

ionPOWDER¹⁰⁰



Low-pressure system equipped with ion implantation technologies dedicated to the treatment of powders and loose parts

The ionPOWDER100™ equipment allows powders surface treatment with a double low-pressure technology: Ion implantation with our ionGUN2000™, which allows to reach new and enhanced surface properties.

TECHNICAL DATA	
Power supply	General power: 400 V / 32 A
ionGUN power supply	Frequency: 10 GHz / 50 W Power: up to 600 W Ion energy: up to 40 kV Ion current: up to 15 mA
PVD and PECVD power supply	DC, Pulsed DC, or RF
Vacuum pressure	10 ⁻⁷ mbar in MAP* / 10 ⁻⁶ mbar in chamber
Number of ionGUNS and/or cathodes	1 ionGUN and/or 1 cathode
Substrate size	From a few microns to a few centimeters
Processing capacity	Batches up to 500 ml
Dimensions of the machine	L2600xW900xH2500 mm
Weight	750 kg
Water cooling system	Yes – demineralized water

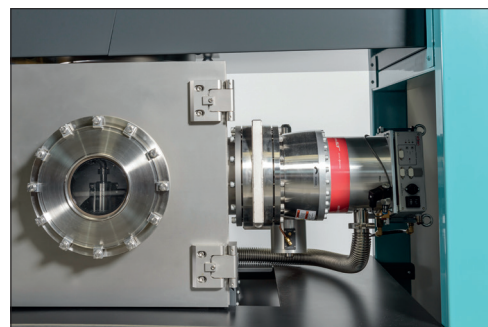
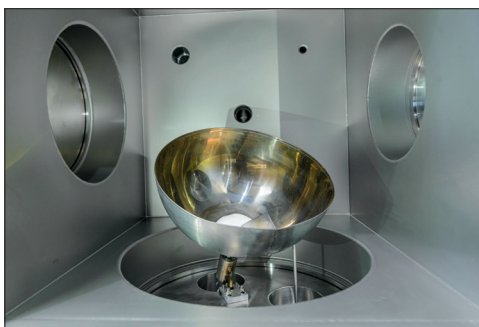
*MAP : Micro-Accelerator of Particles

Features

- ▲ Ion implantation - PVD or PECVD also available on request.
- ▲ Fully integrated control system with intuitive HMI.
- ▲ Any gas can be used: Ar, He, N₂, O₂, SiH₄ as well as mixtures.

Option

- ▲ 1 circular PVD cathode (2-inch / 51 mm) + Power supply.



Applications

▲ On powders/diamonds

Powder modification for AM, 3D printing, catalysts, injection molding and sintering process, thermal spraying,...

▲ On fibers

Fibers treatment for composites, filtration, GO polymers and batteries.

▲ On loose parts/balls

Loose parts treatment for new surface functionalities and enhanced durability.