



# Owens Design

YOUR DESIGN + BUILD PARTNER

## Press Release

For Immediate Release  
9 A.M. EDT, November 14, 2007  
Contact Mark Danna | 510.659.1800  
danna@owensdesign.com

### **Owens Design Introduces a Standard Automation Platform for Semiconductor Metrology OEMs**

**Contract Design & Manufacturer for Capital Equipment expands its service solutions for the Semiconductor Equipment Industry by providing a standard metrology automation platform.**

*Fremont, California:* Owens Design Inc., a leading design and manufacturing service provider to the semiconductor, data storage and solar capital equipment markets, announces the introduction of “Atlas”, a standard automation platform for semiconductor metrology OEMs. This new platform drastically reduces the overall development cost and time to market for new metrology and inspection tools.

“Transitioning a new metrology process from a bench top R&D lab tool into a fully capable process production tool is a difficult and time-consuming task. Equipment developers face a tight market window, limited resources and a core competency focused on metrology, not 300mm factory capable tool development. Owens Design has years of experience solving these problems. Now we are introducing a standard metrology automation platform that further reduces the overall time to market and allows the OEM to focus on their core metrology competency” says Mark Danna, Sr. Business Director for Owens Design.

The Atlas platform uses a well-established industry standard 300mm/200mm capable EFEM to reliably align and transfer wafers from the loadports to the inspection station. Overall airflow and pressure balance between the process stage and the EFEM has been optimized through CFD modeling to ensure clean wafer transfer. The standard metrology automation platform has been designed to allow for wafer level thermal and vibration isolation to ensure a controlled environment for tool to tool matching. A standard power distribution and control system with a GUI interface has been integrated into the system and, when combined with the required connectivity software, the platform will meet all the 300mm factory software interface requirements. The Atlas tool platform has been designed to meet Semi S2 (operator safety) and Semi S8 (operator ergonomics) requirements.

The Atlas standard metrology automation platform is customized to allow for the integration of customer specific wafer staging, metrology modules, optics, wafer alignment mechanisms, and other components. Owens Design will customize the



# Owens Design

**YOUR DESIGN + BUILD PARTNER**

automation platform frame, skins, airflow, handling, and service access to meet specific customer needs.

Atlas Standard Metrology Automation Platform Specifications:

- \* Wafer Sizes: 200mm, 300mm, 200/300mm Bridge Tool
- \* Substrates Types: Si, Quartz
- \* Repeatability (at wafer hand-off location)
- \* X,Y,Z axis: 0.003 inches
- \* Theta axis: 0.1 degree

System Throughput

- \* Steady State (with OCR and align, excluding host process time): 180wph
- \* Expected Time to First Wafer: 18 seconds
- \* Expected Swap time (dual end effector): 3 seconds
  
- \* Cleanliness: ISO Class 1 environment

Reliability

- \* MTBF > 10,000hrs
- \* MTTR < 2 hrs
- \* MTBS > 6 months
- \* Availability > 98%

— End —

## About Owens Design

Owens Design specializes in engineering and manufacturing of capital equipment. Located in Silicon Valley for over 25 years, they have been a strategic partner in the co-creation and manufacturing process for many leading OEM capital equipment companies. Owens Design engineers and manufactures customer's products from concept, through alpha, beta, pilot and on-going production. Their development process results in a rapid design cycle and concurrent manufacturing introduction. Owens Design has and continues to be an innovative and reliable partner for equipment companies in the semiconductor, solar and related industries.