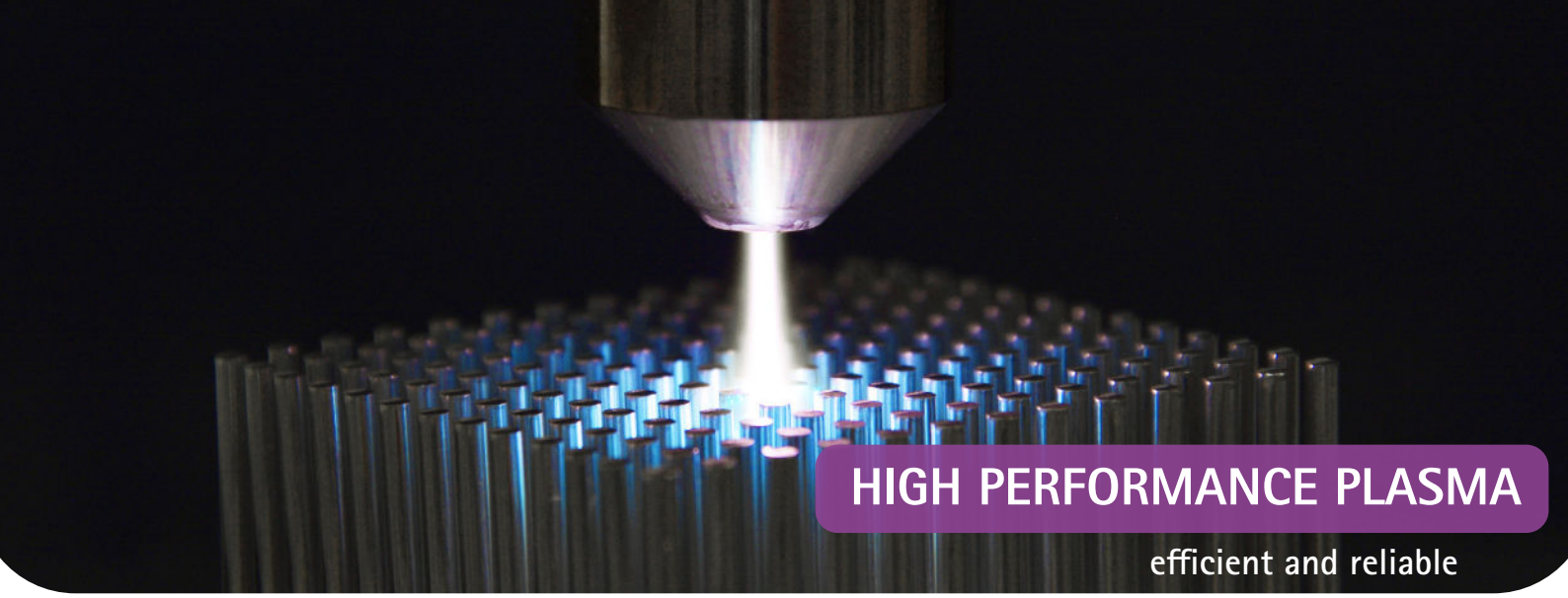


HIGH PERFORMANCE PLASMA

efficient and reliable

plasmabrush PB3

Atmospheric high-performance plasma system

The PlasmaBrush PB3 is our high-performance plasma system for all inline processes in industrial and high-speed applications. The unipolar pulsed high-voltage source PS 2000 in combination with the compact and long-term stable plasma generator PG-31 is particularly versatile thanks to the use of different nozzles and operating modes. The perfectly optimized components in a robust industrial design are perfectly suited for easy integration into any system.

