

PERFORMANCE ENHANCEMENTS

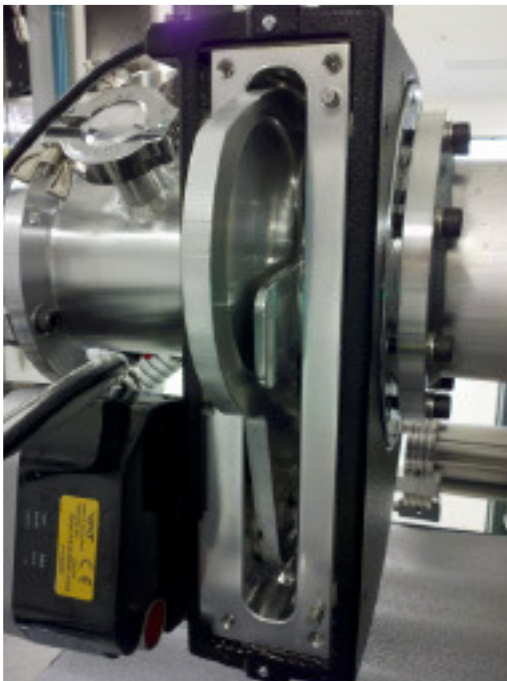
Sustainable Solutions is Our Ongoing Commitment

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.



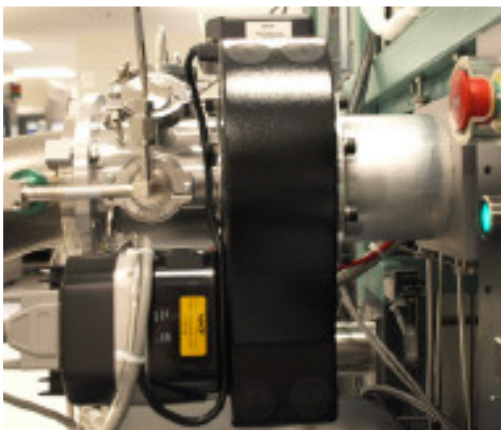
Concept One Dielectric

Heated Pendulum Valve



Concept Part Solutions is working to extend the lifetime of today's aging semiconductor manufacturing equipment. Component obsolescence and reliability are driving suppliers to provide innovative improvement upgrades to meet these demands. The C1 Heated Pendulum Valve is a system enhancement that will provide greater reliability and extendibility for the Concept One System platform.

The C1 platform uses the combination of a TYLAN throttle valve and VAT gate valve for pressure control. The Throttle Valve controller in the current configuration is now obsolete driving the need for an option to extend system lifetime. The Heated Pendulum Valve is a dual-purpose component that replaces the current two Valve configuration with one, easy to maintain unit. The Pendulum valve has a built-in heater circuit to maintain the valve at 120 degrees C. The Pendulum Valve enhancement uses Kalrez O-rings to maximize the number of wafers that can be processed before the unit requires a PM resulting in improved MTBF. Process results show faster pressure control from wafer transfer to process steps. Process results are transparent; there is no change to process performance or particle data. The normal PM of the valve can be completed in less than 30 minutes since only the slider plate needs to be removed. The Heated Pendulum Valve is available for both the external and internal valving configurations.



Upgrade Benefits

- Simplified design is more reliable than current configuration improving reliability – Up to 2X MTBF improvement over current throttle valve and gate valve
- Integrated heater reduces by-product build up
- Pendulum Valve cost is 40% less than current 2 valve configuration; eliminates need to stock multiple items
- Decreased PM frequency – Gate Valve & Throttle Valve are PM'ed every 120k wafers vs. 240k wafers for the Pendulum Valve
- Time to PM is reduced from 2 hours to 30 minutes
- Fully tested, process transparent obsolescence replacement option for aging equipment components



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Concept One 150mm and 200mm
Heated Pendulum Valve

**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.

System Prerequisites:

Upgrade can be external or internal to system; review with your local CPS representative before ordering

Ordering Information:

Heated Pendulum Valve Upgrade

05-346895-XX

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