

CRYOFOX DISCOVERY

COOL and
CLEVER
technology

The Cryofox Discovery is a vacuum thin film deposition rack model to be build into a wall



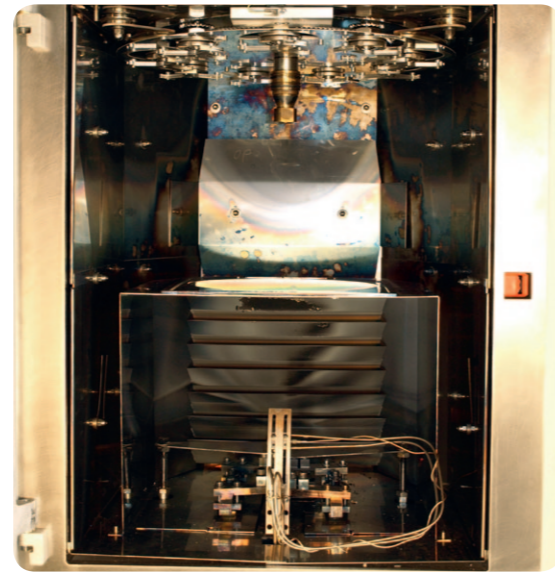
Cryofox 

CRYOFOX DISCOVERY

The Cryofox Discovery is a rack model for wall mounting. It is a complete system with power supply, pumps, and control system in one unit.

It will fit easily into many existing laboratories and clean rooms and fulfills numerous basic needs for thin film deposition in research and university departments. It also offers the possibility for deposition of metals and non-metals under very well controlled conditions.

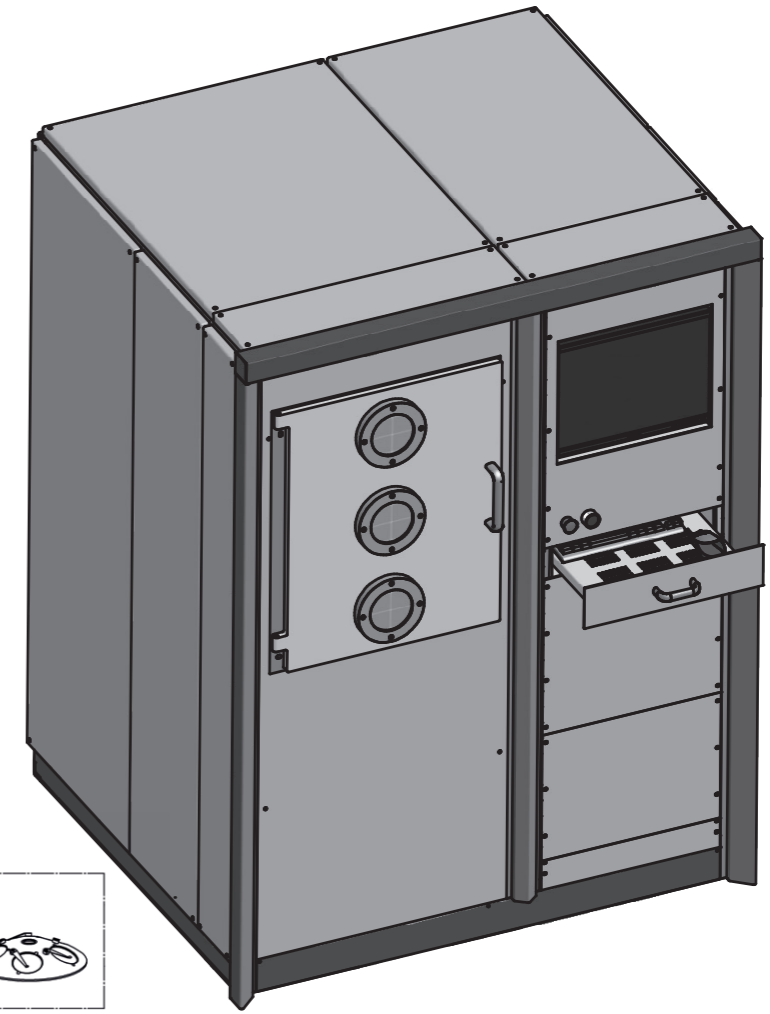
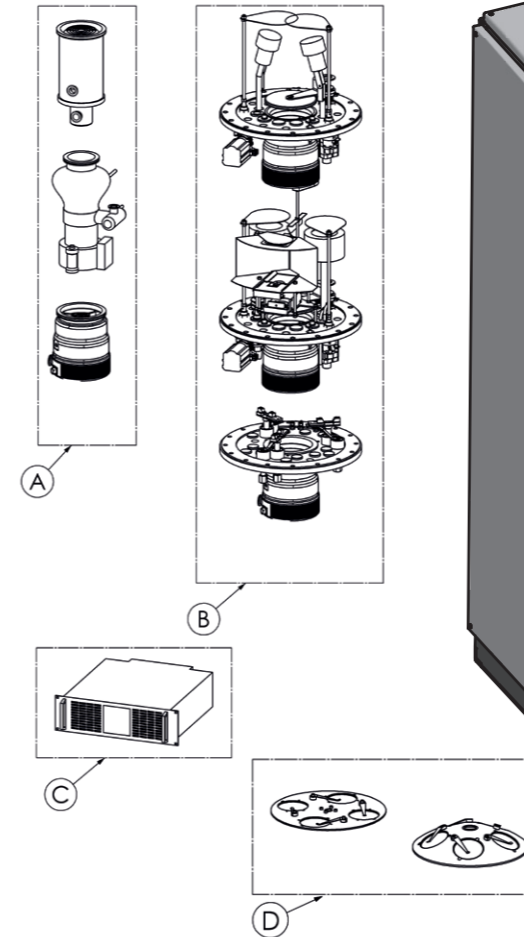
Another feature of the system is the possibility to upgrade/adding more sources to the system. This means that it is possible to start with for example a thermal evaporator and then later on add another source like a DC/RF sputter or exchange thermal evaporator with an e-beam. It is possible to combine up to three sources thereby giving the user, the possibility to design a large number of multi layer combinations without breaking vacuum.



