



Effective plasma device for manual use

The PiezoBrush has been developed as a compact plasma handheld device for use in laboratories, pre-development and assembly of small series. The Piezoelectric Direct Discharge (PDD®) technology is used to generate cold active plasma with a temperature of less than 50°C. The core of this handheld plasma device is the TDK CeraPlas™ piezo plasma generator – a high-voltage discharge device for generating cold atmospheric pressure plasma. Plasma is used for a highly efficient increase of surface energy on many materials as well as for germ and odour reduction.

Fields of application

- ◇ Joining technology
- ◇ Development and optimization of production processes
- ◇ Research facilities and laboratories
- ◇ Microbiology, microfluidics and food technology
- ◇ Medical and dental technology
- ◇ Prototyping, architecture model making
- ◇ Small batch production

Possible usecases

- ◇ Activation and functionalization of surfaces of miscellaneous materials
- ◇ Improved wettability
- ◇ Optimization of bonding, varnishing, printing and coating processes
- ◇ Surface treatment of plastics, glasses, ceramics, semiconductors and natural fibres
- ◇ Ultra-fine cleaning and odour reduction

PiezoBrush PZ2

Handheld device with power supply and changeable nozzles



No process control available
 110-240 V / 50-60 Hz 15 V DC
 max. 30 W
 170 g
 57 dB
 < 50 °C
 4 cm²/s
 2 - 10 mm
 20 mm

Standard, Nearfield, Multigas / Needle
 Argon, helium and nitrogen



PiezoBrush PZ3

Handheld device with power supply and changeable piezo module



Process control
 Electrical connection
 Power consumption
 Weight
 Sound level
 Plasma temperature
 Treatment speed
 Typical treatment distance
 Max. treatment width
 Modules
 Operation mode with inerte gas

Stopwatch, Countdown, Metronome
 110-240 V / 50-60 Hz 24 V DC
 max. 15 W
 110 g
 45 dB
 < 50 °C
 5 cm²/s
 2 - 10 mm
 29 mm
 Standard, Nearfield, Mutigas
 Argon, helium and nitrogen



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