Fields of application

- Automotive industry
- Printers and printing industry
- Solar technology
- Semiconductor industry
- Packaging industry

Nozzles in cascade for particularly fast applications

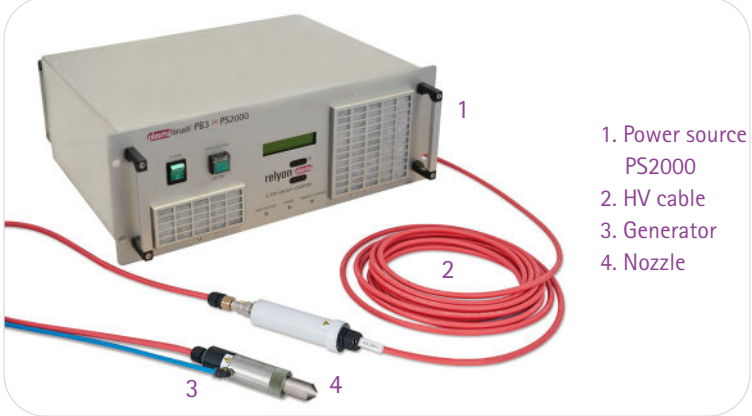
Applications

- Activation of surfaces of various base materials
- Optimization of bonding, painting, printing, potting and coating processes
- Surface treatment of plastics, glass, ceramics, metals, composites and natural materials
- Fine cleaning and reduction of oxide layers

Technical details

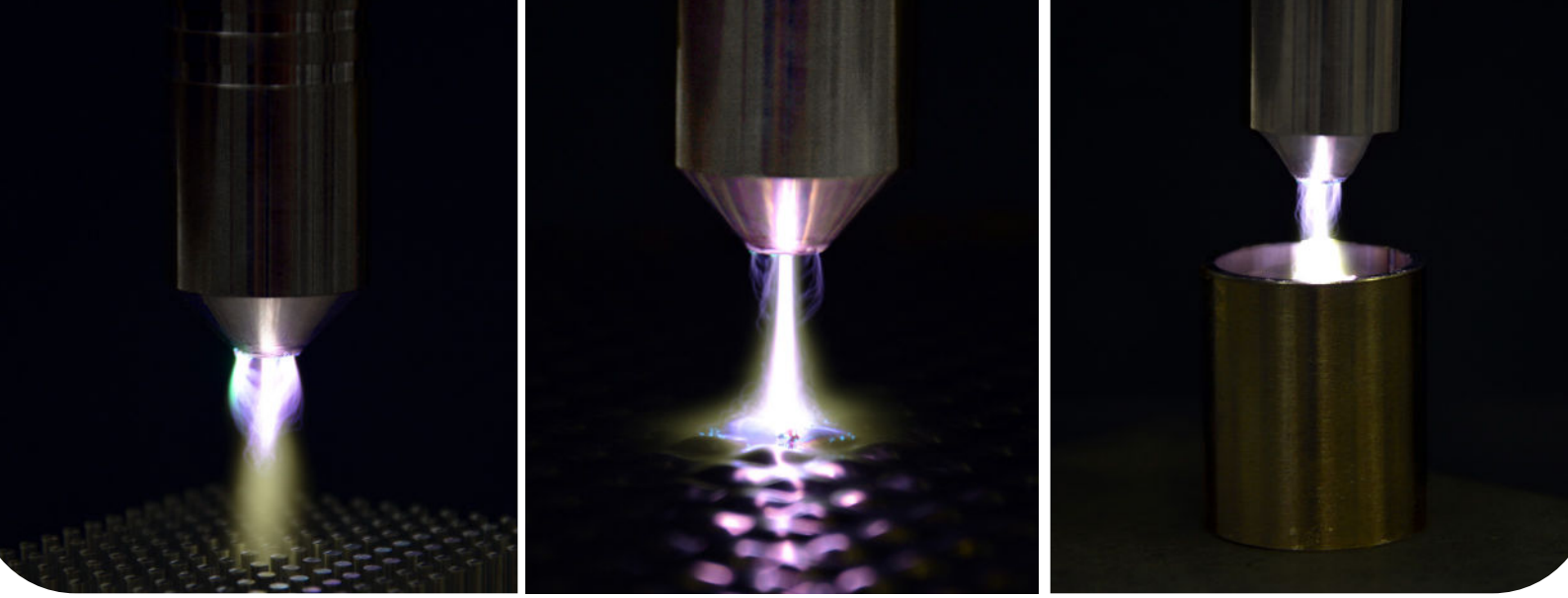
Flow range: 35 bis 60 L/min
Weight plasma generator: 680 g
Gas connector: 6 mm
Typical Treatment speed *: 0,1 – 2 m/s
Typical treatment distance *: 10 – 25 mm
Typical treatment width *: 15 – 25 mm
Power consumption power source PS2000: ~ 1000W

* Typical treatment parameters depend strongly on the application, utilised nozzle and process gas.



