1. Basic System Configuration

ITEM	SPECIFICATION
System Type	PLASMA CLEANER / PSK Supra 3

ITEM	SPECIFICATION
Equipment Model	SUPRA III
Manufacturer	PSK Inc.
Wafer Size	300mm (12 inch)
Applied Tech Node	70nm ~ 10nm Process Technology
Plasma Type	Remote Plasma

2. System Configuration

Substrate Type	Silicon Wafer
System Control	COMPUTER CONTROL / PLC & PC Based Control
Operating System	Windows 10 Operating System
Control Sub-Module	ELECTRIC RACK
Signal Lamp	SIGNAL LAMP
Buzzer	Alarm System Installed
Main Frame	STEEL FRAME, ALL SIDE COVER EASY TO INSTALL AND REMOVE
System Cover	Minimize Main System Footprint
Overall Requirement	REQUIREMENT OVERALL PREP FOR SYSTEM

3. Chamber Specifications

Process Chamber	PROCESS CHAMBER - 2 Chambers Configuration
Chamber Material	ONE PIECE ALUMINUM BODY HARD ANODIZED THICKNESS ≥40μm
Surface Finish	SURFACE FINISHED
View Port	TWO PORT FOR EACH PROCESS CHAMBER
Transfer Module	TRANSFER MODULE
Wafer Handling	WAFER HANDLING / CLEANING MODULE
Align Module	ALIGN MODULE / COOLING MODULE
Cooling Module	COOLING MODULE
Load Port	LOAD PORT - Wafer Loading Interface
EFEM Robot	EFEM ROBOT - Auto Wafer Transfer
Handle & Vacuum Chucking	GAS FOR HANDLE, VACUUM CHUCKING TWO FORKS, VACUUM CHUCKING
Throughput	100 WPH (Wafers Per Hour)

4. Pressure Control System

Process Chamber Pressure	PROCESS CHAMBER
Base Pressure	PROCESS CHAMBER BASE PRESSURE - High Vacuum Achievement
Process Control Gauge	PROCESS CONTROL GAUGE
Chamber Vacuum Status	CHAMBER VACUUM STATUS - Real-time Monitoring
Chamber Pressure	CHAMBER PRESSURE
Pressure Gauge	CPD mTorr (Capacitance Manometer & Isolation Valve) CAPACITANCE MANOMETER & ISOLATION

	VALVE VACUUM GAUGE & ISOLATION VALVE VACUUM SWITCH
Gate Valve	GATE VALVE - Chamber Isolation Valve
Pressure Control	PRESSURE CONTROL - Precision Adjustment
Control Method	AUTO/MANUAL CONTROL BY SOFTWARE
Pressure Control Valve	PRESSURE CONTROL VALVE
Vacuum Pump Config	VACUUM PUMP CONFIGURATION
Process Chamber Vacuum	PROCESS CHAMBER - Independent Vacuum System
Vacuum Pump	VACUUM PUMP - DRY PUMP
Pressure Range	1 ~ 2,000 mTorr

5. Gas Supply System

Gas Lines	6 Gas Lines
Process Chamber Gas	Dedicated Gas Supply for PROCESS CHAMBER
Gas Types	GAS 1: O_2 (Oxygen) GAS 2: N_2 (Nitrogen) GAS 3: AR (Argon) GAS 4: CF_4 GAS 5: H_2 GAS 6: Selectable Gas (Other Process Gas) * Gas specifications may vary depending on the equipment.
Methodology	Settings per Chamber (Independent Control)
Gas Panel	21PS-HER-LIS-Chamber Type (Dedicated Gas Panel)

6. RF System

RF Power	REMOTE RF PLASMA
RF Frequency	13.56 MHz (Standard RF Frequency)
RF Output	Max 5,000 Watts (5 kW)
Control Method	Software-based Auto/Manual Control

7. Control System & Interface

Control System	PLC & PC Based Integrated Control
User Interface	21-inch Touch Panel TFT
Operating System	Windows 10 Operating System
Process Control	Recipe-based Auto Process Control
Data Logging	Real-time Process Data Recording & Monitoring

8. Equipment Layout & Installation Dimensions

Component	**Dimensions (Unit: mm)**
Main Body	W2150 x L3500 x H2150 (Width 2,150mm x Length 3,500mm x Height 2,150mm)
E-Rack 1 (Electric Rack 1)	W600 x L900 x H1900 (Width 600mm x Length 900mm x Height 1,900mm)
E-Rack 2 (Electric Rack 2)	W600 x L900 x H1900 (Width 600mm x Length 900mm x Height 1,900mm)
Total Layout (Incl. Maintenance)	**W5150 x L6700 x H2150** (Width 5,150mm x Length 6,700mm x Height 2,150mm)

9. Utility Requirements

Utility Item	Specifications
Electric	3Ø 208V, 250A 3-Phase 208 Volts, 250 Amperes
CDA (Clean Dry Air)	7 kgf/cm² Clean Dry Air - 7 kgf/cm²
PCW (Process Cooling Water)	4 kgf/cm², 20 LPM Process Cooling Water - 4 kgf/cm², 20 LPM
Gas	Chamber Gas Line Check Chamber Gas Line Check (O_2, N_2, AR, CF_4, H_2, etc.)
Vacuum	Robots Wafer Chucking Vacuum System for Robot Wafer Chucking