GEN xplor R&D MBE System

Industry's First Fully-Integrated MBE System for the Compound Semiconductor R&D Market



- High quality epitaxial layers on substrates up to 3" in diameter
- Unique, single frame architecture improves installation time, provides convenient access to effusion cells and allows easier serviceability
- Efficient, all-in-one design combines all vacuum hardware with on-board electronics to make it up to 40% smaller than other MBE systems
- Ideal for cutting edge research on a wide variety of materials including GaAs, nitrides and oxides
- Molly[®] software integrates easy recipe writing, automated growth control, and always-on data recording
- Direct scalability to GEN20[™], GEN200[®] and GEN2000[®] MBE systems
- Winner of the CSindustry award for compound semiconductor manufacturing

New Capabilities:

• Extreme high temperature heater (>1850°C)

CSindustry

- Multiple E-beam source deposition
- Wafer holder exchange and/or flip
- Retractable sources

System Integration:

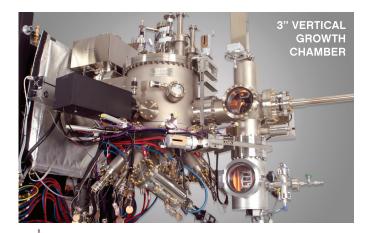
- Isolated preparation chamber
- Multi-system with dissimilar materials
- Veeco legacy systems (GENII/GEN930)
- Atomic Layer Deposition
- Metrology (STM, Auger, ARPES, etc.)



Innovation. Performance. Brilliant.

Discover the Future

The compound semiconductor R&D community asked for a more affordable, flexible, and easy-to-use MBE system and Veeco has delivered with the GENxplor[™]. The GENxplor, awarded the the CSindustry award for compound semiconductor manufacturing, uses Veeco's proven 3" growth chamber design and features unmatched process flexibility - perfect for materials research on emerging technologies such as UV LEDs, high-efficiency solar cells and high-temperature superconductors. Its efficient, single frame design combines all vacuum hardware with on-board electronics to make it up to 40% smaller than other MBE systems, saving valuable lab space. Because the manual system is integrated on a single frame, installation time is reduced. The open architecture design of the GENxplor also improves ease-of-use, provides convenient access to effusion cells and allows easier serviceability when compared to other MBE systems. Discover the future with Veeco's new GENxplor.



Wide Range of Applications on a Flexible Platform

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And many more

- GaAs
- Nitrides
- Oxides



Innovation. Performance. Brilliant.

IMPROVED EASE-OF-USE AND CONVENIENT EFFUSION CELL ACCESS

User accessibility to all 10 source ports and configurable base flange



RELIABLE GROWTH WITH PRODUCTION PROVEN CHAMBER

Manual transfer system based on GEN10[™] 3" growth chamber



INTEGRATED MOLLY SOFTWARE ALLOWS FOR EASY SETUP

Integrates easy recipe writing, automated growth control, and always-on data recording



EFFICIENT DESIGN AND INTEGRATED ELECTRONICS

Minimal footprint for lab space optimization

Process Integration Center – St. Paul, MN USA

Veeco's state-of-the-art facility, featuring a GENxplor system, is fully equipped to conduct process demonstrations, arrange rapid-start programs, provide early access to evaluate system upgrades and support joint technology developments.

MBE Systems 4875 Constellation Drive St. Paul, MN 55127 Tel: 651.482.0800

Find out more at www.veeco.com/mbe or call 1.888.24.VEECO

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