Chamber with thermal evaporation and holder



Double rotating wafer holder with 9 pcs. 4" wafer holders



MECHANICS

- Deposition throwing distance: E-Beam 750 mm approx, DC/RF 150 mm approx & thermal 500 mm approx.
- Electro polished stainless steel chamber.
- Controlled substrate movement and rotation.

PROCESS

- E-Beam deposition: Single or co-deposition with multiple crucibles
- DC/RF Magnetrons with a max of 3 of 4" inch or up to 6 of 3" inch.
- Thermal evaporation, multiple Thermal Evaporators
- Plasma pre-treatment.

PROCESS SUPPLY

- Dry or oil sealed backing pump.
- Turbo or cryopump for high vacuum.
- One or multiple mass flow controllers for gas supply.
- Water cooling.

PROCESS CONTROL

- Receipt control with fully automatic process:
- Fully automatic or manual control of the process:
- Very good HMI on top of robust PLC control.
- Embedded Windows XP in PLC control.
- Internet access for machine control and operation (optional).
- Thickness monitors with double crystals and connected to the control system.

INFO TO THE SKETCH

A: VACUUM PUMPING WITH:

- Diffusion pump.
- Cryo pump.
- Turbo pump.

B: SOURCES:

- DC/RF sputtering.
- E-beam stand alone or combined with sputtering.
- Thermal evaporation.

C: CONTROL SYSTEMS AND POWER SUPPLIES:

- DC/RF.
- E-beam.
- Thermal.

- Film thickness monitor.
- Film deposition control.
- Heating.
- Windows XP control and recipe software.

