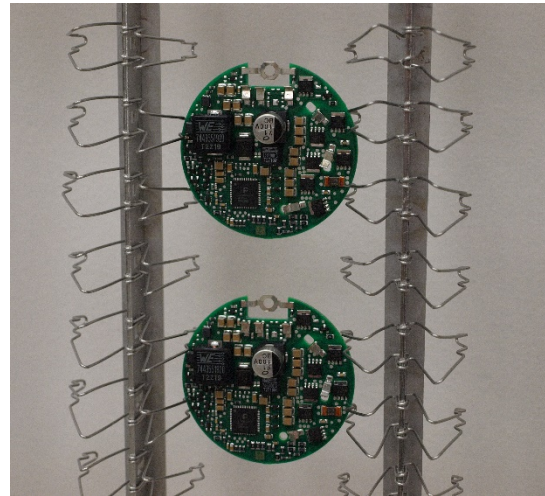


Standard Carriers

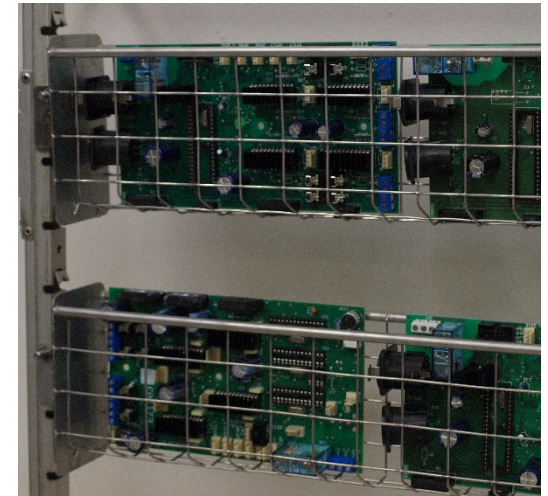
Spring fingers



Spring wires



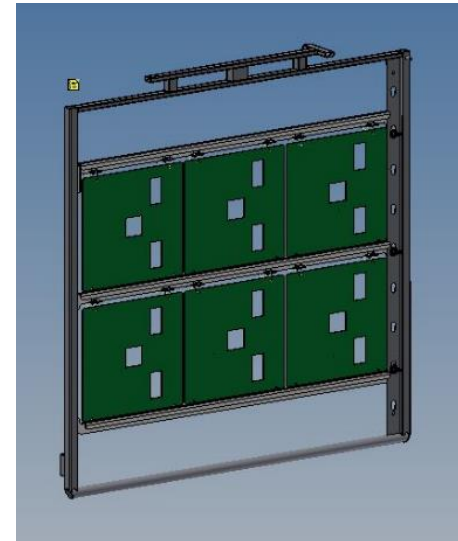
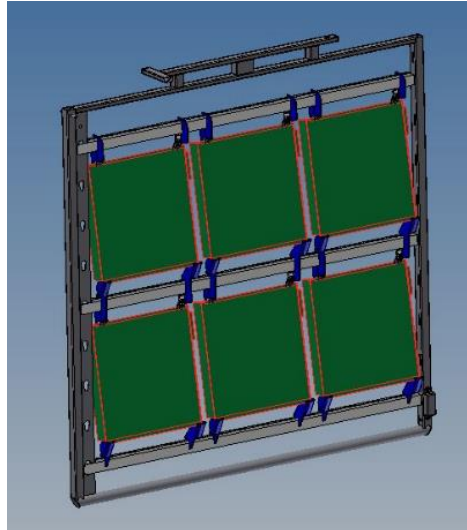
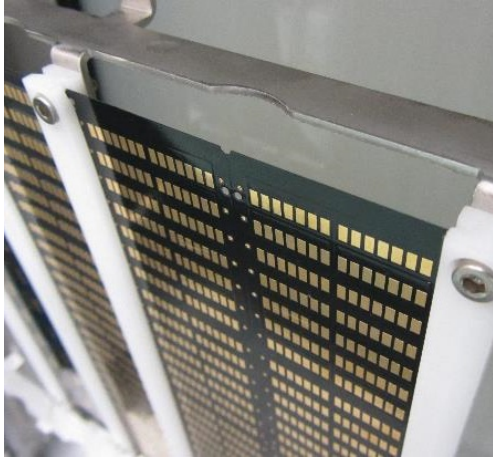
Baskets



