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**
- 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

Please feel free to contact us for more information or a quotation!
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.