

# Veeco *PROPEL* Power GaN MOCVD System

Single Wafer System to Enable Transition from R&D to Production of Highly-Efficient GaN Power Electronic Devices



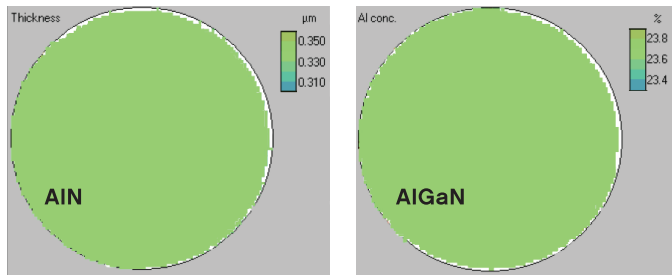
- Outstanding film uniformity, yield and device performance enabled by IsoFlange™ and SymmHeat™ technologies
- TurboDisc® technology features long campaign runs for process development flexibility and best-in-class low particle performance
- Fast cycles of learning accelerate GaN-on-Si R&D transition to high volume manufacturing
- Modular design for ease of configuration, operation and maintenance



Innovation. Performance. Brilliant.

Veeco's new Propel™ Power GaN MOCVD system is designed specifically for the power electronics industry. Featuring a single-wafer reactor platform, capable of processing six and eight-inch wafers, the Propel Power GaN MOCVD system deposits high-quality GaN films that result in the production of highly-efficient power electronic devices. The new IsoFlange and SymmHeat technologies, based on Veeco's leading TurboDisc technology, provides homogeneous laminar flow and uniform temperature profile across the entire wafer. Customers can easily transfer processes from Veeco K465i and MaxBright systems to the Propel Power GaN MOCVD platform.

## Outstanding Thickness Compositional Uniformity on 8" Silicon



AlN Thickness Uniformity: <1%

Al Composition Uniformity (1 $\sigma$ ): <0.5%

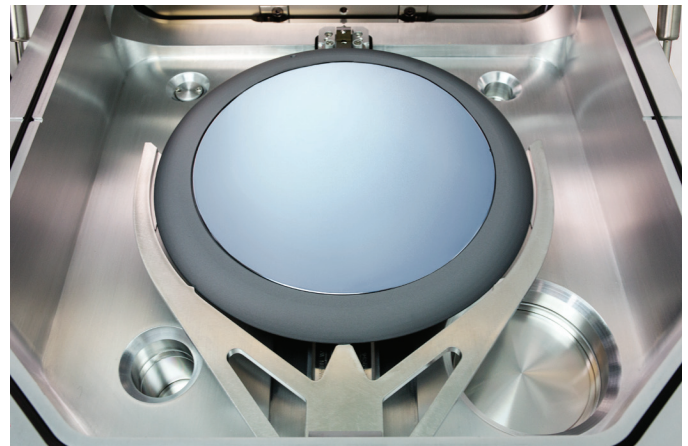
- Uniform thermal control for excellent thickness and compositional uniformity driven by IsoFlange and SymmHeat technologies
- Low particle defects for exceptional yield
- Superior film quality enabled by Propel reactor architecture

## Superior Design, Technology and Performance



- Based on industry-leading TurboDisc MOCVD Technology
- Easy process transfer from K465i™ and MaxBright™ MOCVD systems
- Propels clean operation results in >100 runs between preventative maintenance

## Cost Effective R&D Single Wafer Reactor Platform



- Simple, effective and reliable design
- Accommodates 6" and 8" silicon wafer sizes
- Robot transfer
- Clean vacuum environment



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**Find out more at [www.veeco.com](http://www.veeco.com)  
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