Configuration Details (ICP-

Plasmalab 100 ICP380

94-100-3-41C -- ICP process chamber with 200mm pumping port, single viewport
The ICP process chamber features a coupling port in the centre of the chamber top plate for of an ICP source. The chamber is fitted with a 200mm high-conductance pumping

The aluminium process chambers are machined from a single aluminium block to provide vacuum integrity. Each includes a front viewport fitted with an RF shield for viewing the At the rear, a KF40 blanked fitting is provided for OES end-point or other characterisation Included with the process chamber is a MonoVAT isolation valve for connecting the module to the selected wafer insertion device.

94-100-8-20 -- 200mm pumping tee with 200mm branch to sealable APC (for use with ATH1300MT or ATH1600MT process turbo pump)
200mm high conductance pumping tee fitted with a 200mm variable gate valve (APC) for use a ATH1300MT turbomolecular pump.

94-100-BW-3FBL -- System console 3 frame, PC base unit, 17"TFT, blue plc, PC2000 single chamber software & manuals on CD
Console
The PlasmalabSystem100 process module base unit houses all the electronic sub systems, control units, pneumatics, water, gas services and the turbomolecular pumps (if fitted). located in the base unit is the dedicated module control processor.
The module is constructed using proven OPT hardware designs. The extensive OPT process library supports all Plasmalab System 100 configurations. The system is fully interlocked protect the system hardware from any service failure (e.g.. failed water supply for purposes) and to protect the operator from electrical shock during maintenance

PC2000 controller
The control software runs as a WindowsXP application and allows multiple levels of control. Individual users (or class of users) are accessed by password entry.
The system status is displayed on graphic mimic diagrams with all operational parameters status displays accessible through pop-up windows. Recipe programming is provided for all process parameters. Each gas line may be defined, with input of mass flow settings directly sccm.
The software includes full data logging capability of user-selectable run-time process allowing off-line verification and analysis of process
Hardware supplied is a modern specification PC including TFT, keyboard, CD drive, mouse all relevant cards.
Software includes WindowsXP, PC2000 software, and single-user licence.
Operating manuals and parts list are provided on CD.

PLEASE NOTE that as from the 22nd of October 2009 all new systems PCs will run Windows 7. Please contact the sales manager in your area if you have any question or any

94-100-0-415 -- Standard 380V-415V 50Hz System power box

94-100-3-00-38 -- Electrical heating kit for ICP380 process chamber walls
Electrical heating kit fitted to the chamber walls to allow warming to approximately 80

94-100-5-36A -- RIE 205mm, wafer clamping, fixed height fluid heated/cooled aluminium RF powerable lower electrode, with removable top plate, 3 pin lift, helium assisted heat transfer
205mm diameter fluid cooled or heated aluminium lower electrode with integral dark space Helium assisted heat transfer with wafer clamping mechanism, fixed height. Requires heater/chiller for process temperature control.

All electrodes are designed for use with wafers or carrier plates up to 200mm diameter feature an axial lifting mechanism for wafer and carrier plate transfer. Specify wafer size carrier plate details when ordering.

94-100-6-600-200VBL -- 600W, 13.56MHz RF Generator & Vacuum capacitor Automatch Unit for RIE 205mm electrode

94-100-6-76 -- 415V 50Hz ICP380 Source (Alumina) with 3kW, 2MHz RF Generator, Vacuum capacitor Automatch Unit Chamber liners & End point detector mounting
380mm diameter Inductively Coupled Plasma source giving uniformity suitable for use with up to eight inches in diameter. Complete with 3kW 2 MHz RF generator, end point mounting and automatic matching unit. Alumina discharge chamber provided process specification.

94-100-7-13-4 -- 100 mTorr CM gauge (vertically mounted heated version), isolation valve and Pfeiffer PKR251 gauge
Heated 100 mTorr high resolution temperature compensated capacitance manometer, mounted, isolation valve and Pfeiffer PKR251 gauge mounted on the chamber base plate

94-100-3-00-05 -- Pumpdown pipe heating kit (200mm fixed height pumping tee)
Heating kit applied to the pump-down pipe for optimum vacuum performance and to deposition of loosely adherent material that might generate

94-ATH1300MT/100 -- Alcatel ATH1300MT corrosive compatible magnetic bearing turbomolecular pump
Alcatel ATH1300MT corrosive compatible magnetic bearing turbomolecular

94-TIC-ATH1300MTBL -- Integration hardware for ATH1300MT turbomolecular pump
Hardware to integrate a turbomolecular pump to the system, including purge gas control foreline vent facility.

