

Varian VISta 80

High Current Ion Implanter

SNES137034

- **Currently Configured for 200mm Wafer Sizes**
- **MFG Date: October 2000**
- **Cassette Interface:**
 - (4) FOUP
 - Small WIP Buffer (Single wafer processing end station w/wafer Orient Control)
 - (2) 25-Wafer Polished Load locks
- **Energy Range: 200eV to 80keV**
- **IHC Ion Source**
- **Single Filament Bernas Ion Source**
- **Long Life PFG Filament**
- **Beam Energy Probe (for D1/D2 module control at 70/90° magnet regions)**
- **High Resolution 90° Analyzer Magnet**
- **70° Magnet module**
- **Dual Plasma Xe Flood Gun**
- **2D Profile Faraday**
- **Varian Positioning System (VPS): Recipe interlock incident angle control system**
- **Rotating Platen (X-Tilt capable from 0° to 60° +/-0.1° accuracy)**
- **Gas Cooled Electrostatic Platen**
- **Vertical Scanning**
- **Replant Select Kit**
- **Facility Connections: Bottom Fed (air, water, power)**
- **TurboPumps/Cryogenics:**
 - (3) Helix/CTI 250F On-Board Cryo pumps
 - Beamline: (1) Pfeiffer TMH2101
 - Source: (1) Pfeiffer TMH2101
 - End Station/LLKs: (2) Varian 300-HT
 - (1) Varian Triscroll-300 Dry Pump
 - (1) Diaphragm Rough Pump (air-bearing diff. seals stage 2)
 - (1) Venturi Pump (air-bearing diff. seals stage 3)
 - Remote Pump Kit:
 - 15M Remote Pump Harness/Helium Lines
 - Std Remote Pump Rack
- **Gas Config:**
 - 1: Ar - HP (CGA 580, Praxair Specified)
 - 2: BF3 - SDS (Unit MFC)
 - 3: AsH3 - SDS (Praxair specified)
 - 4: PH3 - SDS (Praxair specified)
 - 5: SiF4 - HP (CGA 330)
 - 6: CO2 - HP (CGA 320)
 - 7: N2 - Maintenance Purge (Bulk ext feed)

- **VIISTA Varian Control System (VCS):**
 - Operating System: Win NT/2000
 - Auto-Recipe Set-up, Optimization, Control, Production Scheduling, WIP Tracking, etc...
 - HSMS SECS / GEM Interface
 - 300mm SEMI Standards SW: includes E5, E30, E37, E37.1, E39, E40, E87, E90, E94
- **Power Requirements: 208V (50kVA), 175A, 3-Phase, 5-Wire, Freq 50/60Hz**
- **Safety/Regulatory:**
 - S2-93A Compliant
 - High Voltage Warning Displays (5 Locations)
 - Source Exhaust Flow INTLK
 - Lead Floor Radiation Shield
 - Hinged Enclosure Doors (interlocked)
 - Status Lamp (RYGB, INCDST, CE certified)
 - UPS – Control System & Platen
 - EMO Interlocked Vesda Smoke Detection
 - Exhaust (Gas Box, Mech. pumps, Cryo pumps) designed for thru-the-roof connections
- **Installed Options:**
 - Replaceable Source Liners
 - Vaporizer & Power Supply
 - Ar External Purge Assembly (slot 1, UNIT MFC)
 - Inert Process Gas Option for Slot 7
 - Optional HP Gas Stick, Unit MFCs
 - Stainless Steel UES Exhaust
 - Thru-Beam Wafer Mapping
 - SEMI E58 ARAMS Compliance
 - SEMI E84 Compliance
 - V80 Factory Automation Kit (Infineon Specific)
 - Wafer Viewing, Wafer ID (300mm backside OCR Semi M12 Reader)
 - 4-Pole GFI Power Kit
 - CE Marked Line Filter
 - Reduced Brass Kit
 - Teflon Toxic Exhaust Roughing Line
 - Grounding Kit using Star Washers
 - Customer supplied 50HZ Freq converters for CTI C

