



DATA SHEET

Plasma Jet RD8450 Linear

Compact Linear Jet for Wide Surfaces – Ideal for Use in Injection Molding Tools

The plasma jet RD8450 Linear is specially developed for the high-precision pretreatment of large, low structures – and this in the most compact design. Despite its impressive treatment width of up to 450 mm, it requires only minimal installation space. This makes it ideal for direct integration into injection molding tools, e.g. for pretreatment immediately after opening the mold.

The jet is robot-supported in narrow processing windows, for example before a component is overmolded or coated. Its high process speed and uniform effective width enable seamless, reliable surface activation – without thermal stress on the workpiece.

Advantages at a Glance

- Treatment width up to 450 mm with a slim design
- Compact design for narrow installation spaces in the tool
- High process speed with uniform activation
- No significant thermal effect on the substrate
- Ideal for low structures with large area
- Robot-guided inline operation possible
- Efficient alternative to flame treatment

Typical Applications

- Automotive industry: e.g. bonnets, bumpers, door modules
- Injection molding processes: Pretreatment in the tool before overmolding
- Large components with limited installation space
- Robot-based inline applications with high cycle time

Technical Data

Operating frequency	27 kHz
Electrode voltage/plasma output	3 - 5 kVss / 8 × 450-500 W
Plasma generator, high-voltage unit	FG8000 DZ (high-voltage unit integrated in jet)
Plasma jet connecting cable	EMC-protected, Ø 34 mm, assembled, 3-wire technology
Cable lengths	2.5 m / 4 m, special lengths on request
Bending radius	Static: 75 mm / Dynamic: 150 mm
Motor connecting cable	EMC-protected, Ø 17 mm
Jet rotation	1,000 - 16,000 U/min
Treatment width	Up to approx. 450 mm (depending on jet head)
Effective width (local)	Approx. 30 mm
Speed relative to the surface	Up to 20 m/min
Effective distance to the surface	Up to approx. 20 mm (depending on jet head)
Weight	Approx. 18 kg plus connection cable
Operating gas	Oil and water-free compressed air (approx. 17,000 NL/h)
Extraction	Integrated in the jet cover

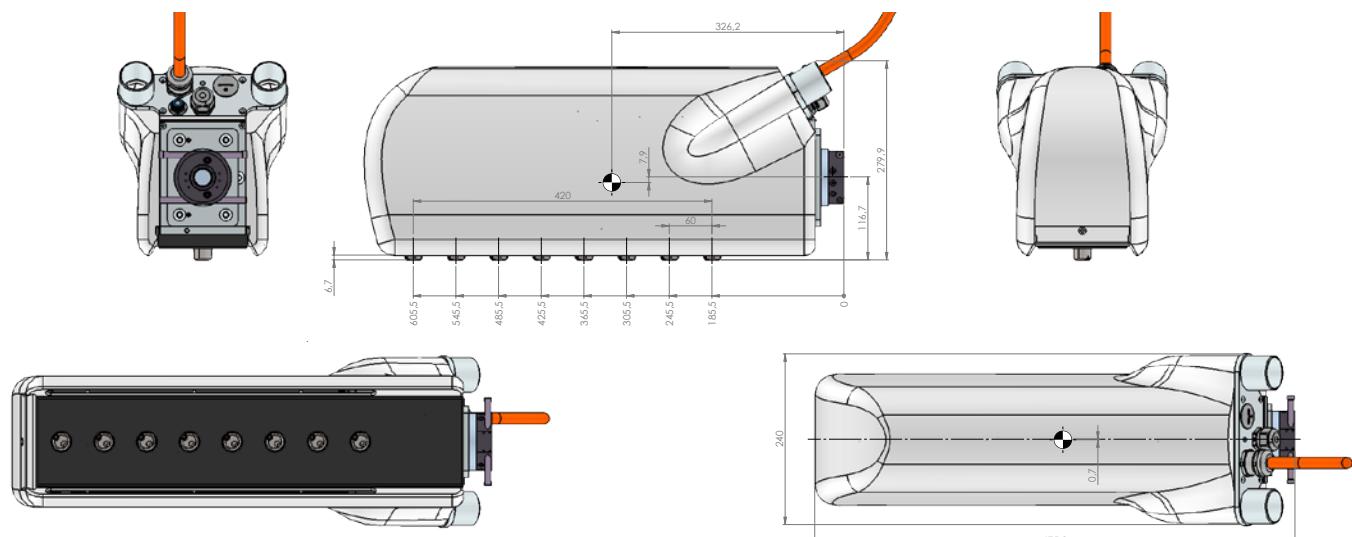
Low-Wear Jet with Variable Applications

The RD8450 Linear is designed for continuous industrial operation. Its non-rotating system components are virtually wear-free and ensure high process reliability, even during continuous use. The jet can be connected to a robot or movement system via a robust mounting flange.

Thanks to its compact design, the jet is particularly suitable for installation situations with limited space, e.g. directly in the injection molding tool. The integration into a safety circuit and extraction of the process air are implemented by the customer.

No application is too specific

Installation Diagram



We develop the perfect plasma solution for your product. Let's forge new paths together.

And if you have ideas on how to innovate while being sustainable and environmentally friendly, contact us.