94-100-8-1300H -- Heated backing valve kit for turbos

94-81-9-51-8 -- 8 line (MAX 8 LINES) externally mounted gas pod
The gas pod is ventilated and fitted with an extraction port for maximum safety. Positions provided for up to 8 mass flow controlled gas lines, with control pneumatics and circuitry for lines included. Fixing points are provided for wall mounting. The gas pod is mounted remote the system console.

94-81-9-11-12 -- (3) Non-toxic gas line excluding mass flow controller
Gas line with stainless steel VCR fittings and orbitally welded joints, including electro-pneumatic isolation valve and one in-line 2µm

94-M/MTR/MFC/ -- (3) MKS 1179A MFC with viton seals for non-corrosive applications
MKS 1179A mass flow controller for use with non-corrosive gases. (SF6,Ar,O2)

94-81-9-21-12 -- (3) Toxic gas line with MFC bypass, excluding mass flow controller
Gas line with stainless steel VCR fittings and orbitally welded joints, including electro-pneumatic isolation valves, one in-line 2µm filter and a manually operated bypass

94-M/MTR/MFC/*M -- (3) MKS 1479A MFC with metal seals for corrosive applications**
MKS 1479A mass flow controller for use with corrosive gases. (Cl2, BCl3, SiCl4)

94-81-9-42-415 -- (2) 415V Heated Gas Kit - required for SiCl4 and BCl3
Gas line heating kit, for use with upto 4 gaslines internal of the gaspod. Typically required for like SiCl4, BCl3 and C4F8.

94-ADP122P-230V -- Alcatel ADP122P 415V 50Hz Dry pump for turbo backing (No purge kit required)
Alcatel ADP122P Dry Rotary pump for turbo backing

94-RIC-ADP122P -- Integration hardware for ADP122P dry pump
Hardware to integrate a dry pump, including purge control and digital

94-133-8-00-40 -- Heated foreline kit NW40.
Heat kit from turbo backing valve to service panel and 1m foreline pipe to backing

94-MA91B25458 -- Liner kit for ICP380 Chamber

94-G-MA93B31116 -- Revised clamping mechanism (high pressure version)

94-MD91B25976 -- Ø200mm Substrate quartz clamp, continuous contact

-- Sandwich platen assembly for 6 x 2" wafers

94-MD91C00004 -- Ø200mm silicon carbide carrier platen PTN200SC (Recess details must be specified in QCF44)
200mm diameter silicon carbide carrier plate for RIE table.

94-G-WTR-SUN-905 -- JULABO FP51-SL 400V 50Hz 3PH HTR/CHILLER -30 / 80°C
Remotely controlled recirculating heater/chiller unit suitable for ultra-low electrode control, from -30°C to +80°C (with ±0.5 °C temperature stability). Heating up to 3000W. One is required for each application). Includes Electronic module with analog connections for programming, temperature recorder, standby, alarm. 380V-415Vac 50Hz

94-300-10-08CBL -- 4-way handler with automatic insertion load lock for single wafer or batch carrier plate, support frame and active Pirani gauge for rotary pumping
200mm capacity load lock with four side ports. It allows a wafer to be loaded directly onto wafer transfer arm via a hinged lid, for subsequent loading under vacuum into any of up to process chambers attached to side ports. The wafer may be transferred under vacuum the process chambers in any sequence as defined by the user's process recipe.

94-100-10-08C/ -- 4-way handler panel kit

94-ACP40G -- Alcatel ACP40G Load lock dry pump
Alcatel ACP40G Dry pump for loadlock and transfer chamber

94-RIC-ACP40G -- Integration hardware for ACP40G dry pump.
Hardware to integrate a dry pump, including purge control and digital

94-CRM -- Clean-room paper system manuals
Set of system operation and maintenance manuals on clean-room compatible paper. OEM unit manuals are not reproduced on clean-room compatible