Superior Design, Technology and Performance



Firebird Batch Thermal ALD For High Volume Manufacturing

Highest Productivity and Lowest Cost of Ownership HVM ALD System

- > Ideal for oxide films, including encapsulation & barrier layers, optical coatings
- > Best-in-class throughput (Up to 40,000 wafers per month)
- > Veeco-proven advanced automation
- > Safe wafer handling solution for fragile / temperature sensitive substrates, including LNO / LTO / glass
- > Modular thermal management for optimal process flexibility and throughput
- > Veeco worldwide sales, service, and support



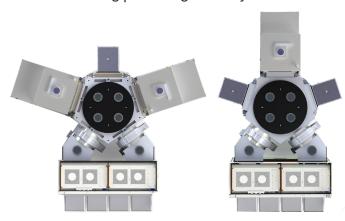
The Firebird Advantage

The Veeco Firebird is a fully automated batch production system delivering superb uniformity with best-in-class throughput at the lowest cost-per-wafer. Leveraging proven Veeco automation solutions, the Firebird enables safe wafer handling via low-impact batch transfer. Its modular pre-heat & cool-down design enables a flexible thermal management solution tailored around your specifications.

The Firebird high capacity reactor(s), low consumable and maintenance costs, and compact footprint, will deliver the most cost-effective solution while exceeding your throughput requirements.

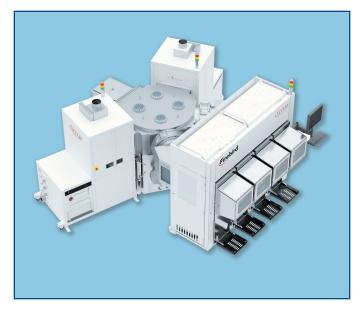
Configurability Advantage

The modular system configuration can be effectively tailored to minimize process flow bottlenecks and offers outstanding processing flexibility.



2 reactors, 1 heat-up module

1 reactor, 2 heat-up modules



Flexibility and Ease-of-Use

The Firebird with its robust yet flexible reactor design will deliver uncompromised process performance with seamless wafer size transition capability all the way up to 300mm.

Cost Per Wafer Advantage

With its long campaign and enhanced serviceability, the Firebird will meet and exceed your low cost of ownership requirements from small batch preproduction evaluation all the way to full production.

With throughputs up to 40,000 wafers a month (based on 100 nm ${\rm Al_2O_3}$ thickness), the Firebird combines best-in-class productivity, superior film performance and low cost of operation, leading to higher profitability to our customers.

MAXIMIZED THROUGHPUT

LOWEST

COO

- Veeco proven HVM automation
- Brooks EFEM and dual load-locks
- Decoupled heating/cooling from process
- Large batch capacity
- Field-tested high capacity ALD reactor
- Low reactant consumption
- Low maintenance cost
- Small footprint

Find out more at

www.veeco.com

or call **781.907.8900**

