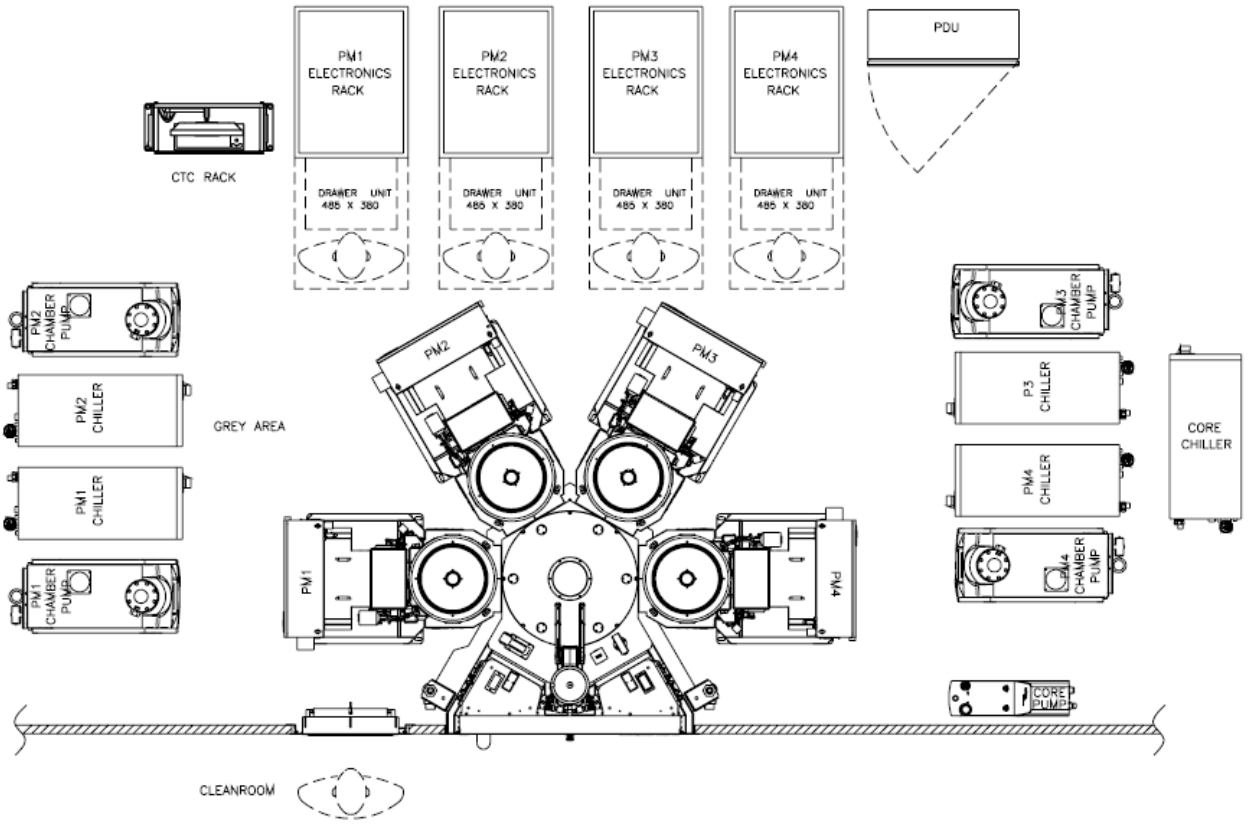
EQUIPMENT DATASHEET

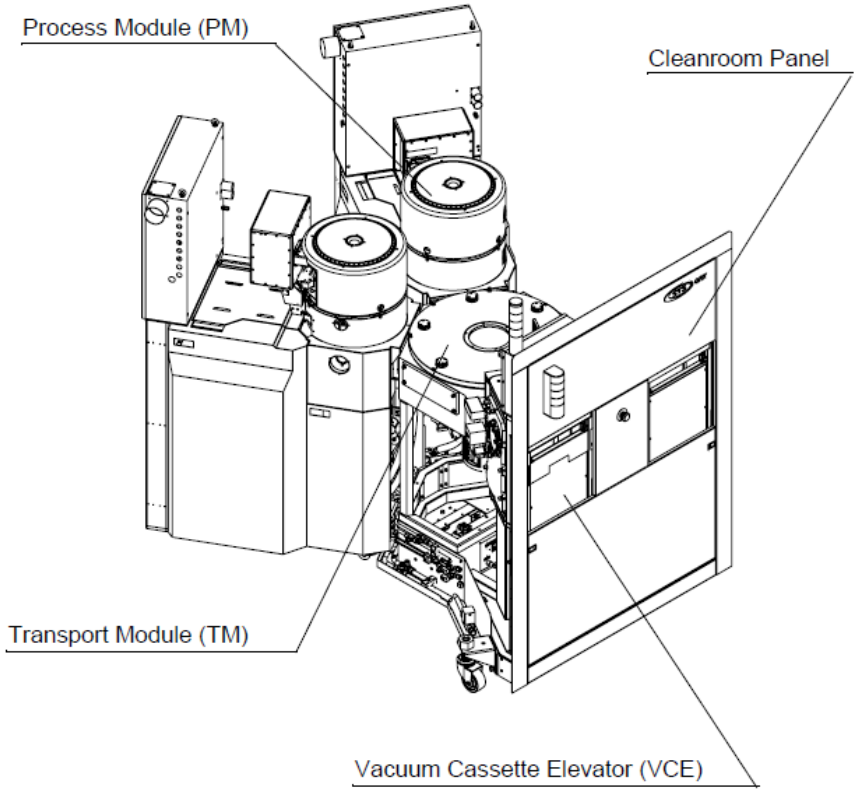
STS CPX Pegasus Etch System

Item List	Notes
Manufacturer:	STS(KLA Corporation)
Model:	CPX Pegasus
Wafer Size:	200mm
Vintage:	2006
Tool Condition:	Refurbished，Excellent condition
Chamber Quantity:	2 Chambers
Volts / Hz/Ph:	380 Volts/60Hz ,160 Amps/phase



