

## PERFORMANCE ENHANCEMENTS

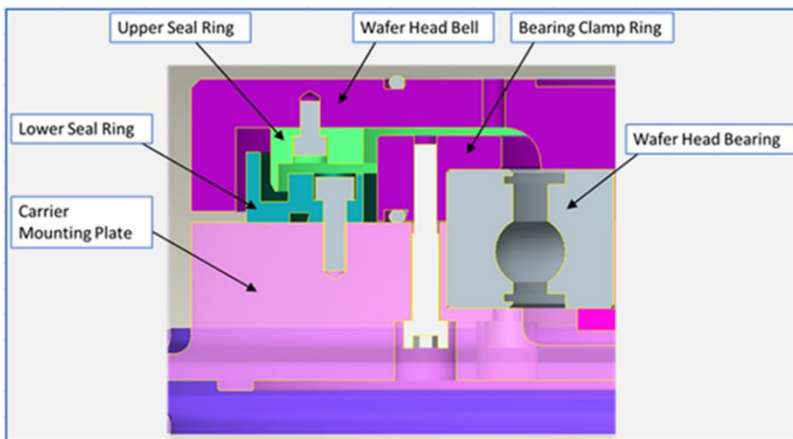
### Sustainable Solutions is Our Ongoing Commitment

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.



**CMP - MV200 / 776 / 676**

## Labyrinth Wafer Head Seal



**Reducing process defects is a never-ending objective for improving product yield on CMP equipment. CPS has released a new product enhancement, the Labyrinth Wafer head Seal, to address a major equipment contributor of particles on Speedfam/IPEC CMP systems.**

The Labyrinth Wafer Head Seal Upgrade replaces the existing rubber lip seal with a non-contact set of labyrinth rings. The original rubber lip seal required continuous contact between a stationary wafer head bell and the rotating carrier mount plate. This continuous seal contact with a rotating surface results in a significant amount of rubber particle generation over the polish pad. As a result, the tool required regular maintenance to clean and manage the particles on the wafer head as well as a regular PM seal replacement. These items all contribute to additional tool downtime.

The non-contact design of the Labyrinth Seal eliminates the rubber seal and the potential of particle generation since there is no contact between rotating surfaces. There is no particle buildup to be managed and the regular seal replacement PM is eliminated. And because there is no seal degradation with a set of labyrinth rings, full moisture protection of the wafer head bearing is never compromised.

### Benefits

- Elimination of major particle generation source on tool
- Improved spares cost of ownership (eliminates consumable wafer head seal)
- Life Extension for wafer head bearings due to reduced exposure to water

[Additional information on back](#)



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**Labyrinth Wafer Head Seal**

### **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:**

- The module Wafer Head Bell and Wafer Carrier Mount will need to be modified to allow installation of new hardware. Contact CPS for machining instructions or routing guidance to CPS for modification (additional costs will apply).

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### **Ordering Information:**

**RETROKIT, NON-CONTACT SEAL, WAFER HEAD ASSEMBLY  
05-421500-00**

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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.