

ALD Deposition Systems

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coating technologies

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Stardust Fluidized Bed Reactor (FBR)

Small and medium size fluidized bed reactor providing efficient coatings for samples of various OD - 1D shapes and sizes.

Technical Data

- Small or medium size reactor: up to 50 g or 10 kg, substrate load.
- Stainless steel and borosilicate glass reactors.
- Precursors feeding system with 2-4 lines. Different precursors (cold and hot).
- Precursors feeding system equipped with fast pneumatic valves.
- Fluidization: Induced vibration and gas flow.
- Filters to prevent particles leaving reactor.
- Multi-section temperature control:
 - Precursors, heating jackets, range 0-200°C, resolution 1°C.
 - Chamber, range 0-200°C, resolution 1°C.
 - Piping inlet and outlet of the chamber, range 0-150°C, resolution 1°C.
- Base pressure $10^{-1}/10^{-3}$ mbar.
- Tool dimensions: 1100x600x1600 mm.
- Control system with touchscreen:
 - System status information: gas flow, temperatures, pressure, and valves.
 - Process monitoring: pressure and temperatures. Deviation alarms and safety locks.
 - Recipes handling and real time monitoring.
- Customized characteristics upon request.
- Ergonomic design. Visual and alarms.

Stardust Series-Standard Systems

Reactor available in customized diameters and height.

Description

- Reactor with cylindrical shape and engineered flow pattern homogeneity.
- High versatility for many different substrates and deposition materials.
- Precursors, pump, trap, and control, in separated areas for safety purposes.
- User friendly and easy access to all components.

Additional options

- O₃ generator, plasma source, residual gas analyzer...

Industrial and non-standard R&D Systems

Contact us with your requirements and we will design your specific system.

