

PICOSUN® P-1000

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**

• Al<sub>2</sub>O<sub>3</sub>, ZnO, TiO<sub>2</sub>

## **Substrate loading**

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

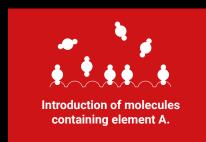
#### **Precursors**

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



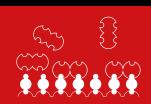


# THE PRINCIPLE OF ALD





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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