

New sputtering machine: "Modularity, productivity and choice of materials"



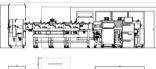


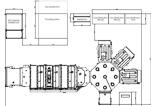


- > One- or Two-loading modules
- > Up to 6 frames per Loading module
- > Compatible with standard OCTOPUS II carrier plates
- > 450x350 mm²

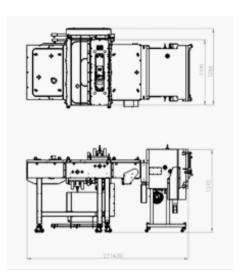


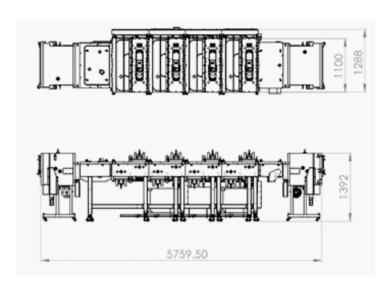
- > Each process sub-module integrates 1x TOP et 1x BOT magnetrons slots
- > From 1 up to 4 process sub-module
- > Each magnetron slot can integrate a planar or rotary cathode
- > Each process sub-module can be fitted with : specific sputtering sources :
 - Dual-magnetrons & Low damage sources





- > Systems back-end can be attached to Octopus II Transfer Module
- > Continuous PECVD-PVD depositions without vacuum break becomes possible
- > Thin stack films interfaces control and reproducibility





System key data

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Footprint L x W x H	2'715 - 5'760 x 1'288 x 1'392mm ³
Magnetrons available	Single magnetron Planar Single magnetron Rotary Dual magnetron Planar Low damage source
Gas box architecture	Customizable gas box architecture including Ar. 02/Ar, etc
Carrier plate size	450 x 350 mm ²
No. substrates per carrier plate	4 x 6" c-Si wafers (M0, M2 or M4) 12 x 4" c-Si wafers
Max substrate weight	2.5kg (including carrier plate)
Carrier plate nature	Spec. Aluminium
Process	
Deposition side	TOP- and BOTTOM-side deposition
Type of power source	DC, Pulsed DC (5- 350 kHz), RF on demand
Power	Single planar : up to 3 kW Single rotary : up to 10 kW Dual planar : up to 2x 3 kW Low damage : up to 3 kW
Process pressure	Typ. $1\cdot 10^{-4}$ to $1\cdot 10^{-2}$ mbar, other pressures available on demand
Base pressure	Loading module: < 1 · 10 ⁻⁵ mbar Process module: < 5 · 10 ⁻⁶ mbar
Thickness uniformity	<5% across entire carrier plate; < 3% run-to-run
Max Temperature	Up to 200°C (wafer temperature)
Chamber cleaning	Shield replacement / cleaning

