

ionPOWDER¹⁰⁰

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

The ionPOWDER equipment allows powders surface treatment with a double low-pressure technology: Ion implantation with our ionGUN 2000, which allows to reach new and enhanced surface properties.



Designed by ionics

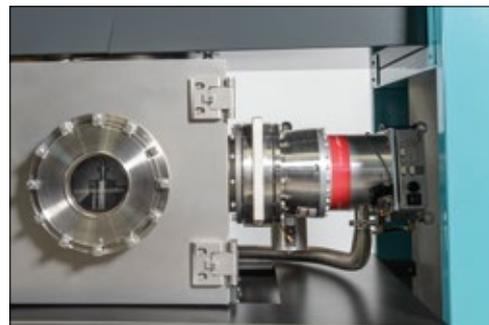
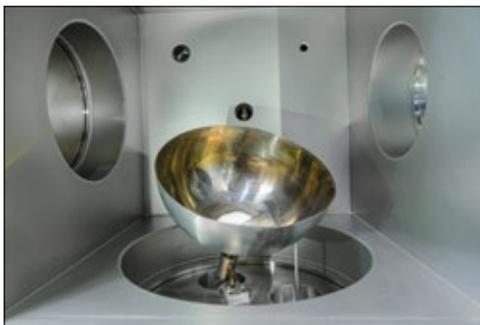
TECHNICAL DATA	
Power supply	General power: 400 V / 32 A Frequency: 10 GHz / 50 W Power: up to 600 W Ion energy: up to 40 kV Ion current: up to 15 mA
Vacuum pressure	10 ⁻⁶ mbar
Number of ionGUN's used	1
Substrat size	From a few microns to a few centimeters
Processing capacity	Batches up to 500 ml
Dimensions of the machine	L2600xW900xH2500 mm
Weight	750 kg
Water cooling system	Yes – demineralized water

Features

- ▲ Coating sources: ion implantation - PVD also available on request
- ▲ Fully integrated automated control system
- ▲ 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.

The innovation is supported by the Walloon Region through the WALIBEAM project which gathers major industrial actors in the fields of surface treatment of glass, metal and polymer.