Very small PCB's

Cleaning and printing solution

Customized Carriers



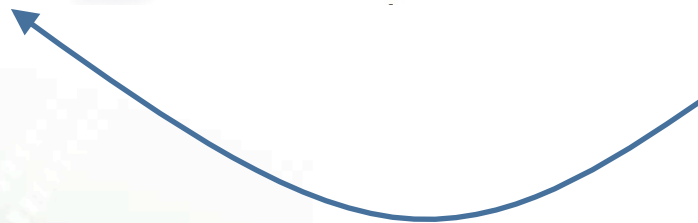
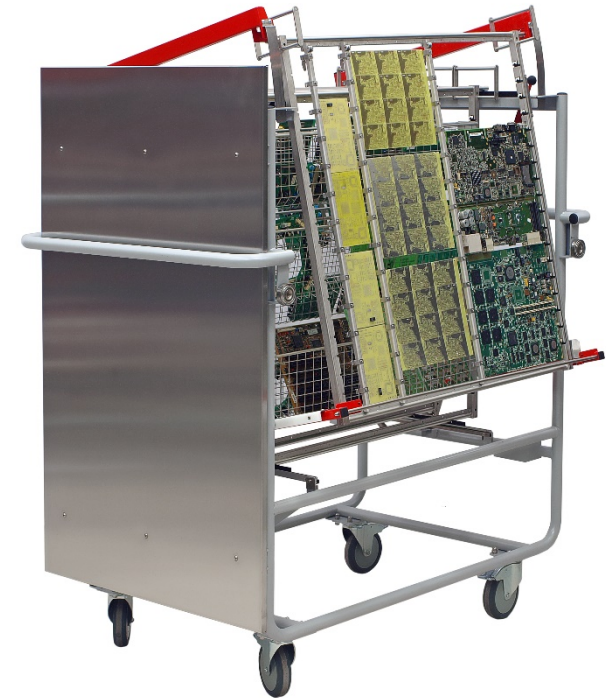
Handling

