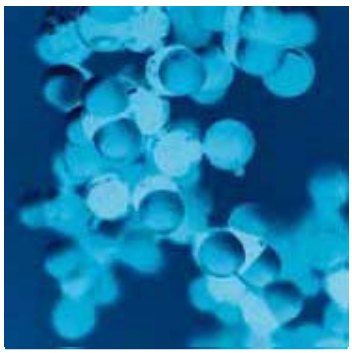
PVA TePla

IoN 300



PLASMA SYSTEMS

PVA TePla

Certified System ISO 9001 QMI-SAI Global

IoN 300 Plasma System

The **IoN 300** is our latest advancement in vacuum plasma technology. Gas plasma is fast becoming the technology of choice for surface modification of materials in the life sciences, electronic and industrial arenas due to its versatility and low impact to our environment. For example, the trend towards biocompatibility and miniaturization in medical devices requires precision cleaning and selective chemical functionalization. Plasma removes organic contamination several orders of magnitude more efficiently than wet chemical processing and can chemically functionalize surfaces at the nano-scale in preparation for down stream processing. As a result, plasma is replacing older types of treatments that are no longer practical or economical.

The **IoN 300** meets the ultra high volume production requirements of our customers, emphasizing versatility and control for their surface treatment needs. Its advanced features provide state of the art process control, fail-safe system alarms and data capturing software. This enables the equipment to meet the stringent control programs in the life science industries. The **IoN 300** uses radio frequency (RF) generated plasma in a compact, fully integrated package.

One very unique feature of the **IoN 300** is the ability to quickly and easily alternate electrodes between primary or secondary plasma (up to 30 shelves).

Features include:

- Graphical User Interface (GUI) software complies with CFR Title 21 Part 11 and Semi E95-1101
- Configurable chamber that can accommodate various electrode configurations for high volume component treatment or unique hanging catheter processing
- Plug and Play self installation
- Onboard gas generator package option
- Energy saving control feature for lowest cost of ownership
- Industrial computer with a Windows® based system
- User access control for process development, operator and maintenance programming.
- Remote statistical process control monitoring via Ethernet
- Onboard diagnostic features and alarm logging
- Recipe editor offers fast and versatile step control functionality
- Liquid Crystal Display (LCD) touch panel and keyboard

Technical Data

Process Chamber

Material	Aluminum (standard)
Chamber Volume	300 liters (approximately) 18,568 cubic inches
Chamber Dimensions	419 x 441 x 1645 mm 16.5” x 17.38” x 64.75” L

Process Gas

Mass Flow Control	up to 6 gasses
Process Pressure	120-2000 mTorr / 0.16-2.66 millibar
Evacuation Time	~1 minute (pump dependent)
RF Generator	Air cooled
Frequency	100kHZ, 13.56 MHz
Power Output	0-1000 watts (standard) 0-1250 watts cooled (optional)

Power Requirements

Electricity	208-240 VAC, 3 phase 30A 50/60 Hz 4-wire (standard) 380-415 VAC, 3 phase 15A 50/60 (optional)
Process Gas	Input pressure 1-2 bar / 30 PSI
Purge Gas	Input pressure 1-2 bar / 30 PSI
Compressed Air	Input pressure 5 bar / 75 PSI

Chassis

Self contained footprint featuring all
power and gas connections
Roll around chassis with leveling feet

Dimensions	1473 x 1064 x 1941 mm 58” x 41.9” x 76.4”
Weight	Control Cabinet 228 kg / 503 lbs. Chamber Cabinet 239 kg / 527 lbs.

Options

- Stainless Steel Chamber
- 1% pressure monitor
- Pressure controller
- Light tower
- Barcode reader
- Spectrographic endpoint detection
- MFC upgrade for corrosive gasses
- Printer
- Monomer processing kit
- H2 generator unit
- Wall mount package
- Vacuum pumps (rotary vane, dry, scroll and blower package)
- Vapor phase MFC

Safety Certification Standards

CE certified
EN 60204
EN 61326

PVA TePla America, Inc.
251 Corporate Terrace • Corona, CA 92879
Tel: (951) 371-2500 • Fax: (951) 371-9792
Email: sales@pvateplaamerica.com