



Octopus

by



Octopus II

The OCTOPUS platform makes double sided deposition easy and provides consistently high film quality. Ideal for heterojunction cell development, MEMS manufacture or opto-electronic layers.

- › Very flexible system concept for thin film deposition
- › Excellent film thickness uniformity
- › Excellent film passivation levels
- › PECVD, PVD layers, or combinations in the same system
- › PECVD: extremely stable plasma ignition, even at low power ($<10 \text{ mW/cm}^2$), low bombardment
- › R&D and pilot production
- › Substrate size: 350 x 450 mm max. or 4 wafers per 6 inch
- › Small footprint: LxWxH 2.5 x 2.5 x 1.7 meters (PECVD)
- › High throughput possible: $> 1.3 \text{ Mio wafers (6") p.a.}$
- › Fully automated system and process control
- › User-friendly GUI
- › Process & system data logging

SELECT YOUR PREFERRED CONFIGURATION

HEATING MODULE

- › For substrate Pre-heating or Cooling
- › Capacity for up to 6 slots

PECVD MIRROR

- › Double-sided deposition (NO substrate flipping necessary)
- › Closed reactor (enables Δp mode)
- › RF plasma process (13.56 MHz) or VHF (40 MHz)
- › A-Si:H thin layers (intrinsic and doped), $\mu\text{c-Si}$, mc-Si layers
- › Single and multiple stack layers
- › Customized thin film profiles across the entire surface

PECVD HT

- › Top side deposition
- › Closed reactor (enables Δp mode)
- › RF plasma (13.56 MHz)
- › SiNx, SiOx, SiONx ...
- › 450°C max. in permanent mode

PECVD CLASSIC

- › Top side deposition
- › Closed reactor (enables Δp mode)
- › RF plasma (13.56 MHz) or VHF (40 MHz)
- › a-Si:H layers (intrinsic, doped), $\mu\text{c-Si}$, mc-Si, SiGe:H layers...
- › 280°C max. in permanent mode

CUSTOMIZED MODULE

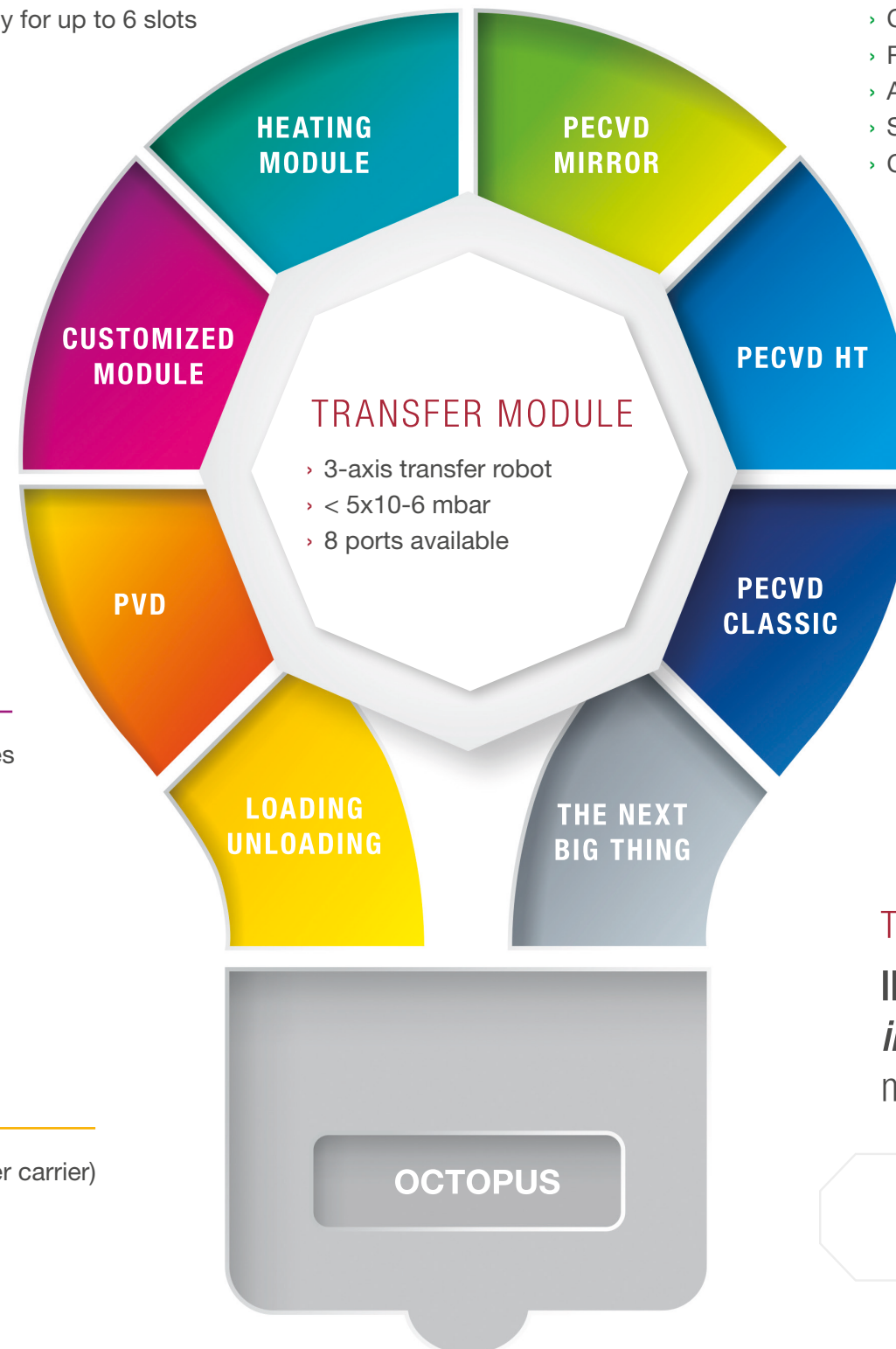
- › LPCVD, Hot wire, etching modules

PVD

- › 3 top, 3 bottom cathode ports (planar or rotary)
- › Power type: DC, pulsed DC, RF
- › With separate Loading/Unloading
- › Adjustable target-substrate distance
- › Options: port-connected to OCTOPUS II or as Stand-alone

LOADING / UNLOADING

- › 6 substrate or carrier slots (4 wafers 6" per carrier)
- › Pumping/Venting station (turbo pumps)
- › High-throughput per deposition cycle
- › Substrate auto-tracking



THE NEXT BIG THING

INDEOtec is continuously bringing *innovation* to the **thin-film** manufacturing **equipment** industry.



SWISS MADE
INDEOtec
PLASMA PROCESS EQUIPMENT