

## PERFORMANCE ENHANCEMENTS

### Sustainable Solutions is Our Ongoing Commitment

Concept Part Solutions is dedicated to extending the lifetime of your maturing semiconductor manufacturing equipment. As your toolsets age and new processes emerge, we pursue every opportunity through our Continuous Improvement Program (CIP) to offer important enhancements that increase the reliability, productivity, and performance of your install base.

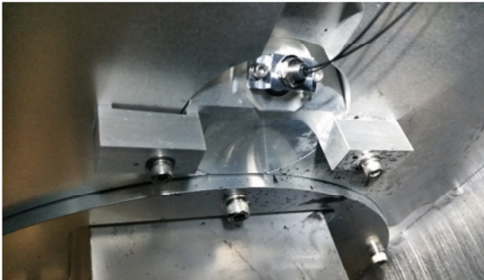


## Concept One Dielectric

# Wafer on Paddle Sensor (WOPS)



Quartz WOPS Reflector



Quartz WOPS Emitter

**Concept Part Solutions is committed to ensuring our end users have the ability to reduce scrap on their C1D platforms. CPS provides a Wafer on Paddle Sensor enhancement to help identify incidences of improper wafer handling.**

Wafer mishandling during process runs is a major contributor to wafer scrap incidences potentially costing end users thousands of dollars. The Wafer on Paddle Sensor (WOPS) is designed to detect improper wafer handling when transferring wafers from the cassette to the reactor chamber and from the reactor back to the cassette.

As wafers are removed from the cassette and transferred to the reactor, the WOPS will detect the wafer is on the paddle and that it is centered correctly prior to placement in the chamber. If not, the C1D system will generate an error and allow the operator to abort the tool and rectify the issue before continuing. Conversely, should a wafer drift within the reactor during processing, and the product is misaligned (or missing) upon retrieval, the WOPS will detect the issue, generate an error, and allow for end user recovery before continuing.

CPS offers two types of WOPS systems, one for silicon and GaAs wafers and another for glass wafers, i.e. Silicon Carbide, Sapphire, quartz, etc.

### Upgrade Benefits

- Helps to reduce wafer scrap from mis-handling of wafers during robot and spindle transfer activities
- Immediate return on investment



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Concept One 150mm and 200mm  
**Wafer on Paddle Sensor**

### Get More Information on System Performance Enhancements

To find out how to improve the performance and productivity of your CPS supported systems, call your local CPS Sales and Service Office for complete ordering information, or visit [www.conceptpartsolutions.com](http://www.conceptpartsolutions.com).

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### System Prerequisites:

For Quartz WOPS option, Load Lock PN 16-72159-00 Rev J or later is required. Contact your local CPS representative for systems with Load Locks built prior to 1995 is requesting this version of WOPS.

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### Ordering Information:

Red Visible WOPS (for Silicon and GaAs)	05-117865-00
Quartz WOPS (all wafer types)	04-358890-00

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Some Upgrades may require an audit of your System; Contact your local CPS Representative to verify the Upgrade Kit before ordering.