Moduleclean

- Automatic start
- Cart change only

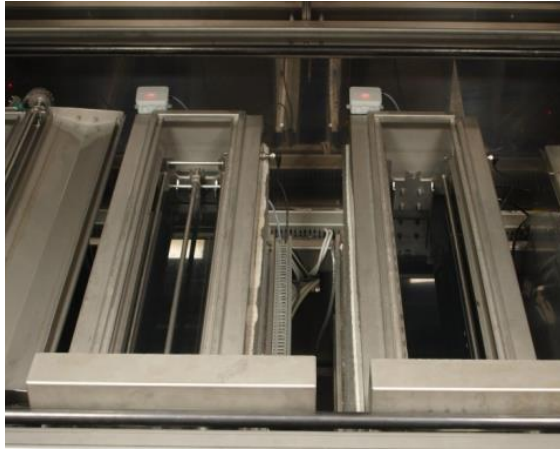
Carts

- 5 Frames x 6 mins takt time
- 30 mins comfortable load-unload

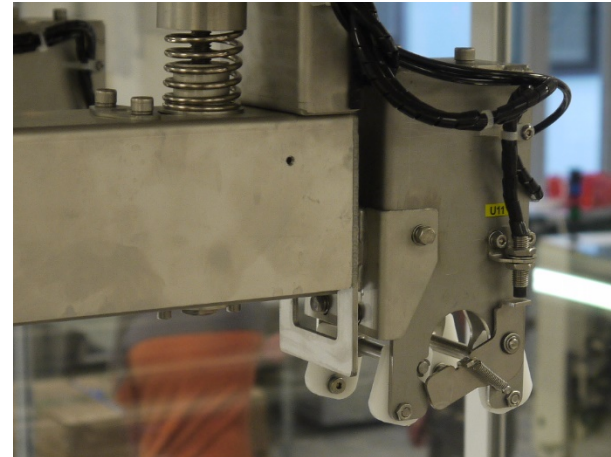


Mechanical features

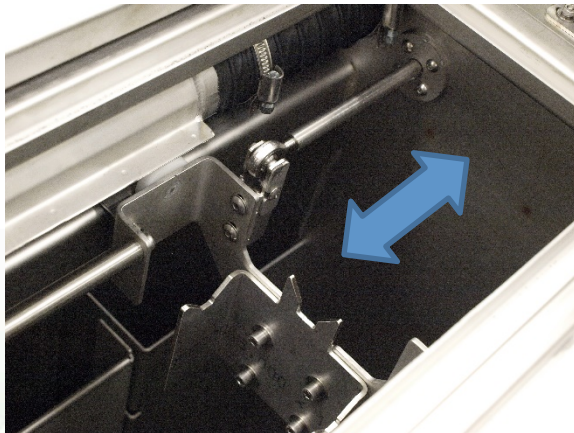
Robust chambers



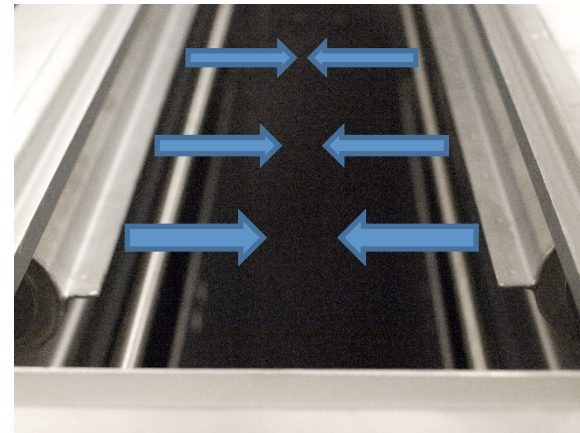
Safety grip head



Carrier oscilation



Air knives