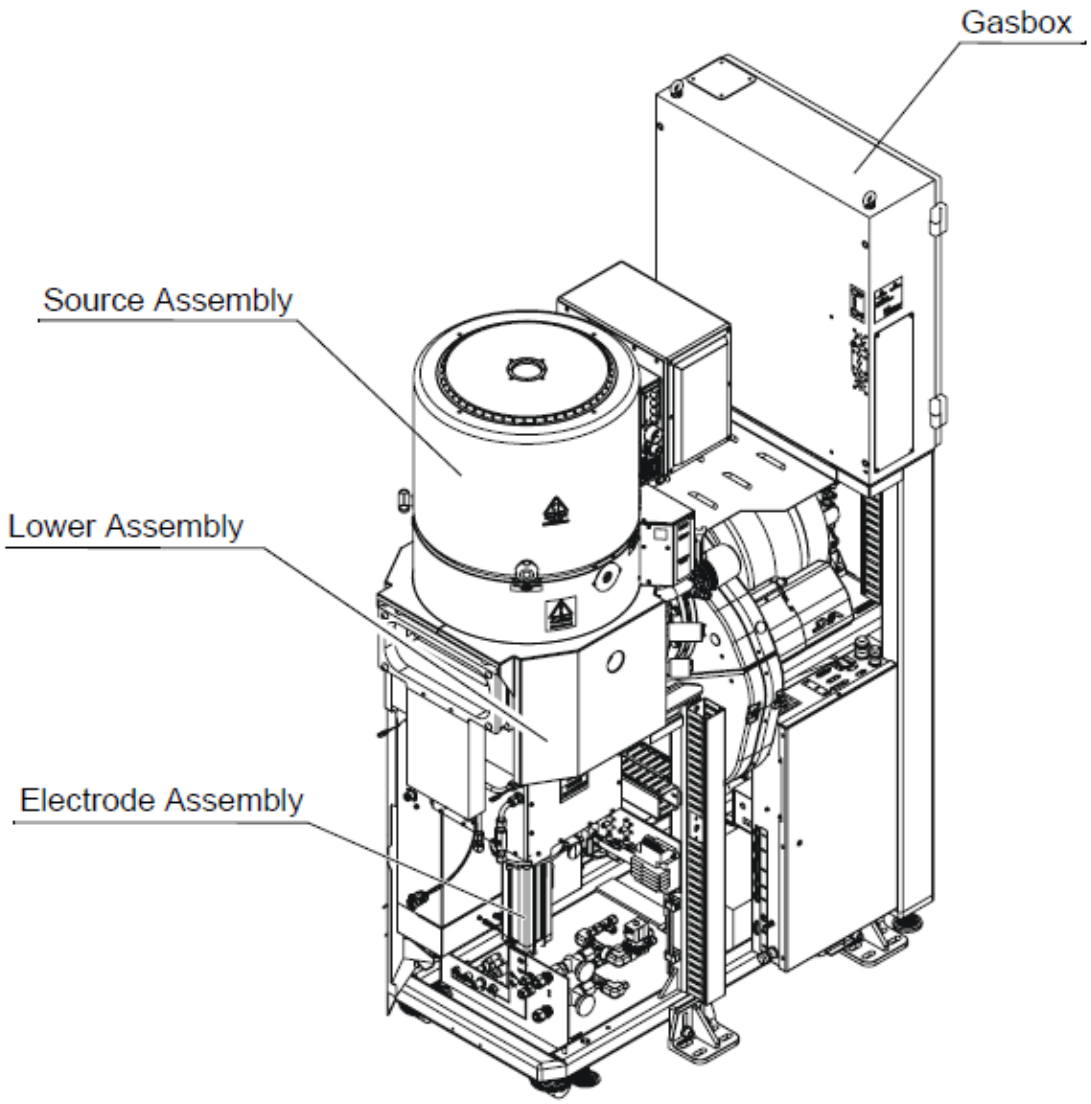
Typical System Layout

- **System General View :**



