



**Highest quality
ALD on large
batches.**

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-of-ownership 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_2O_3 , ZnO, TiO_2

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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AN APPLIED MATERIALS COMPANY

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

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