Filtration unit

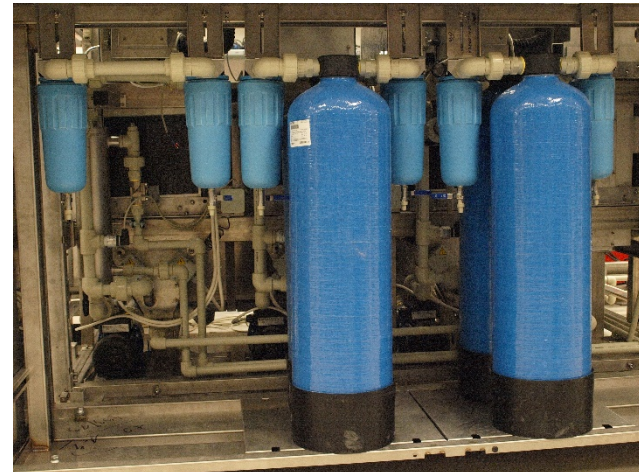
Integrated

- Easy maintenance
- Space saving



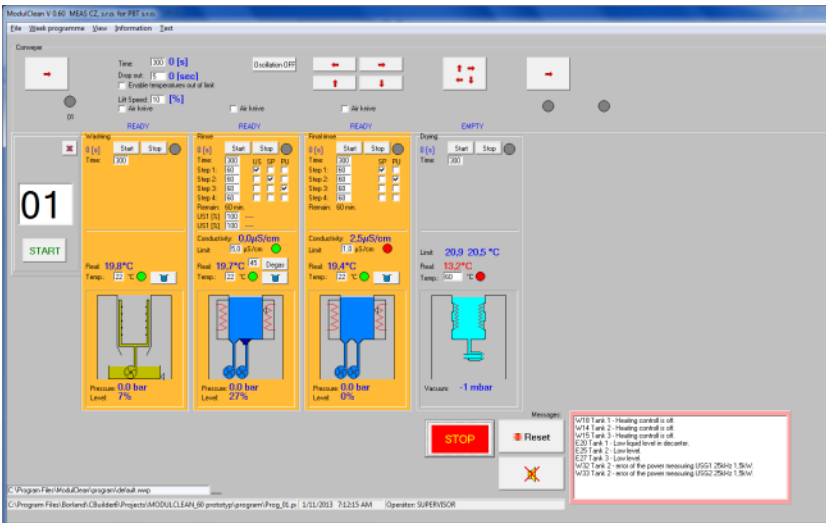
Fully closed

- No drain
- Economic
- Ecologic



PC WIN® Controll

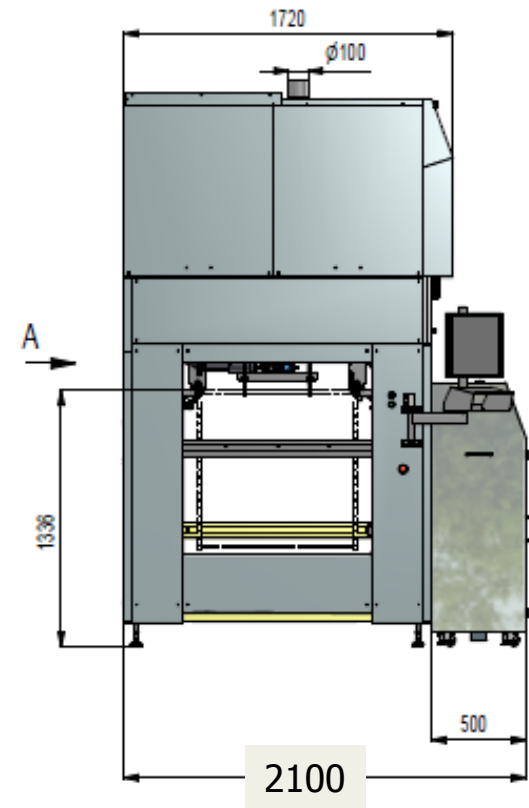
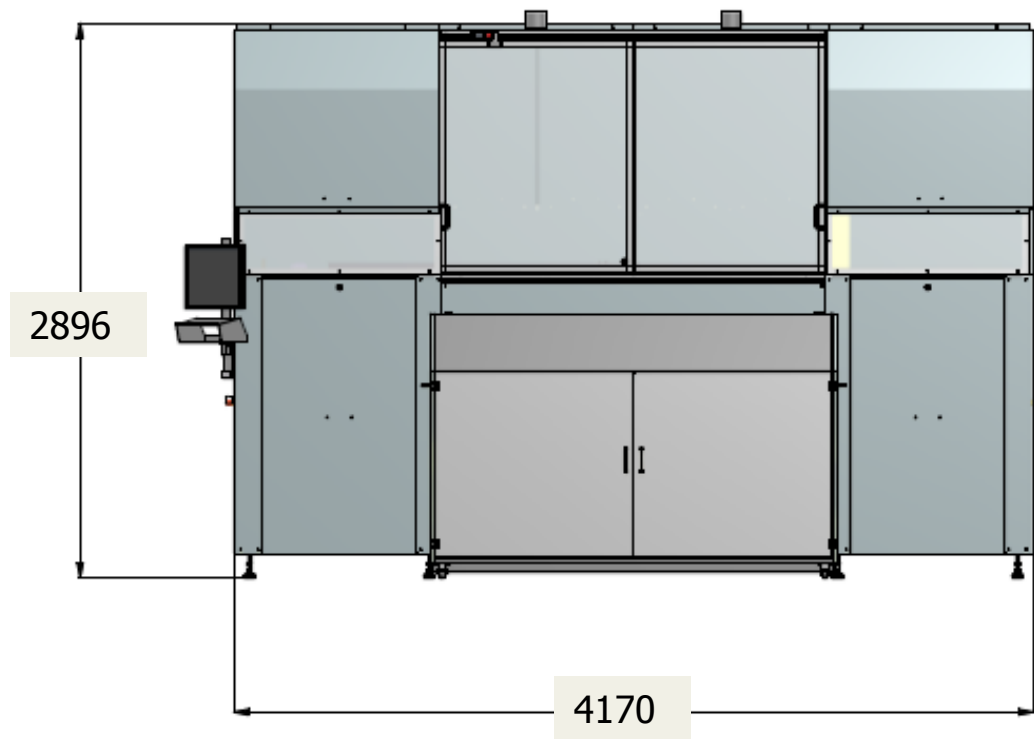
- 99 Programs
- 3 access levels
- Full parameters measure *
- All parameters traceability logging



