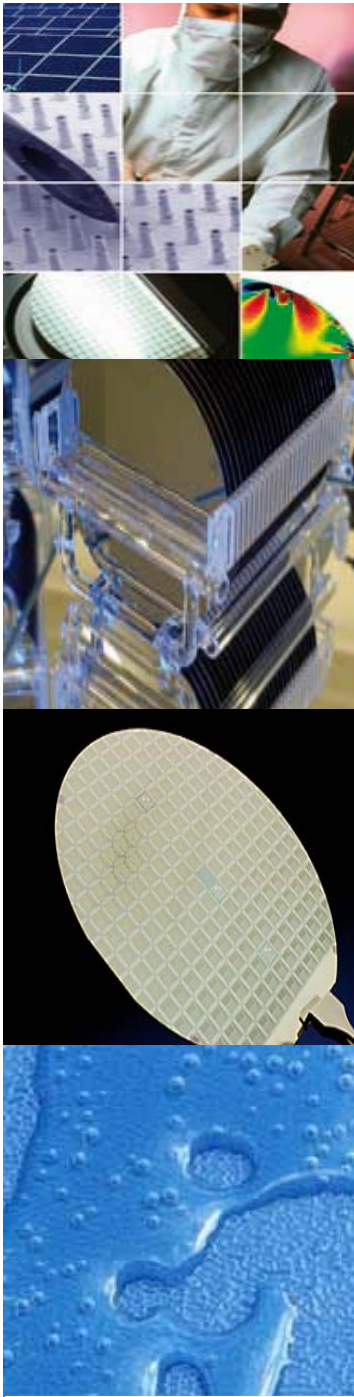


IoN 40Q





IoN 40Q Plasma System

The **IoN 40Q** is a barrel type plasma reactor. It is designed for batch processing wafers for photoresist strip, descum, nitride etch and other cleaning applications in semiconductor, LED, and MEMS fabrication. The IoN 40Q technology is based on proven reactor designs developed by our company and its ancestors over 40 years (International Plasma Corporation, Branson IPC, Dionex, Gasonics, Metroline, TePla and finally PVA TePla).

Today's **IoN 40Q** is designed to meet the evolving demands 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 system to meet stringent quality control programs required to manufacture Semiconductor, LED and MEMS devices. The **IoN 40Q** uses radio frequency (RF) generated plasma in a compact, fully integrated package.

Standard Features

- Low particulate quartz reactor chamber
- Plug and play self installation
- Energy saving control feature for lowest cost of ownership
- Industrial computer with a Windows® based system
- Graphical User Interface (GUI) software complies to Semi E95-1101 standards
- User access control for process development and maintenance
- Sophisticated alarm features and process tolerance controls allowing precise lot-to-lot repeatability
- Data logging and process statistics monitoring via Ethernet
- Onboard diagnostic features and alarm logging
- Recipe editor offers fast and versatile step control functionality
- LCD touch panel and keyboard
- Optical end point detection
- Selectable fast or slow venting modes
- Through-wall mounting with full rear maintenance capability

Technical Data

Process Chamber

Material	Quartz
Wafer Size	All sizes up to 200mm
Batch Size	Up to 50, 6" Wafers / load
Wafer Loading	Manual

Process Gas

Mass Flow Control	Up to 6 gasses
Process Pressure	Approx. 120-2000 mTorr
Evacuation Time	~1 minute (pump dependent)
RF Generator	Air cooled
Frequency	13.56 MHz
Power Output	0-600 watts (standard) 0-1000 watts

Power Requirements

Electricity	208-240 VAC, 3 phase 30A 50/60 Hz 5-wire (standard)
	415-480 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
Easy Roll around chassis with leveling feet

Dimensions

Standard	737 x 1980 x 1118 mm 29" x 78" x 44" (IoN 40Q)
-----------------	---

Weight	318 kg / 700 lbs. (standard)
---------------	------------------------------

Options

- 1% pressure monitor
- Pressure controller
- Light tower
- Barcode reader
- Spectrographic endpoint detection
- MFC upgrade for corrosive gasses
- Printer
- Monomer processing kit
- Wall mount flange package
- Vacuum pumps (rotary vane, dry, scroll & blower package)
- Vapor phase controller
- Onboard gas generator package option

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