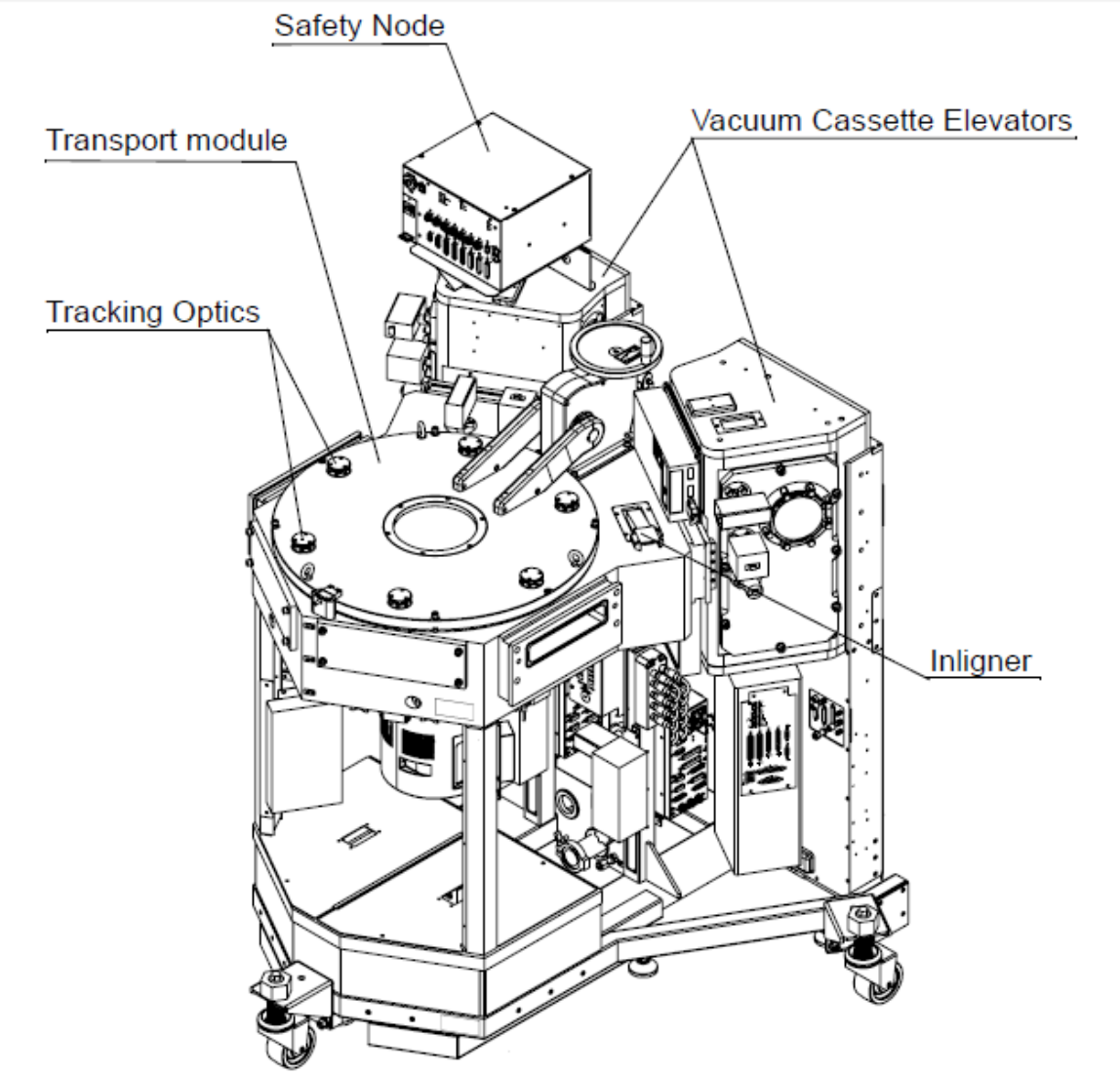
- **System Components and Configuration**
  The major components of the system are :

