PICOSUN® P-1000

Highest quality ALD on large batches.

The PICOSUN[®] P-1000 ALD system is designed for batch coating of various 3D objects such as mechanical parts, glass or metal sheets, coins, jewelry, or medical implants.

The PICOSUN® P-1000 ALD system is designed for batch processing of various 3-dimensional objects such as mechanical parts, glass or metal sheets, coins, jewelry, or medical implants in a production environment. The main applications include various passivation and barrier layers to significantly improve the performance and lifetime of the coated items. The PICOSUN® P-1000 ALD system offers innovative and agile design to enable the highest quality ALD depositions with excellent uniformity, maximum yields, minimum system downtime and low cost-ofownership with production-proven processes.

The reliable, fast, and easy to maintain PICOSUN® P-1000 ALD system represents the cutting-edge of industrial ALD!

TECHNICAL FEATURES

Typical substrate size and type

 Small and large 3D items (e.g. mechanical parts, glass or metal sheets, coins, jewelry, medical implants)

Processing temperature

• 50 - 400°C

Typical processes

• Al₂O₃, ZnO, TiO₂

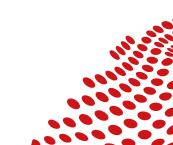
Substrate loading

 Manual loading with loading accessory (e.g. forklift cart)

Precursors

- · Liquid, solid, gas, ozone
- · Level sensors, cleaning and refill service
- Up to 10 sources with 6 separate inlets





THE PRINCIPLE OF ALD



Introduction of molecules containing element A.



Adsorption of the molecules on the surface.



Introduction of molecules containing element B and reaction with element A on the surface.



Completion of one monolayer of compound AB.

Repeat cycle till desired film thickness is reached.



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This technology is protected via granted patents or is the subject of pending patent applications.

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