# Eaton Nova Axcelis NV 8250HT Medium Current Ion Implanters

Pump and compressor
Vacuum system:
Cryo compressor: CTI-9600 X1
Beam line cryo pump 1: OB 8 (P3)
Process cryo: 2, 3 OB 8 (P4,5)
Source pump: STP1003C (P1)
Beam line turbo pump: STP300C (P2a), STP1000C (P2b)
Terminal rough pump: EBARA Pump 40 x 20 (RP1, RP2)
End station rough pump: EBARA Pump 50 x 20 (RP3)
Vacuum controller: HCIG
End station:
Cassette capability
(2) Cassettes, 8"
Automatic notch alignment capability
Wafer handling system: In-air / In-vacuum high throughput
Particle filter system: Class 1, UPLA filtered wafer handling system Chuck electrostatic clamp
Chuck cooling interlock
ASYST LPT2200 SMIF Interface capability
Implant angle capability:
Variable implant angle
45° Tilt axis and 360° twist axis
Quad implant capability
Beam monitoring system:
Real-time patented dose control
Real-time beam profiler (Single dimension)
Gas box option:
Modular gas box

(4) String gas boxes
High pressure string
(2) SDS String hydride (Arsine and phosphine)
SDS String flouride (Boron trifluoride)
(3) Pressure transducers on SDS string (Per string): PSIA
Mass flow controller:
(1) Kit unit 1660
(3) Kit units 1662
Extraction PS:
0 - 40 KeV
Extraction voltage monitor
Vaporizer
Ion source: ETERNA ELS (Extended life source) - S10
Source bushing:

Extended life bushing
Source liner for extended life bushing
AMU System: Triple indexed mass analysis magnet / Power supply