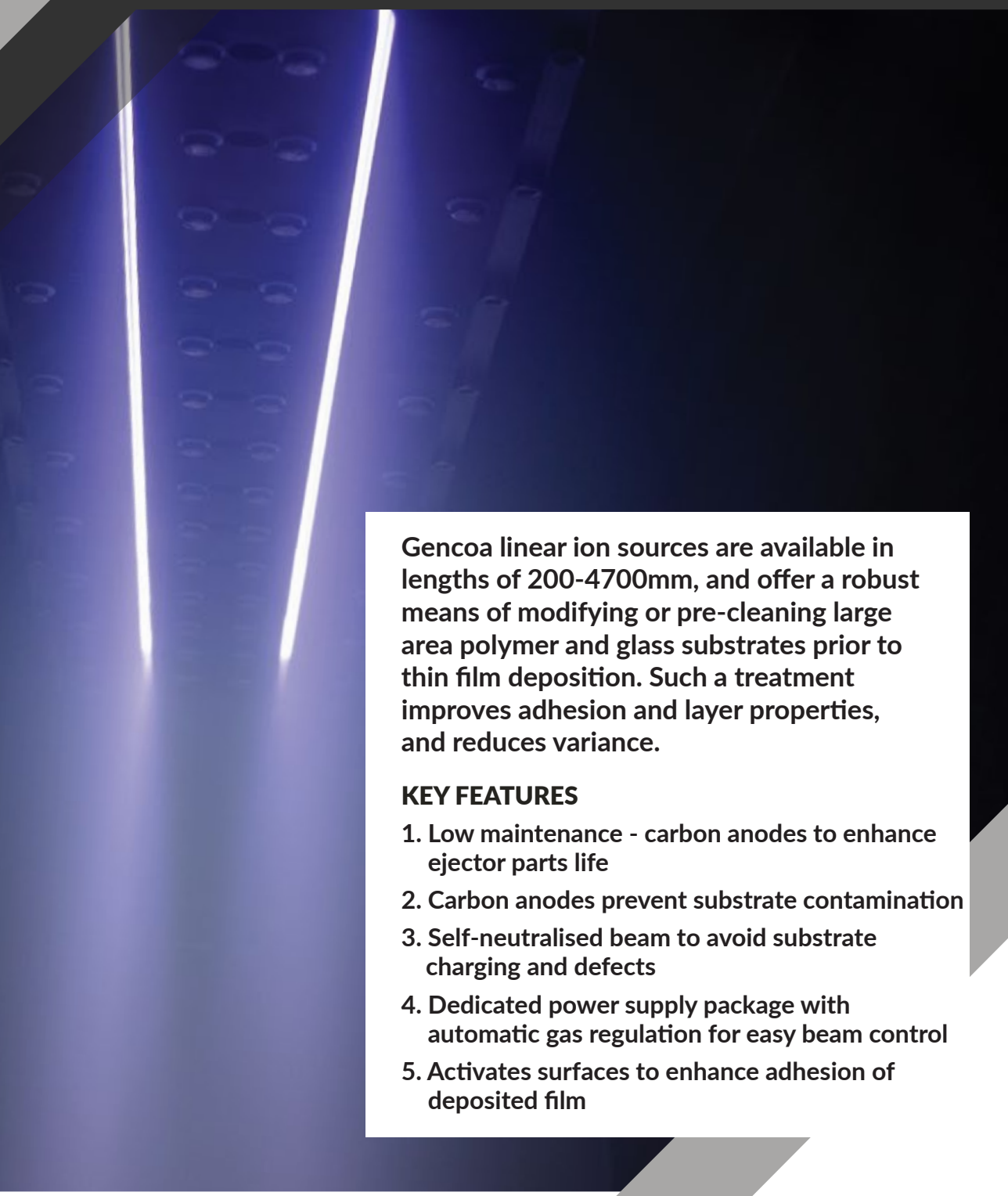




LINEAR ION SOURCE



Genco linear ion sources are available in lengths of 200-4700mm, and offer a robust means of modifying or pre-cleaning large area polymer and glass substrates prior to thin film deposition. Such a treatment improves adhesion and layer properties, and reduces variance.

KEY FEATURES

1. Low maintenance - carbon anodes to enhance ejector parts life
2. Carbon anodes prevent substrate contamination
3. Self-neutralised beam to avoid substrate charging and defects
4. Dedicated power supply package with automatic gas regulation for easy beam control
5. Activates surfaces to enhance adhesion of deposited film

Perfect your process
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ION SOURCE

APPLICATIONS

- Astronomical telescopes
- Display and optical coaters
- Functional coating on glass, plastic and ceramics
- DLC from the gas phase
- Tempering of coated glass



Based on the inverted magnetron principle, Gencoa linear ion sources produce a collimated plasma beam that lightly etches the substrate, burning off hydrocarbons and activating the surface to promote adhesion of the deposited film.

Unlike conventional technology, Gencoa's ion sources are assembled with a graphite anode and cathode, protecting the substrate from contamination and preventing erosion of source. The sources are indirectly cooled, minimizing maintenance of the source.

Typical operation uses a DC power supply with argon or argon/oxygen gas mixtures.

To optimize the performance of the sources, Gencoa have developed a dedicated voltage regulated power supply with integral gas flow control. The gas adjustment feedback loop control maintains the same current at all times – ensuring no variation in beam output.

An optional reactive gas injection arrangement to the side of the beam allows hydrocarbon gas injection without contaminating the inside of the source.

Linear ion sources can be assembled with a choice of mounting options.

IM3000 POWER SUPPLY

To optimize performance, linear ion sources can be supplied with a dedicated voltage-regulated power supply with internal gas flow control. The gas adjustment feedback loop control maintains the same current at all times – ensuring no variation in beam output.

| IM3000 SPECIFICATIONS | |
|-----------------------|---|
| UNIT | Rack 19" 4 HU |
| MAIN | 400 VAC 3 Ph |
| VOLTAGE STRIKE | 3 kV positive |
| NOMINAL VOLTAGE | 2500 V/4 kW |
| SHORT CIRCUIT CURRENT | 2 Amps |
| REGULATION MODE | Current (5 mA resolution) |
| OUTPUT CONNECTOR | FISHER HV female mod 105 |
| MFC | 2 channels analog 0/5 VDC |
| DISPLAY | Touch screen 240 x 128 pixel |
| INTERLOCK/REMOTE | 9 pin D type |
| RS 232 | 9 pin D type |
| REGULATION MODE | Internal constant gas flow, or gas feedback (constant voltage), via external RS 232 or analog user port |

FURTHER INFORMATION

Contact: sales@gencoa.com or visit www.gencoa.com/ion-source

