



# Flexi-PCS™

## Optical Edge Exposure System



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### Flexi-PCS Family:

Small Footprint  
Color LCD Touch-screen  
Non-Contact Optical Centering  
Remote Data Collection and Control  
Unlimited Process Storage Capabilities  
Multiple Size Substrates Without Change  
Clean, Robotic Wafer Handling  
Process Substrates to 200 mm  
All Servo Motion Control  
Proven Modular Design  
Ultra High Reliability

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### EDGE BEAD EXPOSURE FOR REMOVAL OR CURING

*S-Cubed* offers long proven process capability in combination with the most up to date control and software capabilities. New control technology has enabled a substantial reduction in cost, permitting *S*<sup>3</sup> to offer new equipment at costs that often are lower than used or rebuilt equipment, while offering superior process capability, reliability and new equipment warranty. The **Flexi-PCS™** provides the highest in performance, not in spite of its low cost, but because of it... *intelligent application of technology while at the same time lowering cost.*

- **Excellent Process Control**  
Wafer angular position control within one part in one thousand
- **High Reliability**  
Demonstrated 1000 hours MTBF
- **Programmable Exposure Width**  
Position precision within 25 microns
- **Lamp Life**  
2000 Hours for lower operating costs
- **Small Size**  
Typical system with two cassettes is less than 1/2 Meter<sup>2</sup>
- **Granular Modularity**  
Get what you need when and as you need it
- **Low Cost**  
Fewer parts for lower cost and improved reliability

The **Flexi-PCS™** utilizes a PC based control system enabling advanced image analysis for wafer positioning and sensing. A suite of servo driven actuators ensure precise closed loop control of all system operational parameters. The application of intelligent control eliminates entire mechanical subassemblies further reducing cost and improving reliability.

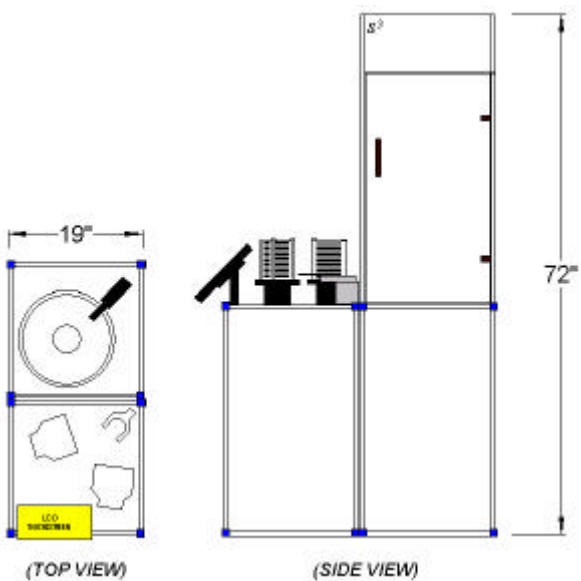
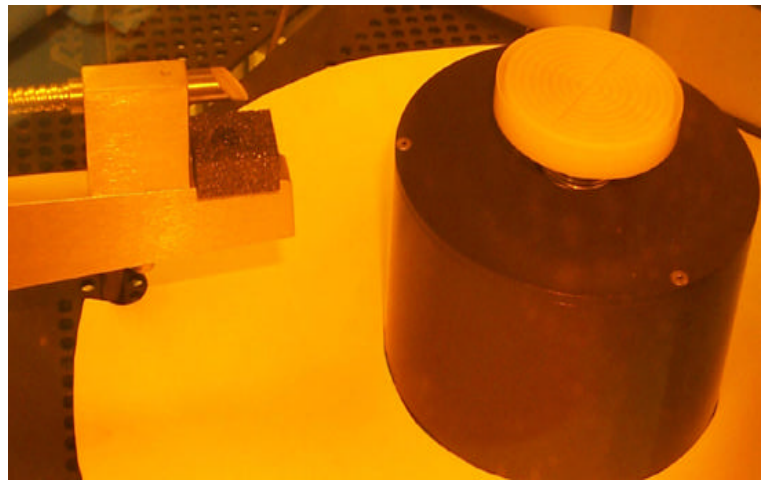
For more information on all products including the new **Flexi-PCS™** system, the **TruClean™** double-sided scrubbing systems, and **Cy-clone™** spin processors, please visit our website, [www.s-cubed.com](http://www.s-cubed.com).

*S*<sup>3</sup>

# Flexi-PCS™ Exposure Module

## Features

- Digitally controlled motion amplifier
- All DC brushless servo motors
- Flat / Notch finding and alignment for better azimuthal information and control
- Multiple wafers size processing without hardware changes (made possible by the high resolution camera used for wafer centering)
- Zero relative motion of the wafer to the machine throughout for enhanced system and wafer cleanliness
- 200 Watt lamp with 30W/cm<sup>2</sup> output to deliver the required intensity over a broad range of applications
- Radiometer controller for closed-loop monitoring and regulating of the programmed lamp output intensity
- Intelligent lamp power capability for maintaining optimum operating conditions and stable lamp output for longer lamp life
- Lamp, light guide and lamp shutter alarms
- UV protective barrier enclosure
- Optional “clip area” exposure software permits user programmable definition of clip areas up to 12 mm width



*Typical Stand-alone Optical Exposure System with UV Protective Enclosure*

## Specifications

Lamp	High Pressure 200 Watt Mercury Vapor Short Arc
Lamp Life	2000 Hours
Warm Up Time	4 Minutes
Light Guide	3 mm Standard 5 mm, 8 mm Optional
Bandpass Filter	320-500nm Standard 365nm, 320-390nm, 400-500nm Optl.
Intensity Level	200mw/cm <sup>2</sup> - 30W/cm <sup>2</sup> programmed in mw/cm <sup>2</sup>
Intensity Control	+/- 5% of programmed level



Value Engineered Process Systems

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