

HIGH-SPEED COINING AND INSPECTION SYSTEM

SEMICONDUCTOR



The High-Speed Coining and Inspection System utilizes a common platform and software control to interface with custom substrates. The system integrates custom micron precision coining tools with the automation capabilities of an AeroSpec factory-ready system. The software operates with user friendly recipe control functionality. Systems are configured to optimally suit each customer's needs including hardware configurations, software automation, factory provisions, installation, and world-wide support.



FEATURES

- Four Microscope Camera Systems And One Confocal Sensor For System Alignment, Dimple Tool Inspections, Tool Positioning, And Post Coining Inspections.
- 23+ Optimized Recipe-Useable State Machines Including, But Not Limited To Initialization, Read ID, Tool Change, Calibration, etc.
- Precision Linear Motor Automation for X, Y and optional Z.

APPLICATIONS

- Semiconductor
- Medical Device

SPECIFICATIONS

- Configurable Product Nesting
- Integrated factory safety, S2S8
- Clean-Room Ready

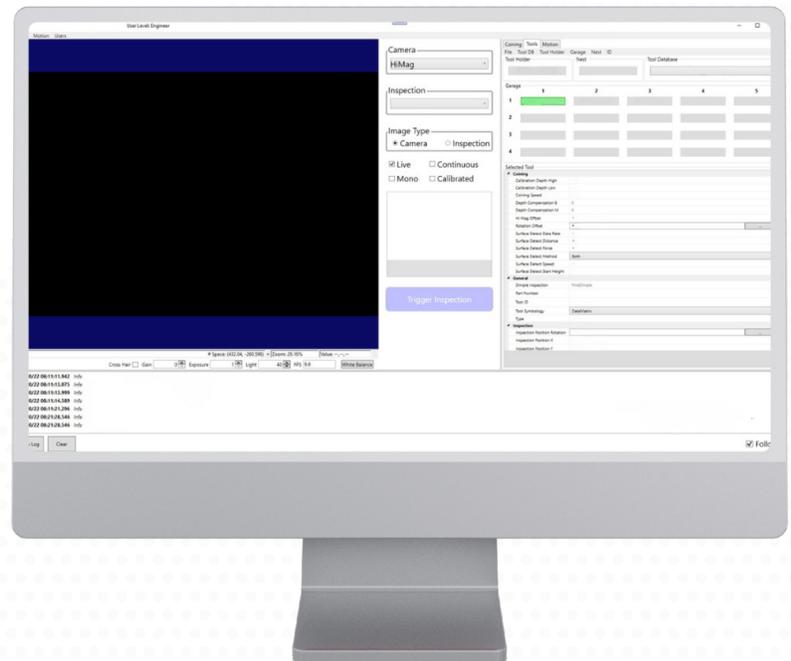
HIGH-SPEED COINING AND INSPECTION SYSTEM

SEMICONDUCTOR

The High-Speed Coining and Inspection System utilizes a common platform and software control to interface with custom substrates. The system integrates custom micron precision coining tools with the automation capabilities of an AeroSpec factory-ready system. The software operates with user friendly recipe control functionality. Systems are configured to optimally suit each customer's needs including hardware configurations, software automation, factory provisions, installation, and world-wide support.

SOFTWARE SPECIFICATIONS

- Software operates through loading of customer defined product maps.
- Software uses fully automated calibration to calculate offsets between tools (motion X/Y/Z, confocal, camera, tool, etc.).
- Software allows for customization of a "Tool Garage" by allowing the user to define various tool types in various positions to be used and swapped mid-process.
- Software allows for fully automated dimpling on customer defined locations.
 - o Test dimples are performed to calculate offsets between tool tip and camera mid-process.
 - o Post-dimple inspections are performed to ensure process completely successfully.
- After process is complete, software allows user to revisit failed points through a "Results Summary" view.
- Map views allow for manual alignment and navigation and of various points of the product.
- Software settings are fully configuration based and can be modified by users inside the software.
- Multiple levels of user control to enable/disable things like manual controls, debugging screens, etc.



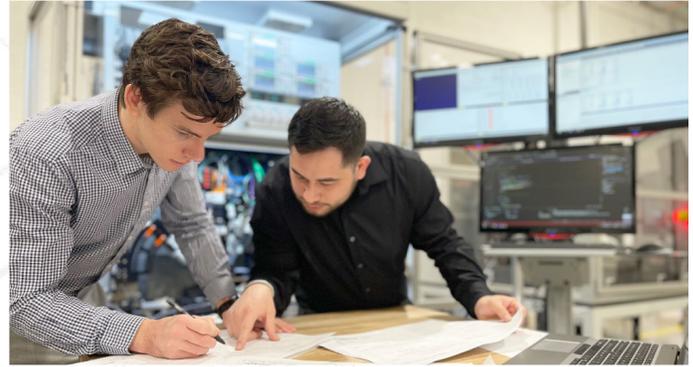
PHYSICAL / OPERATING SPECIFICATIONS

- **Operating Temperature:** Minimum 41°F (5°C), Maximum 113°F (45°C)
- **Humidity:** Minimum 20%, Maximum 90% (non-condensing)
- **Incoming Power:** 208Y/120VAC, 3-phase, 5-wire, 50/60 Hz, 15A maximum
- **Weight (max):** 3000 lbs
- **Dimensions:** 93 in (H) x 64 in (W) x 70 in (D)
- All maintenance tasks supported using standard hand tools.
- Configured for different input voltages.



PROJECT MANAGEMENT

Our project management services ensure the successful planning, execution, and delivery of engineering projects—from concept to completion. We specialize in coordinating multidisciplinary teams, managing timelines and budgets, mitigating risks, and ensuring compliance with industry standards and client requirements.



ENGINEERING DESIGN

We provide comprehensive engineering services tailored to meet the needs of a wide range of industries. Our expertise spans across planning, design, analysis, and implementation of technical solutions that are efficient, innovative, and cost-effective.



MANUFACTURING MACHINE SHOP

Our machine shop services support engineering projects with precision machining, custom fabrication, and high-quality metalwork. Equipped with advanced CNC and manual machines, we produce complex components to exact specifications, whether for prototyping, repairs, or full-scale production.



SUPPORT

Our field support services provide on-site expertise to ensure seamless execution and performance of engineering projects. From installation oversight and system testing to troubleshooting and maintenance, our experienced field teams deliver responsive, hands-on support.

LEARN MORE ABOUT OUR CAPABILITIES

☎ 1.888.854.2376 / 480.892.7195
🌐 aerospecinc.com
✉ support@aerospecinc.com

📍 505 E. Alamo Dr.,
Chandler, AZ 85225