* Zestron® EYE Integrated



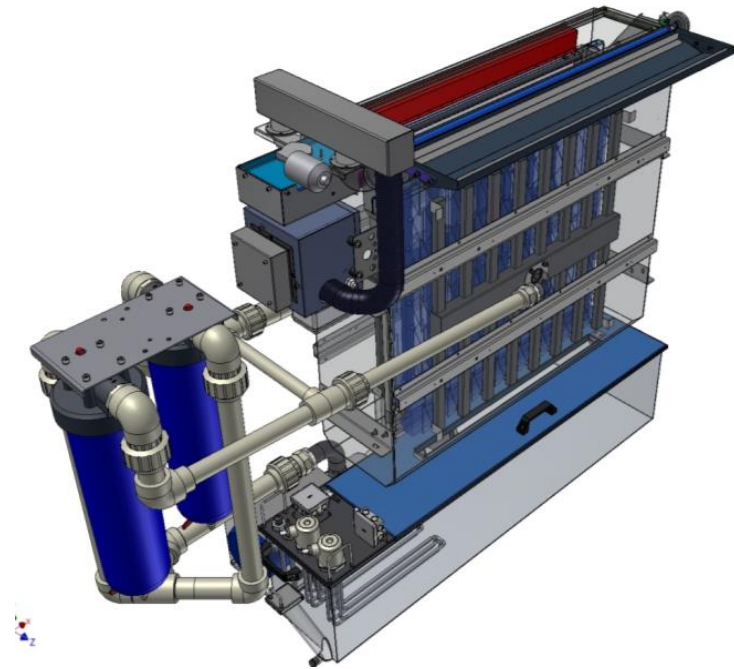
Dimensions



SIA Chamber

Washing & Rinsing

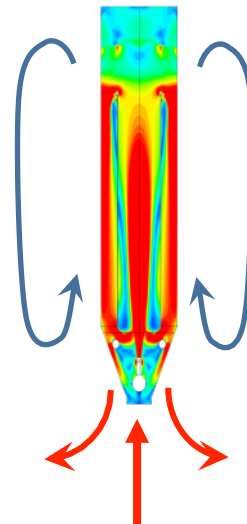
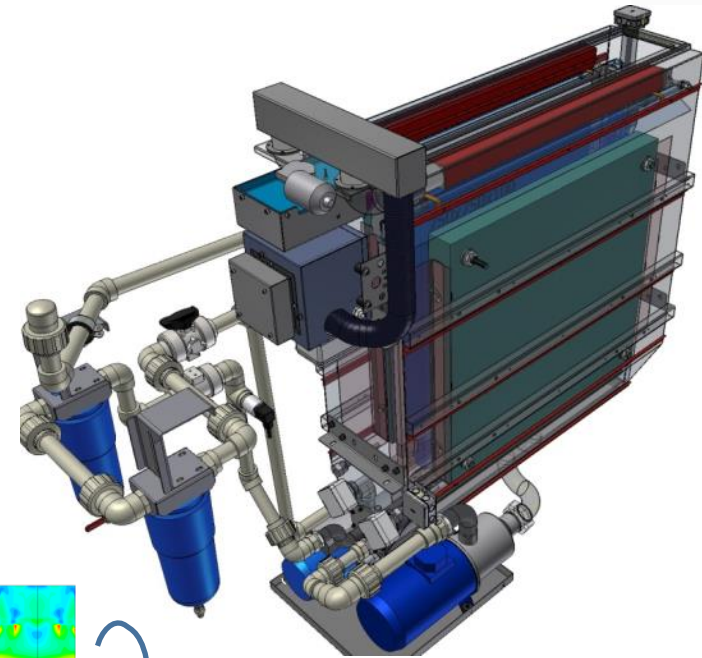
- 144 nozzles
- 450ltr/min
- 3,5 Bar
- Mechanical filtration 5um
- Heating 60°C
- Carrier oscilation
- Air knives
- No seal doors
- Chemical fully resistant



US SUI Chamber

Washing & Rinsing

- Ultrasonic 40kHz up to 4500W
- 1500ltr/min double flow*
- Mechanical filtration 5um
- Heating 60°C
- Carrier oscilation
- Air knives
- No-seal doors
- Chemical fully resistant

