Robo-RF Plasma Control System

Plasma Control Software Interface

Features

- Automatic Tuning of the Plasma Source to the RF Power Supply
- Mass Flow Control with Automatic Feedback Control and Processing
- Plasma Status Monitoring and Plasma Control
- Data Logging of Parameters for Process Analysis and Quality Control
- User Interface to Remote PC's or Remote Applications (DDE)
- Cooling Water Flow Safety Interlock

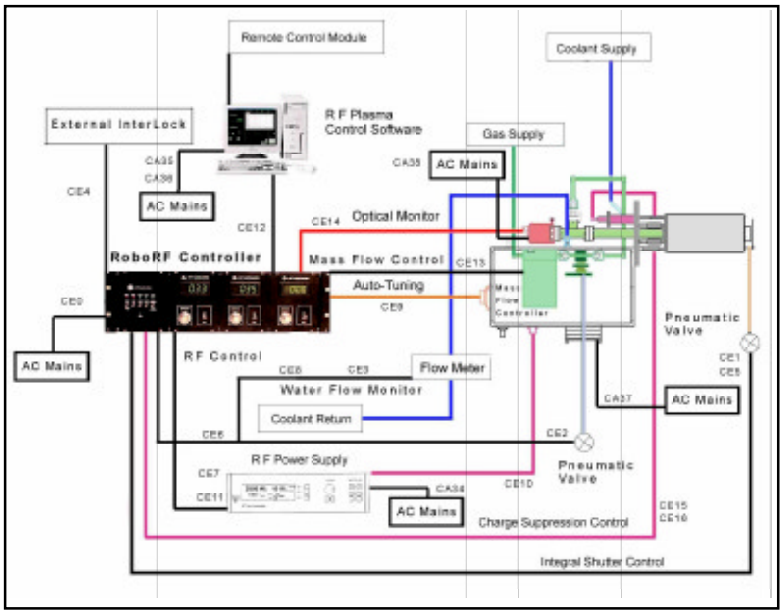
Description

The RoboRF Plasma Control System is a multi-purpose interface that allows fully automated operation of the SVTA RF plasma sources. The system can be easily retrofitted to other existing RF plasma systems. A 19" rack mount electronic box with embedded microprocessor and an industry field bus protocol ensures reliable operation even in noisy production environments. The system monitors the plasma status and automatically controls the RF matching network, gas flow controller and the RF power supply for stable process conditions and maximum RF efficiency

RoboRF Controller

The plasma monitor module is designed to communicate with the SVTA plasma emission monitor located at the view-port of the plasma source. The monitor signal is processed within the embedded control unit to monitor the plasma properties of the RF source in real time.

A user-friendly windows based control software allows uncomplicated operation of the RF plasma source and displays all plasma system parameters. Extensive data logging, processing and analysis capabilities, as well as remote operation of the plasma system are provided for quality control and process optimization.



Schematic of the Plasma Control System

Model	Description
SVTA-RF-6.02PBN	PBN, Specify Length: 10" - 20"
SVTA-RF-6.02ALO	Alumina, Specify Length: 10" - 20"

Model	Optional Components
SVTA-RF-HVPS	High Voltage Supply for Charge Suppression Plates
SVTA-RF-RR	Robo RF Plasma Control System