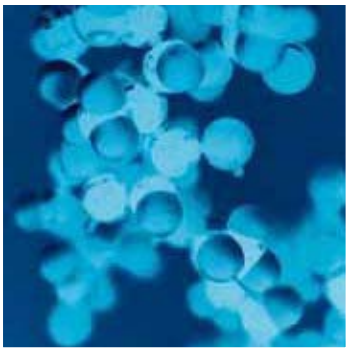
PVA TePla

IoN 100 WB



PLASMA SYSTEMS

PVA TePla

Certified System ISO 9001 QMI-SAI Global

IoN 100 WB Plasma System

The **IoN 100 WB** is our latest project in value engineered vacuum plasma systems. Derived from the IoN 100, the WB has all the same RF plasma qualities as the IoN 100, including optional pressure control, spectrographic endpoint, and various electrode configurations. Removed are some features that facilitate installation, such as powering a pump from the IoN chassis, and alternate gas per MFC as a standard.
Plasma is 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 100 WB** 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 100 WB** uses radio frequency (RF) generated plasma in a compact, fully integrated package.

One very unique feature of the **IoN 100WB** is the ability to quickly and easily alternate electrodes between primary or secondary plasma (up to 13 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
- 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. Internet based live diagnostic software program.
- 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	107 liters (6527 cubic inches)
Chamber Dimensions	375 x 375 x 762 mm 14.75" x 14.75" x 30" D

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	0-600 watts (standard) 0-1000 watts (optional)

Power Requirements

Electricity	208-240 VAC, 1 phase 20A 50/60 Hz 3-wire (standard)
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	1067 x 737 x 1245 mm 42" x 29" x 60"
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
- Vacuum pumps (rotary vane, dry, scroll and blower package)
- Vapor phase MFC

Safety Certification Standards

CE certified
EN 60204
EN 61326

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