

GEN_xplor™ R&D MBE System

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

**CSindustry
awards2014
-WINNER-**
Compound
Semiconductor
Manufacturing



The **Hottest** MBE R&D System on Earth

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

System Integration:

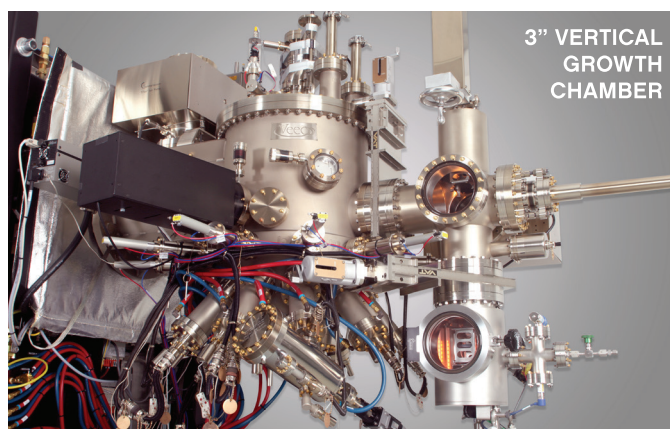
- Isolated preparation chamber
- Multi-system with dissimilar materials
- Veeco legacy systems (GENII/GEN930)
- Atomic Layer Deposition
- Metrology (STM, Auger, ARPES, etc.)



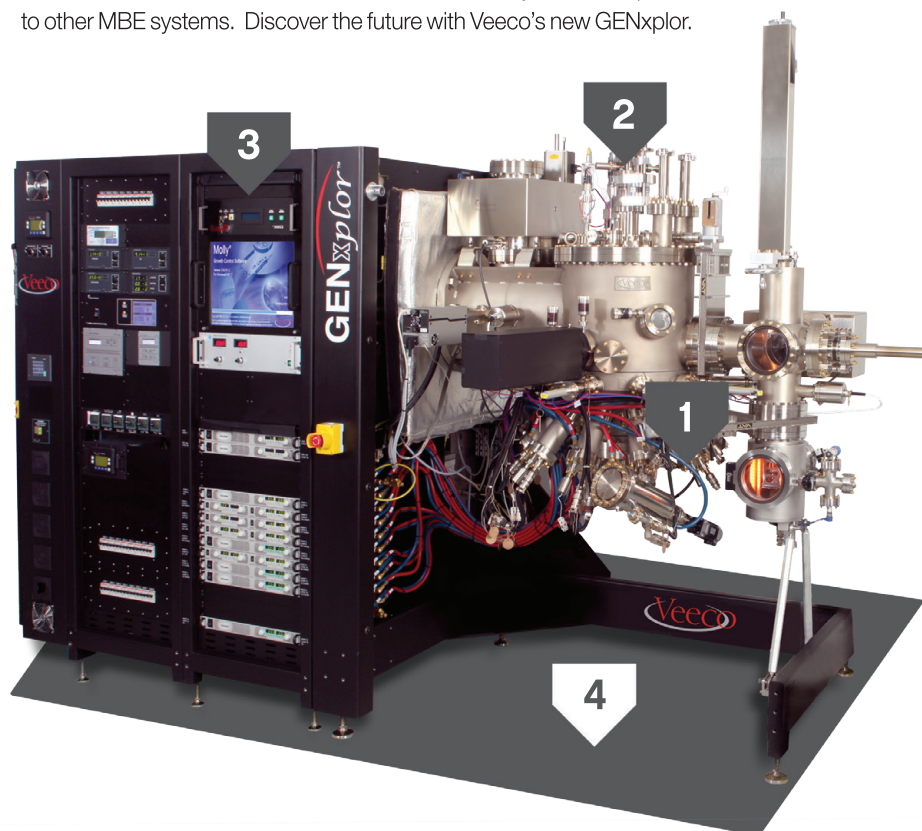
Innovation. Performance. Brilliant.

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 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.



3" VERTICAL
GROWTH
CHAMBER



1 IMPROVED EASE-OF-USE AND CONVENIENT EFFUSION CELL ACCESS

User accessibility to all 10 source ports and configurable base flange

2 RELIABLE GROWTH WITH PRODUCTION PROVEN CHAMBER

Manual transfer system based on GEN10™ 3" growth chamber

3 INTEGRATED MOLLY SOFTWARE ALLOWS FOR EASY SETUP

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

4 EFFICIENT DESIGN AND INTEGRATED ELECTRONICS

Minimal footprint for lab space optimization

Wide Range of Applications on a Flexible Platform

- GaAs
- Nitrides
- Oxides
- II/VI
- And many more



Innovation. Performance. Brilliant.

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