



## Inline Thin Film Deposition Systems

**The flawless performance you expect**

*From the most respected name in high vacuum deposition systems: Dynavac*





## *Ingenuity That Drives Your Business Forward*

Dynavac has been designing, manufacturing and supporting thin film deposition systems for over 30 years. Our customers are in a wide range of industries, but they share the same expectation: top-quality performance and consistent results, process after process, year after year.



**Maximum throughput. Consistent quality. Minimal downtime.**

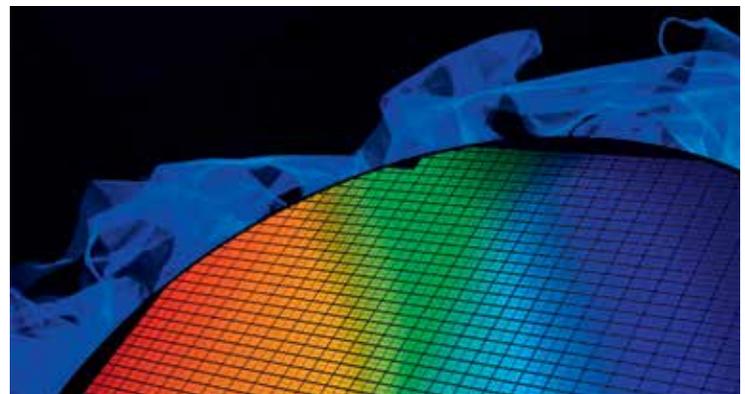
Dynavac's Inline systems offer the highest performance and lowest cost solution for a variety of thin film deposition requirements.



### **Engineering Expertise That Ensures Your Success**

When you partner with Dynavac, you work directly with scientists and engineers with hands-on experience with your application.

- Perform initial process development and produce coatings to provide assurance before your equipment is delivered.
- Design and fabricate custom fixtures to meet your specific application needs.
- Provide flexible control system architecture customizable for your production requirements.

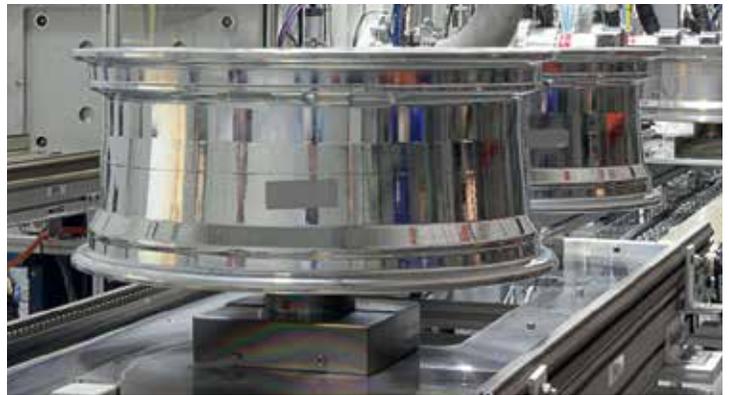


## Inline System Features

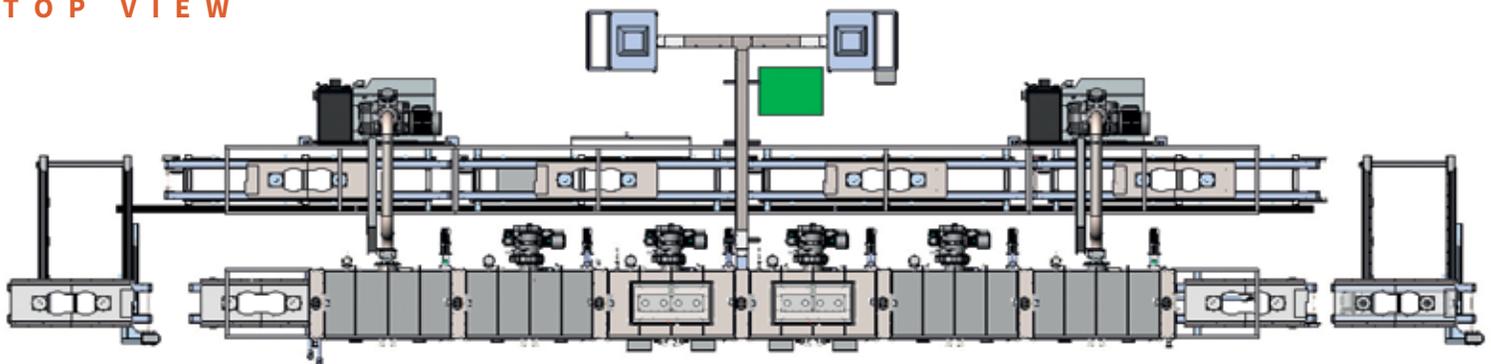
- Modular vacuum chambers for scalability
- Sputtering, evaporation, or ion-assisted deposition
- Fully automated production
  - Material handling systems
  - Integrated control systems
- Low cost of ownership
- Custom engineered fixtures to handle a wide range substrate types and sizes

## Applications

- Anti-reflection coatings
- Transparent conductive-oxide coatings
- Substrate metalization
- EMI shielding coatings
- Decorative coatings
- Substrate pre-post treatments (Plasma and thermal)



## TOP VIEW





# Specifications

## Vacuum Chamber

- Modular and flexible multi-chamber design
- High-duty chamber isolation valves

---

## Material Handling

- Tray, pallet or roller based conveyor systems to accommodate a variety of substrate geometries
  - Flat/rigid
  - Flexible
  - Three dimensional
- Accurate control and sensing to ensure precise positioning throughout system

---

## Pumping System

- High vacuum: cryopumps, turbopumps and diffusion pumps
- Rough: single or multistage mechanical pumps
- Water vapor pumping systems

---

## Process

- Substrate treatment
  - Heat
  - Plasma
  - Cooling
- Deposition methods
  - Magnetron sputtering
  - Electron beam evaporation
  - Ion assisted deposition

---

## System Control

- Fully automated system and process control
- Supervisory control system with HMI interface
- Enhanced data logging and trending capabilities
- Remote login feature
- Integrated quartz crystal monitoring
- Residual gas analyzer
- Plasma emission monitor

---

## System Commissioning

- Systems fully assembled and tested prior to shipment
- Installation, start-up and post-installation support

---

110 Industrial Park Road, Hingham, MA 02043

Tel: 781-740-8600 | [sales@dynavac.com](mailto:sales@dynavac.com)

[www.dynavac.com](http://www.dynavac.com)

**Dynavac**<sup>®</sup>  
30 Years of Innovation