

Piezobrush PZ2/PZ2-i Handheld Plasma Surface Treatment



Description

**Piezobrush PZ2/PZ2-i Handheld Plasma
Surface Treatment**



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What is Plasma Surface Treatment?

Relyon Plasma surface treatment products improve adhesion and wetting of surfaces which are otherwise difficult to bond or print on. Plasma surface treatment is both highly efficient and environmentally friendly, and the

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The **Piezobrush PZ2** introduces the benefits of plasma surface treatment into a convenient and lightweight handheld format, or in a semi-automatable or automatable robot mountable format (see Piezobrush PZ2-i below). Using Piezoelectric Direct Discharge (PDD®) Technology, which has been specially developed by Relyon Plasma, the device transforms low input voltage into high electric field strengths, dissociating and ionizing the ambient process gas (typically air).

“The PZ2 plasma treating unit is really effective and easy to use. We are very happy with it. Makes a real difference. We could not do without it.” – Ben, Videojet Technologies

Developed for end user-friendliness, the Piezobrush PZ2 requires no specialist technical knowledge and no complex infrastructure. It is ready to use, just plug in and get started – no need for an external gas supply. Inert gas input is optional with the multi-gas nozzle. See the Nozzles tab below for more information.

The Piezobrush PZ2 has a low operating temperature as it uses “cold plasma”, meaning that it can be used to treat temperature-sensitive substrates.

Piezobrush PZ2-i Plasma Surface Treatment Tool for Automation

This surface treatment technology is also available in a robot mountable version for semi-automated or automated processes. The PZ2-i combines the effectiveness of plasma surface activation with the improved productivity and repeatability of using a robot to automate a process. [See our range of robots for more information.](#) The PZ2-i requires compressed air or an external gas supply to operate.

Piezobrush PZ2/PZ2-i Handheld Plasma Surface Treatment



Features & Benefits

- Improves adhesion & wetting of surfaces
- Convenient and lightweight handheld format option
- Robot mountable option for improving productivity and repeatability
- Efficient and environmentally friendly
- Uses “cold plasma”, so can be used to treat temperature-sensitive substrates
- Interchangeable nozzles for different substrates
- Compatible with an external gas supply

Applications

The Piezobrush PZ2 and Piezobrush PZ2-i are ideal for use in research and development settings such as a laboratory, and can also be utilised for small production lines.

■ Medical

Filters, cell wells, test tubes, catheters, syringes, petri-dishes, needle hubs, lenses

■ Automotive

Fuse covers, engine parts, air bag covers, rubber profiles, tubing, headlights

■ Electronics

Cable, switches, polyester pcb's, housings & enclosures, screens

■ Consumer

Irons, blenders, shakers, measuring containers

■ Food, cosmetics & drug

Bottles, caps, jars, tubes

■ Professional model making

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Preparing materials such as glass, GRP, ABS and other synthetic materials for bonding

The Piezobrush also allows simple germ reduction on a great variety of surfaces such as glass, plastics or metals and thus provides excellent support in effecting processes in the field of microbiology, medicine, microfluidics or food engineering.

There are 3 types of nozzle available, compatible with both the Piezobrush PZ2 and Piezobrush PZ2-i. These nozzles help to optimise surface activation across varying substrates:



Standard Nozzle

Included with the PZ2 as standard. This nozzle is suitable for most tasks including non-conductive substrates.

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Nearfield Nozzle

This nozzle is most suitable for conductive substrates such as metals and conductive polymers.



Multi-gas & Needle Nozzle

This nozzle is designed for use with inert gas from an external gas supply, e.g. helium. The gas connection component can be removed to allow the nozzle to be used as a needle nozzle for more precise surface activation.

Read more about these nozzles on our blog: [Challenging surface activation applications met by the Piezobrush PZ2.](#)

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Specifications

Piezobrush PZ2 Specification	
Electrical connection	110 – 240 V/50 – 60 Hz 15 V DC
Power requirement	max. 30 W
Weight	170 g
Plasma temperature	< 50 °C
Typical treatment distance	5 – 10 mm
Typical treatment width	5 – 20 mm

Piezobrush PZ2-I Specification	
Electrical connection	110 – 240 V/50 – 60 Hz 15 V DC
Power consumption	max. 30 W

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Piezobrush PZ2-I Specification	
Weight	180g
Plasma temperature	< 50°C
Typical treatment distance	2 – 10 mm
Typical treatment width	5 – 20 mm

Ordering Information

Part number	Description
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Piezobrush PZ2/PZ2-i Handheld Plasma Surface Treatment



Part number	Description	
REL1000280402	Piezobrush PZ2 handheld plasma surface treatment device Incl. Standard nozzle, power supply and carry case	 A photograph showing a person's hands holding a dark green handheld plasma surface treatment device. The device has a white label with the text "Piezo brush PZ2" and a purple power button. The person is also holding a small, black, circular nozzle with a white center.

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Part number	Description	
REL1000617200	Piezobrush PZ2-i for automated applications Incl. Standard nozzle, cap rail power supply unit, connecting lead	
REL1000269201	Piezobrush PZ2 Standard nozzle	
REL1000606801	Piezobrush PZ2 Nearfield nozzle	
REL1000606700	Piezobrush PZ2 Multigas/Needle nozzle	

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Part number	Description	
REL1000606900	Piezobrush PZ2 nozzle kit Incl. 1 x Standard nozzle, 1 x Nearfield nozzle, 1 x Multigas nozzle	

Supplied by:

intertronics

INTERTRONICS

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