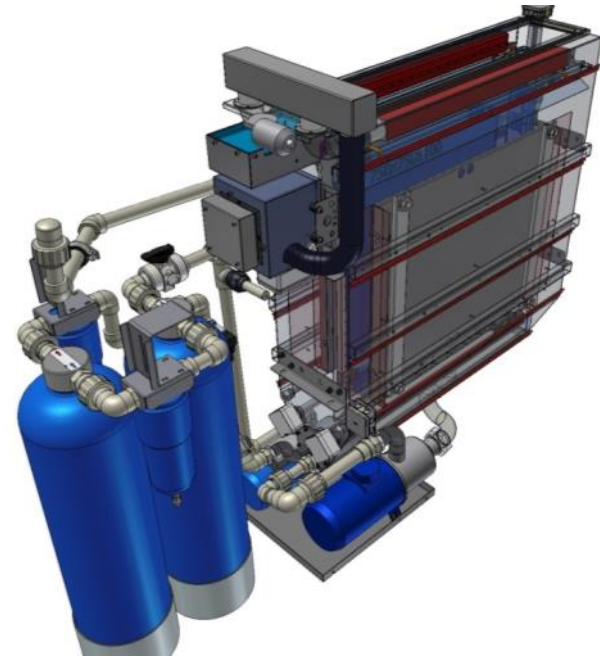


* Double flow

SUI Chamber

Rinsing

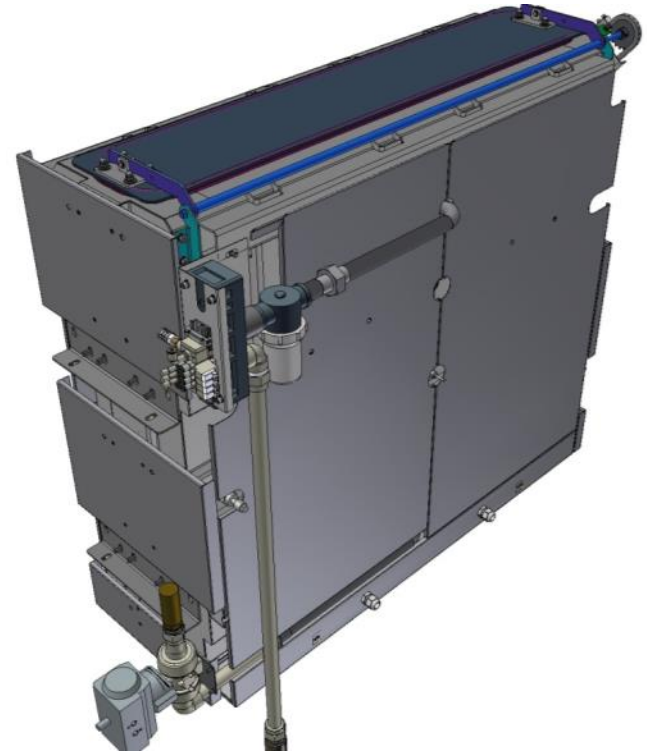
- 1500ltr/min double flow
- Mechanical filtration
- Chemical filtration 1um
- Heating 60°C
- Ultrasonic 40kHz up to 4500W
- Carrier oscillation
- Air knives
- No seal doors
- Chemical fully resistant



