

Complex Systems

La Sr Mn Cu Bi Ba Au Y Ni Ti Ru Nb Ca Ir ...

Full Size MBE System



	Specification
Chamber	Made from SS316 with UHV standard
Pumps	Edwards STP1003 Mag-Lev Turbo Pump, EXT75DX turbo pump as the second stage backing pump and differential pumping, nXDS10i as the forevacuum pump; TSP with Liquid Nitrogen Cooling Shroud
Base Pressure	<1E-10 mbar after 48 hours bakeout at 150 °C
4-axis Manipulator	X/Y(±8mm), Z(150mm), θ (+/-180°) Temperature Range: Liquid Nitrogen Cooling Module, 150~1200K
QCM	INFICON XTC/3s with 150mm Linear Shift
RHEED	STAIB 15 KeV RHEED & Phosphor Screen; Data acquisition and Analysis.
High Purity Ozone System	High purity Ozone source, up to 90% purity; capable to oxidize most material at 1E-6 mbar Ozone atmosphere; Max 16 g/hour Ozone generation capability and storage of 8g liquid Ozone (supporting up to 8 hours of growth process).
Evaporator Cells	Up to 16 Evaporators Temperature Range : up to 2000°C (with K-cells) up to 3000°C (with E-beam Evaporator) Temperature Stability : $\pm 0.1^{\circ}\text{C}$ Flange : DN40CF / DN63CF Pneumatic Shutters with Controller & Software
Gate Valve	VAT DN63/40CF UHV Manual Gate Valve
Other Accessories	Load Lock, RDC, High Stability Chiller