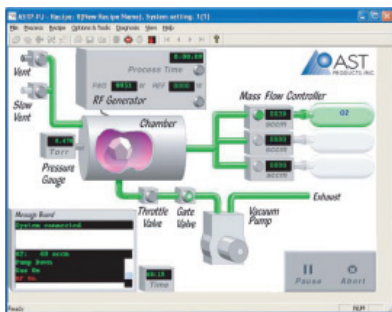


PJ™

BENCH TOP PLASMA UNIT

The PJ Plasma Surface Treatment System is a compact, user-friendly tool with all the functionality of our large batch gas plasma systems. Designed for both laboratory and production use, the PJ is versatile and can be used for a variety of plasma-based processes including cross linking and cleaning organic or inorganic contamination from various substrates such as: metals, ceramics, glass, and silicon. It is also ideal for improving lubricity, wettability, and bond strength. Common applications include medical devices, RGP contact lenses, printed circuit boards and electronics. The entire unit conveniently fits in a single cabinet. Choose from Pyrex (standard), quartz, or aluminum chamber materials.



PJ user interface

The PJ's main user interface screen constantly displays all the key process information in real time. Information such as RF forward and reflective power, gas flow, operating pressure and process time are all clearly displayed. A message board also displays the latest process function. Operators can choose from an infinite number of pre-programmed processes or create a new recipe. All parameters can be modified in-process from this main screen.

AST has long had a core business in plasma processing. Backed by the company's superior expertise in surface modification, coating and contact angle measuring technologies, AST/Plasma Science group provides the best knowledge to work with our customers for critical process development.

PJ SPECS:

- **Main** 115 VAC, 15 amp
- **RF Power** 300W 13.56 MHz
- **RF Match** Automatch
- **Control** Software controlled via PC
- **Footprint** W24" x L24" x H12", Weight 75 lbs.
- **Chamber** 8" diameter, 10" depth Pyrex
Capacitively coupled

GAS FEED

- One MFC included

OPTIONS

- Choice of chamber material
(Pyrex, quartz, and aluminum)
- Pump filtration system
- O₂ service on pump
- Mist filter on pump
- Capacitance manometer
- Throttle valve
- Vacuum pump, 11 cfm, 115V, 15 amp
- 2nd MFC
- Notebook PC

PLASMA DESCRIPTION

Plasma is a highly energized state of matter that consists of electrons, positive ions and neutral species. Feed gases are ionized at pressures at or below 200 mTorr to yield highly reactive species. These discrete plasmas can etch a surface, deposit a film, add or modify chemical functional groups or simply alter the surface energy to control water management characteristics. Low-temperature plasmas, also called cold plasmas, do not adversely affect the bulk properties of polymers, metal alloys, glasses and ceramics. Instead the effect is realized at the surface to provide new and enhanced surface functionality

