



## TECHNOLOGY DESCRIPTION

The performance of the plasma generators is the key to an innovative coating technology, the high-performance plasma coating process, which is characterised by the following properties:

- The plasma generators operate at high power levels. Correspondingly, large quantities of material are converted.
- Wide range of primary gases or admixture gases (e.g., N<sub>2</sub>, H<sub>2</sub>, O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub>) is available.
- All substances can be melted and evaporated in the plasma. They can also react in the plasma.
- The reactions in the plasma beam can be controlled. This also makes the layer structure controllable, which enables a layer design. The coating has good interlocking with the base material, resulting in maximum adhesion.
- High coating speed is possible.

The areas of application are in the field of corrosion, wear protection and solar technology.



## INNOVATIVE ASPECTS

The innovative plasma source technology increases the coating speed, a better adhesion of the coatings and a innovative coating system.



## TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

## COUNTRY OF ORIGIN

Germany

## LATEST UPDATE

06/2024

### TAGS

#plasma

#coating

#adhesion

#layer design

#corrosion

#wear

### APPLICATION AREAS

Aviation

Construction &  
Civil Engineering

Energy

Food &  
Agriculture

Health

Mechanical  
Engineering

Space  
technologies

SPACE  
FOR BUSINESS  
BUSINESS  
FOR SPACE

# TECH CARD