1. Power source PS2000
2. HV cable
3. Generator
4. Nozzle

relyon plasma®

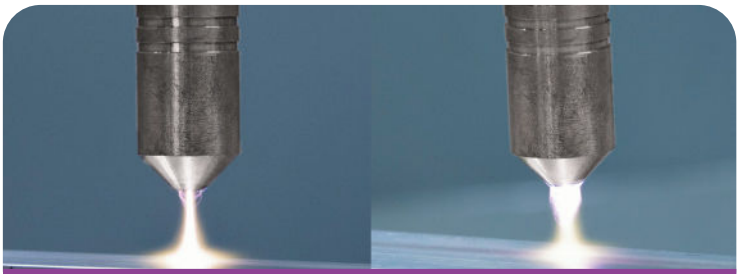


plasmabrush PB3

Application examples of plasma activation with the PlasmaBrush PB3

Effective fine cleaning

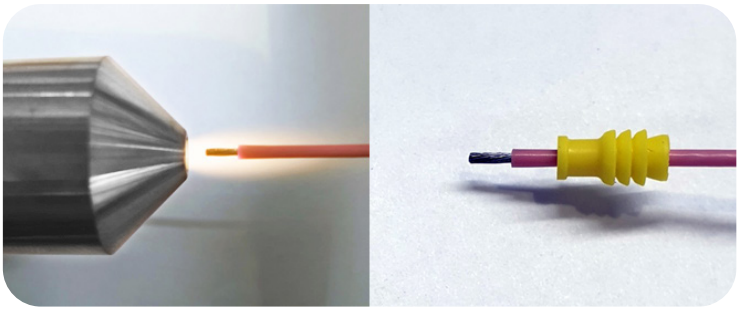
On earthed metal substrates, even more effective cleaning and microscopic roughening of the functional surface can be achieved by transferring the electric arc. The latter leads to a larger surface and thus to even better adhesion of adhesives, potting compounds or sealants. The removal of oxide layers is also possible with this process.



Transferred electric arc | Diffuse mode

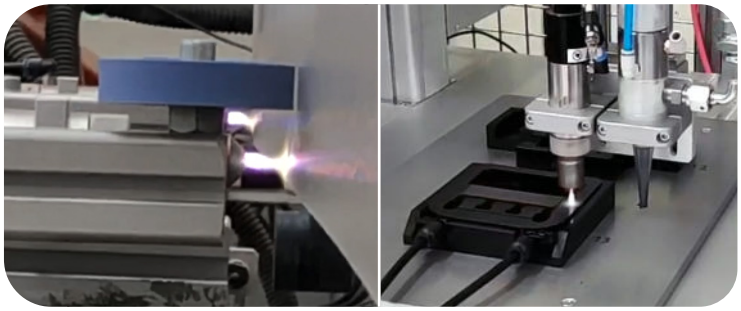
Moulding and overmoulding of cables

One of the most important tasks in cable assembly is the moulding and overmoulding of cables and wires for connection or sealing. For example, the insulation is cleaned with plasma in order to ensure reliable material adhesion and thus tightness of the entire assembly.



Plasma treatment before bonding

Atmospheric pressure plasma is utilised to increase the surface tension in order to ensure reliable bonding. In solar thermal technology, the bonding areas of the glass surface of the solar thermal collectors or the solar connection boxes are treated immediately before bonding.



There are three different nozzles for the PlasmaBrush PB3 system, which are optimised for low-potential processes, sensitive materials and high process speeds.

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