D: SUBSTRATE HOLDER:

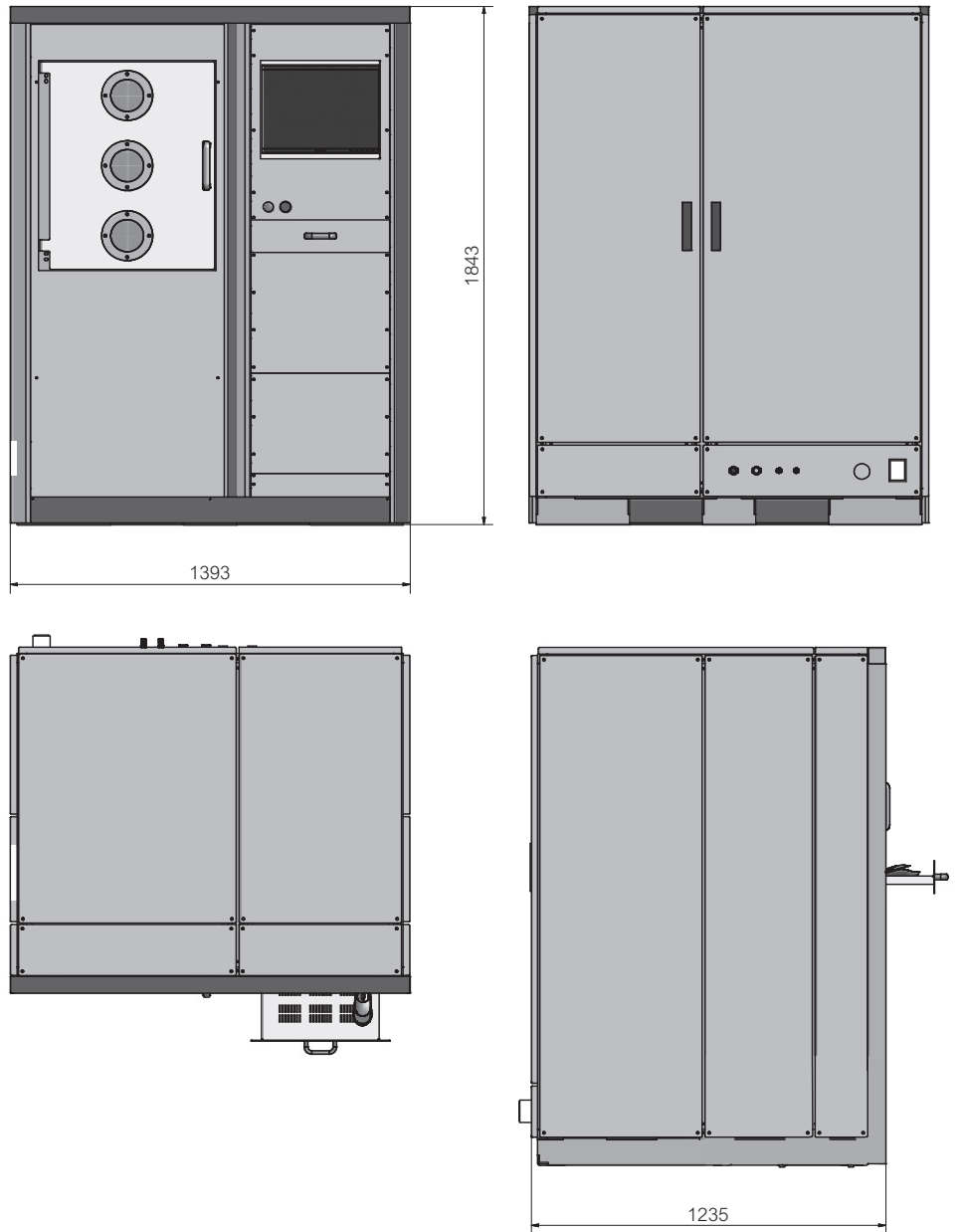
- Different holders.

VACUUM CHAMBERS:

- FD400/85.
- FD400/160.

www.cryofox.com

FOOTPRINT



POLYTEKNIK
HOUSE OF COATING TECHNOLOGY



POLYTEKNIK AS · Moellegade 21 · DK-9750 Oestervraa · Phone: +45 9689 2800 · Fax: +45 9689 2801 · Email: sale@polyteknik.dk

REPRECENTIVE: