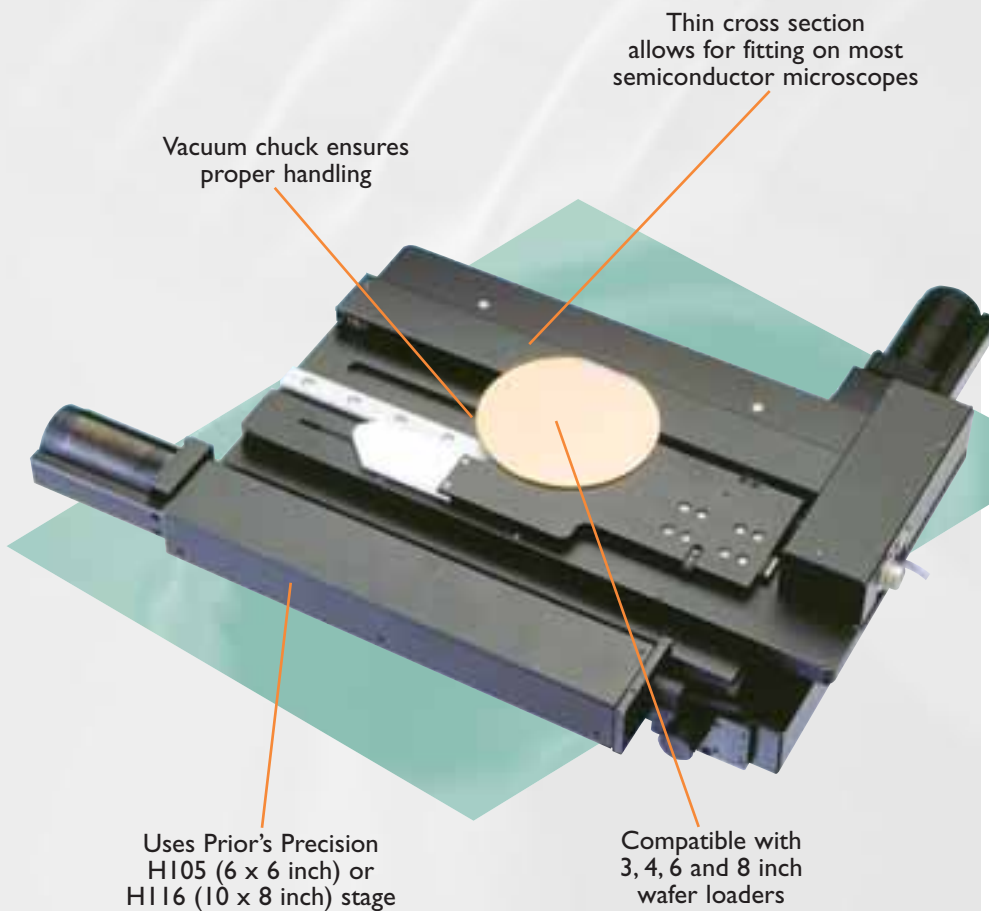


# Motorized Semiconductor Wafer Shuttle Stage

**PRIOR**  
Scientific

**For Nikon & Olympus Wafer Loaders**

## Features



The Prior Scientific motorized Shuttle Stage is designed to be used with the Nikon and Olympus wafer loader systems for 3, 4, 6, and 8 inch wafers. The system greatly reduces operator fatigue while increasing inspection accuracy and repeatability.

In operation, the Shuttle System automatically moves to the correct load position and activates the loader switch, notifying the loader that the shuttle's wafer chuck is in position to receive the wafer. After the wafer is transferred to the shuttle, the system senses the vacuum change and retracts the shuttle, moving the wafer to a pre-defined position (home). From this point the wafer can be scanned using the joystick or a programmed pattern for totally automated inspection.

The Shuttle Stage is used in conjunction with Prior's Touch Screen Keypad. This keypad allows users to quickly and easily set up and store inspection patterns and other stage parameters.

The system also has several features that insure smooth, error free operation:

- Power-up initialization procedures set the home positions of the X,Y, and shuttle axes.
- An optical sensor ensures that the stage is in the correct position before it allows the shuttle to move to the load position.
- A pressure sensor allows for the automatic retrieval of wafers to begin analysis.

## General Specifications

<b>Power</b>	Universal mains input 85-265 VAC, 50-60Hz
<b>Control Options</b>	Joystick, Touch Screen Controller, and RS232 ASCII command set
<b>Computer Interface</b>	RS232C
<b>Communication Protocol</b>	8 bit word, 1 stop bit, no parity, no handshake, baud rate of 9600, 19200 or 38400
<b>Step Size</b>	As small as 0.04 $\mu$ in XY; 0.002 $\mu$ in Z
<b>Wafer Sizes</b>	Accepts 3, 4, 6 and 8 inch wafers
<b>Controller Dimensions:</b>	350mm x 215mm x 98mm



Shuttle Stage



Shuttle Stage in load position

## Shuttle Stage Accessories



Shuttle System is shown in the load position with a H29XY4 Controller, CSI52KB Touch Screen Keypad and a CSI52V2 Joystick.

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Specifications subject to change without notice.