Vacuum drying

Drying

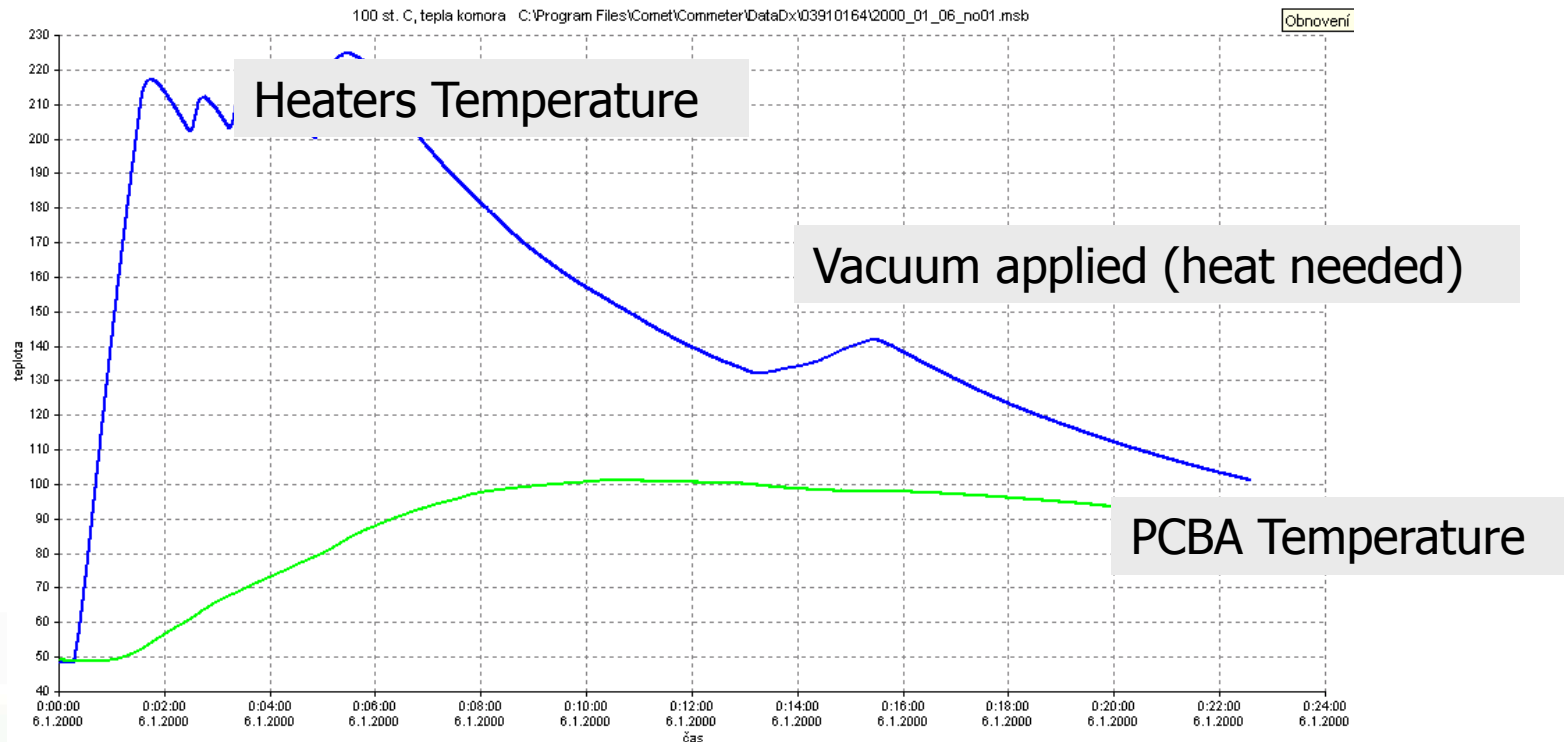
- Radiation up to 110°C
- Venturi 0.5 Bar
- Heaters temperature control
- IR PCBA Temperature control
- Robust design
- Easy exchangeable sealing



Vacuum drying

Heating control test

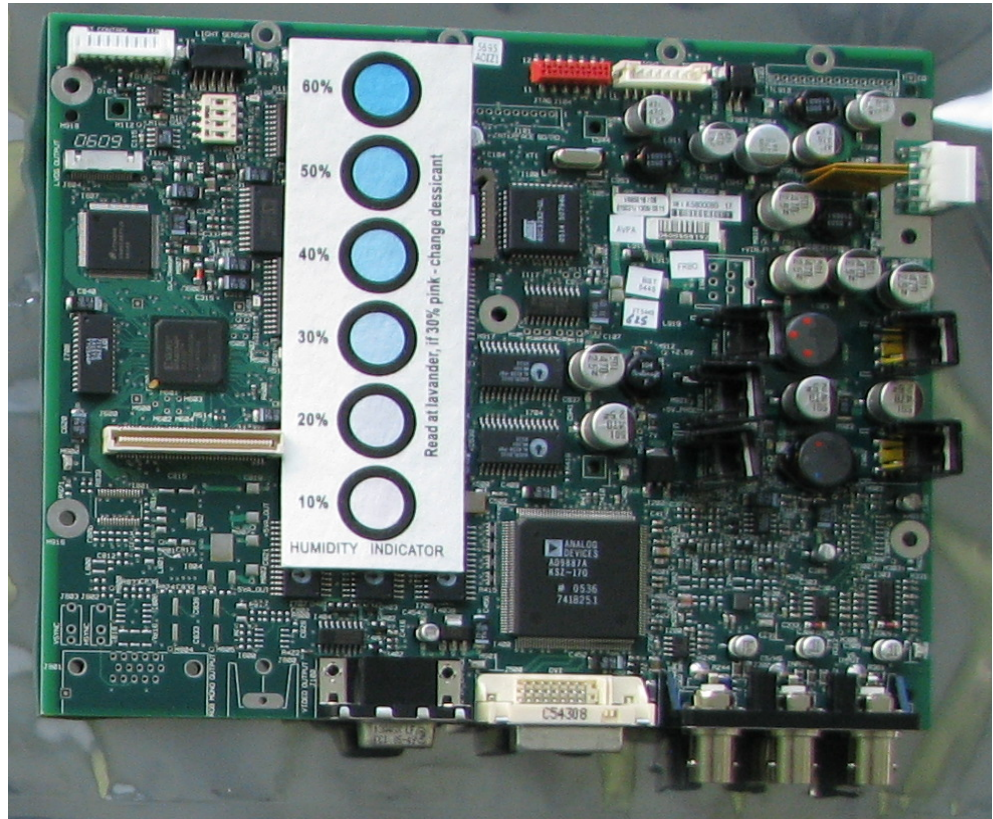
- IR sensor to PCBA temperature corelation
- Heaters driven by thermometers and IR sensor
- PCBA measured by external thermocouples



