

# Introducing the LED Industry's Highest Productivity As/P MOCVD System with the Best-in-Class Yields



## TurboDisc® K475i™ As/P MOCVD System for LED Production

### Industry's Highest Productivity and Lowest Cost of Ownership MOCVD System for High Volume LED Production

- > New Uniform FlowFlange™ technology enables best-in-class uniformity and process repeatability capable of driving greater yields
- > Robust reactor design provides ease-of-use and faster recovery after maintenance for maximum uptime
- > Industry's highest productivity due to high growth rates and maximum uptime
- > Low consumable costs and industry's highest throughput provide industry's lowest cost of ownership



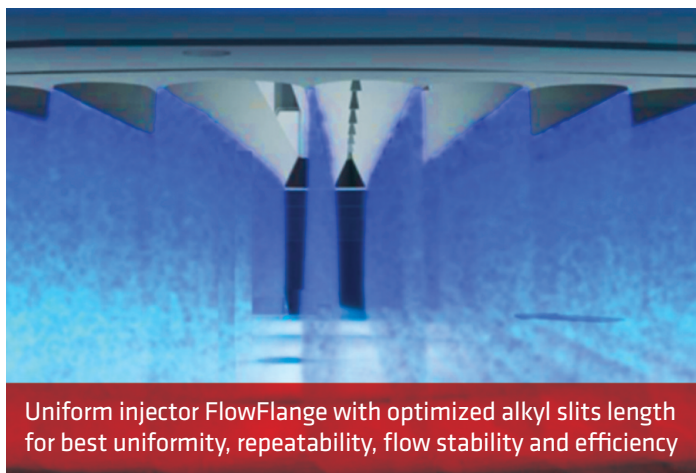
Innovation. Performance. Brilliant.

## The K475i Advantage

Veeco's new TurboDisc K475i As/P MOCVD System is the industry's best reactor for the production of red, orange, yellow (R/O/Y) LEDs, as well as multi-junction III-V solar cells, laser diodes and transistors. The K475i system features a new reactor design incorporating Veeco's Uniform FlowFlange technology producing films with very high uniformity and improved within-wafer and wafer-to-wafer repeatability with the industry's lowest particle generation. The simple design of the Uniform FlowFlange technology provides ease-of-tuning for fast process optimization and fast tool recovery time after maintenance for the highest productivity for applications such as lighting, solar, laser diodes, pseudomorphic high electron mobility transistors (pHEMTs) and heterojunction bipolar transistors (HBTs).

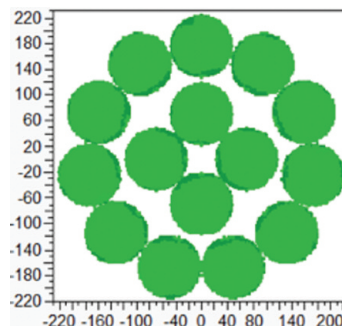
Compared to competitive systems, the new reactor at the heart of the K475i achieves:

- > excellent uniformity
- > better repeatability
- > fast recovery after maintenance
- > easy tune-ability (one alkyl zone)



## Unmatched Uniformity Advancements

- > Best-in-class uniformity and process repeatability due to new Uniform FlowFlange technology
- > Improved wavelength uniformity drives greater yield in a tighter bin
- > Consistently clean and efficient process with minimal down time



Distributed Bragg Reflector (DBR)  
Wavelength Uniformity

	Average Inner Wafer	Average Outer Wafer
DBR Wavelength	633 nm	634 nm
Uniformity	0.3%	0.4%

## Ease-of-Use and Flexibility Advantages

- > Easy process transfers from previous generations
- > Seamless wafer size transition to 15x4" → 7x6"
- > Upgradable from previous K tool platforms



Find out more at [www.veeco/K475i](http://www.veeco/K475i)

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