

plameco

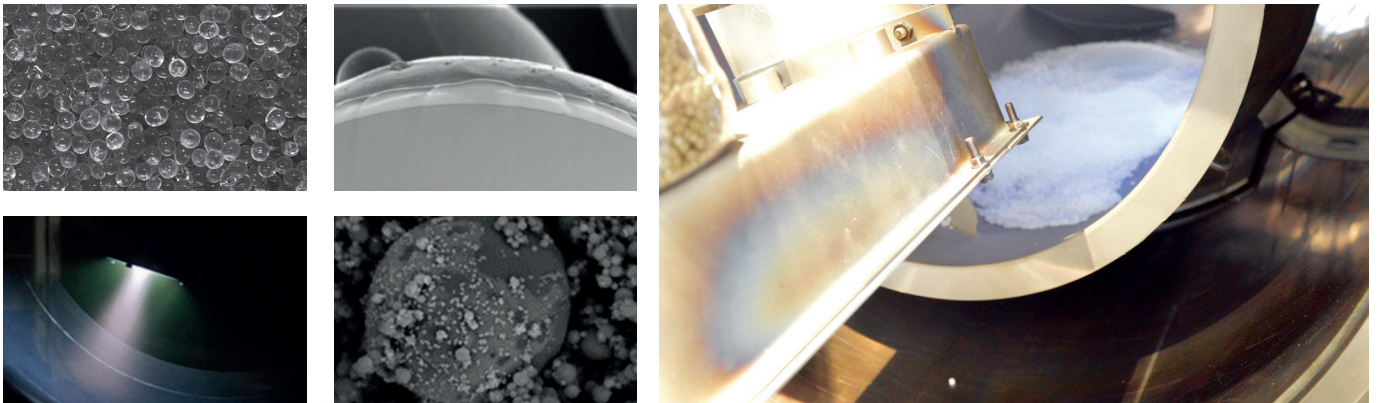
plasma technology

Plasma coatings for powders and small parts

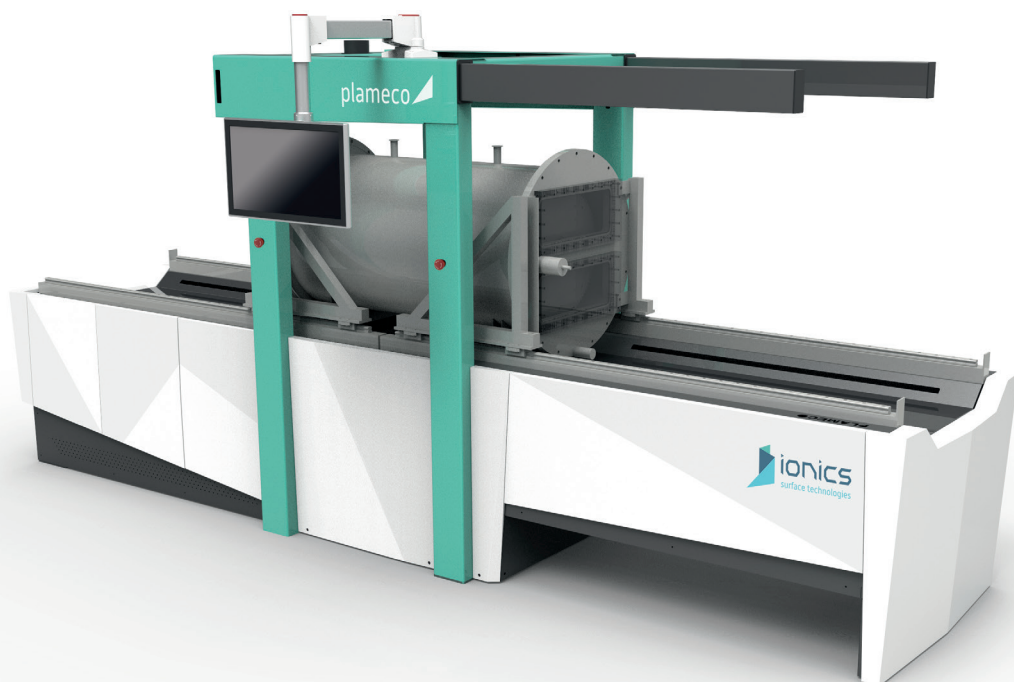
IONICS has developed with MATERIA NOVA's engineers an innovative low-pressure plasma coating process to treat powders and loose parts.

The Plameco technology allows to treat and modify any micrometric powders using PVD and PECVD low pressure plasmas deposition processes. Composition fine tuning, new alloys with rare elements, core shells hybrid structure, nano structuration are reached for enhanced properties and processes using commercial low-cost powders. The fields of application are numerous:

- ▲ **thermal spraying:** increased flowability, better adhesion...
- ▲ **additive manufacturing:** new alloys, enhanced laser absorption, increased densities, decrease the porosity...
- ▲ **catalysis:** enhanced efficiency and selectivity, lower running temperature...
- ▲ **sintering:** increased thermal conductivity, better cohesion...
- ▲ **composites materials:** enhanced compatibilization, hollow conductive structure, increased conductivity...



The Plameco system has also been developed to coat small loose parts as connectors, technical balls, fixing systems with the aim of enhancing wear durability, thermal and electrical conductivity or simply for decoration purposes. Low pressure technologies allow to treat any materials, insulating or thermally sensitive, without wet steps and toxic products. The technology is very flexible and leads to an incredible variety of highly performant coatings.



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