

Reel-to-Reel Plasma System

PS-2525



Features:

Unique reel-to-reel process mechanism ensures uniformity and effective treatment for all sections of the reel materials

Reliable and precise control by micro-processor

Primary plasma operation provides most effective plasma exposure

Patented electrode design maximizes process uniformity

Integrated Turnkey vacuum system provides most efficient operation

Automatic self-diagnostic display, interlocking devices and emergency power off system provide full range safety features

Application: Continuous reel-to-reel processing for cleaning and surface treatment of flexible circuit materials

Process benefits: Flexible circuit materials are treated to remove carbon contamination from laser drilling processes and other forms of organic which may inhibit bonding of micro-circuits. Processing of the flexible circuit material on the reel greatly reduces handling and process time of the end products

System Specifications

Dimensions:	System - 86" H x 77" W x 42" D Pump – 42" H x 42" W x 24" D Chiller – 33" H x 36" W x 22" D
Chamber	Aluminum with 72 in. process zone 14 ¾ in. diameter reels Primary plasma configuration Batch loading Water-cooled electrode Interleaf removal and reapplication fixtures Integral splicing station Footage counter RF- and UV-shielded view port
Control System	Microprocessor controller with key pad 14 ¾" diameter reels Primary plasma configuration Batch loading Water-cooled electrode Interleaf removal and reapplication fixtures Integral splicing station Footage counter RF and UV-shielded view port
RF Generator	1500 watt, 13.56 MHz, solid-state generator Automatic impedance matching network with fast automatic tuning
Power Distribution Module	Power distribution to all components except vacuum, providing single-point power connection Separate circuit breaker for main power
Optional Pump Package	500 cfm turn key installation when purchased from AST including plumbing and all fittings Pump option for lubricating with inert oil Optional external filtration system with pressure gauge Optional oil-mist separator Integral pump starter with control panel
Safety and Automatic Self-Diagnostics	Controller screen automatically displays error checking of gas flow pressure, RF, forward and reflected power. An "out-of-tolerance" message sets process on HOLD with sound alarm and error message EMERGENCY OFF (EMO) buttons on both controller and pump (if purchased from AST); either button terminates both system and pump
Installation Requirements	Plasma System - Electrical power, 208 VAC, 3Ø, 25 Amp; gas input of 1/4" compression fittings; regulated dry air with inlet pressure greater than 65 psig (supplied by user) Vacuum pump - Electrical power, 208 VAC, 3Ø, 20 Amp; 500 cfm pump package with adequately-rated, sealed exhaust line at 60 cfm connected to pump with a 2" ID KF-50 fitting

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