Vacuum drying

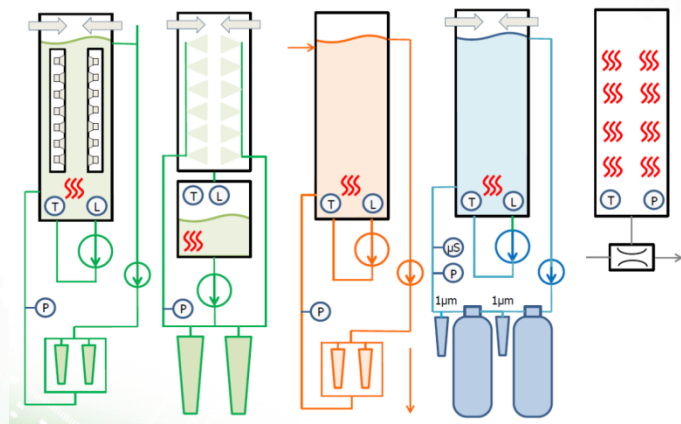
Moisture test

- 100°C set temperature
- 10 mins cycle
- Sealed in a plastic bag
- 30% humidity after 24h

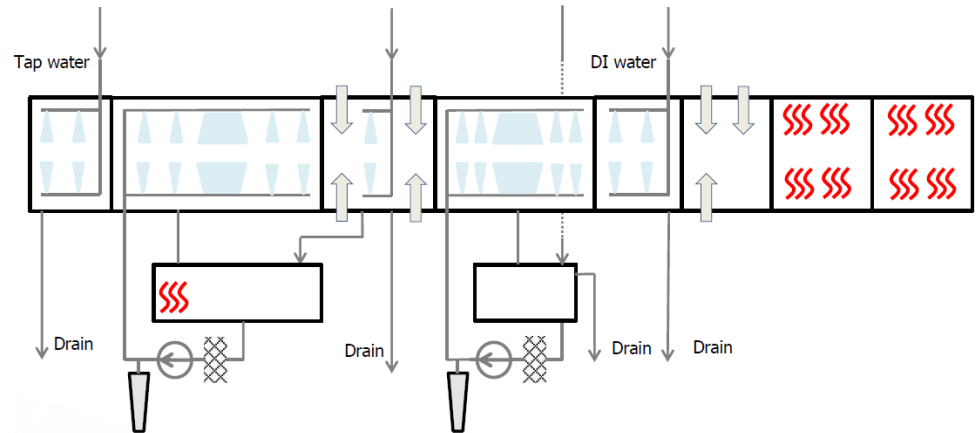




Moduleclean & Inline



Prewash Recirculating wash Chemical stop Recirculating rinse Final rinse Blower dry Radiation dry



Cleaning and printing solution

Moduleclean & Inline



Moduleclean

- 0,5m² in 10 mins
- Electric 70 kVA
- Water 0
- 4200x2100x2900 complete



Inline

- 0,8m² in 10 mins
- Electric 280 kVA
- Water 110 ltr/min DIW
- 4900x1520x1300 without DIW unit