1. Process Module (PM)
   The process module assembly is shown in the Figure. Its principal functional components are:
   - Source Assembly
   - Lower Assembly
   - Gasbox
   - Electrode Assembly
   - External Components (not shown)



Process Module Assembly

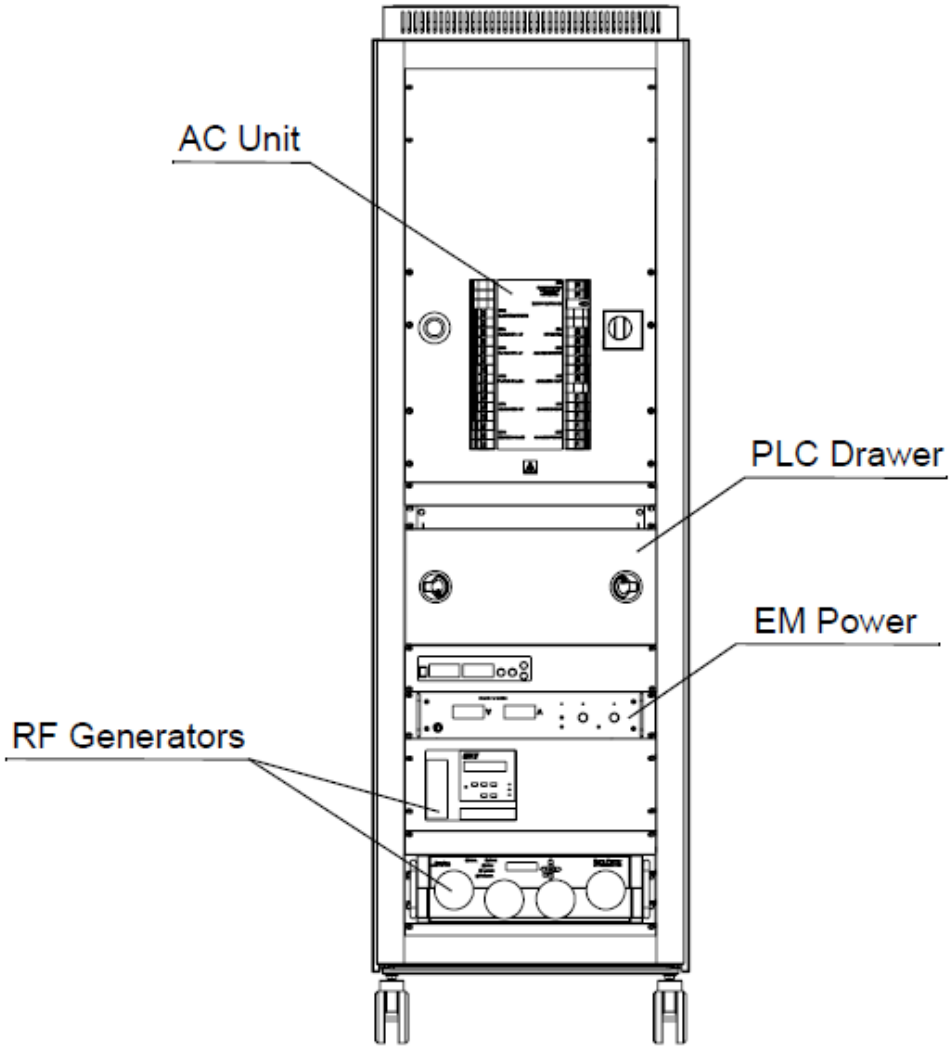
2. Transport Module (TM)
   Substrates enter the Process Module through a MX600 Handling System.
   The major components of the MX600 handling system are:
   - Vacuum Cassette Elevator (VCE)
   - Safety Node
   - Tracking Optics
   - Transport Module (TM)
   - Inligner



MX600 Handling System

The Transport Module's principal functional components are:
- Transport Module Chamber
- Brooks MagnaTran 7 robot

3. Electronics Rack



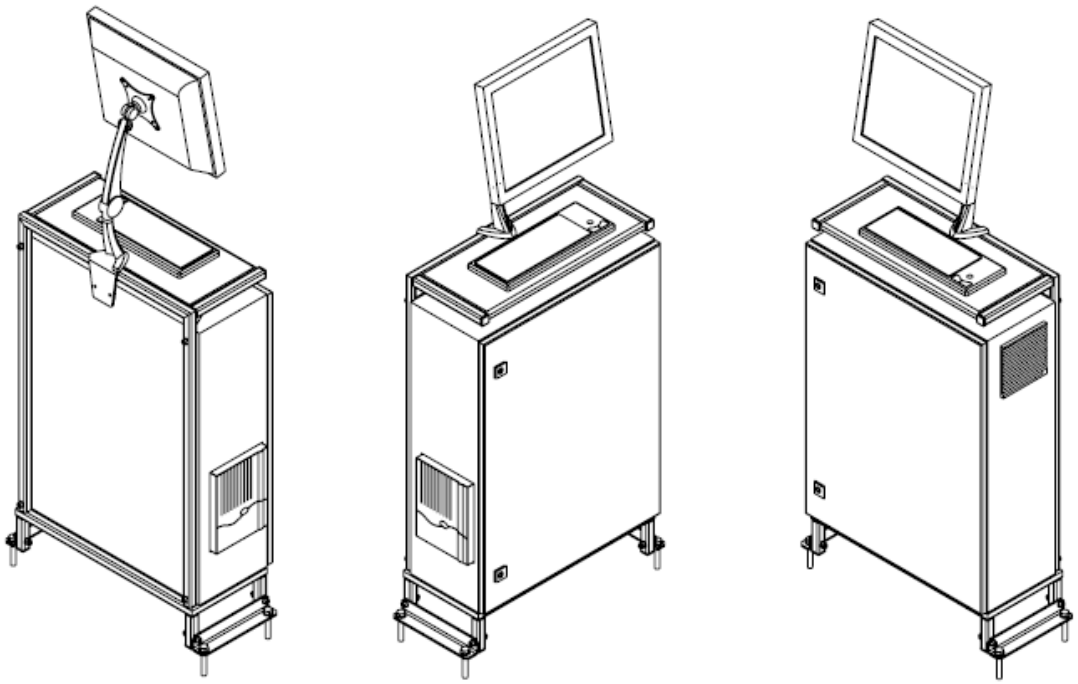
Typical Electronics Rack (E Rack)

RF Generator Units

- Source RF Generator : MKS 6.5 kw RF Power Generator
- Platen RF Generator : MKS/ENI ACG 3B 13.56MHz RF Generator

4. Power Distribution Unit (PDU)

5. Cluster Tool Controller (CTC) Cabinet



Cluster Tool Controller Cabinet

6. Pumping System
   - Rotary Pump : 3 PCS
   - Turbo pump : 2 PCS
7. Cooling and Heating Systems
   Four heating/cooling systems are present within the system
   - House Water
   - DI Water : SMC HRZ-L2-DY chiller
   - Silicon oil : SMC HRZL-D chiller
   - Insert Heaters

- **Pressure System :**
  - MKS Baratron gauge(10-4~10-1 m Torr)
  - MKS 750 capacitance(10-760 Torr)
  - BOC EDWARDS Active gauge (10-4mTorr~10Torr)
  - ESC(ceramic)

- **C4F8 Flow rate, ±2 % vibration (Analogy MFC 400 sccm)**
- **SF6 Flow rate, ±2 % vibration (Analogy MFC 1200 sccm)**
- **Ar Flow rate, ±2 % vibration (Analogy MFC 500 sccm)**
- **O2 Flow rate, ±2 % vibration (Analogy MFC 200 sccm)**
- **Chuck He Pressure, ±2 % vibration**

- **Pressure**
  a. PM Pumpdown
     Pressure 500m Torr
     APC valve open
  b. LL Pumpdown
     Pressure 80m Torr
     Gate valve open

- **Temperature, ±2 °C vibration**
- **Forward power, ±1% vibration**
- **Ref power, ±1% vibration**
- **Gases:**
  - SF6 : Purity 99.999%(5N)
  - C4F8 : Purity 99.999%(5N)
  - O2 : Purity 99.9995%(5N5)
  - N2 : Purity 99.9995%(5N5)
  - Ar : Purity 99.9995%(5N5)