

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

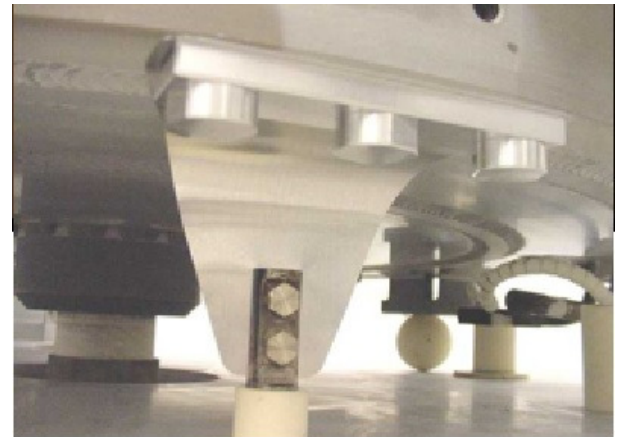
RF Strap

Concept Part Solutions is committed to improving the sustainability of the Concept One system. Proven enhancements, originally developed by the OEM, are available for the C1. The new RF strap offers enhanced design and improved placement.

Reduces Cost and Improves Availability

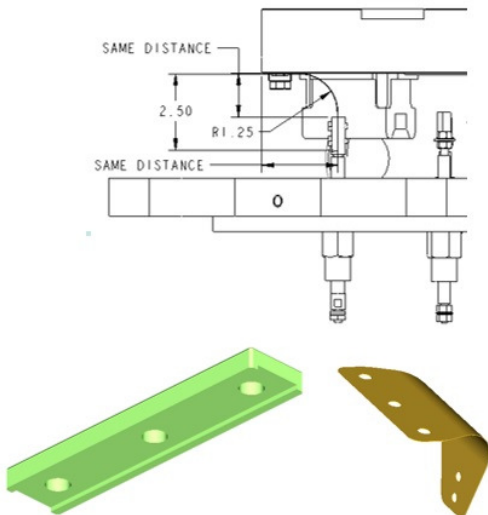
On some processes, the Concept One can experience an AlF3 build-up between the strap and the heater block. The result of this build-up impacts the low Frequency RF and Peak-to-Peak Voltage (V_{pp}), and allows the tuning capacitor to drift. The increased voltage on the tuning capacitor can lead to problems that include arcing and tripping the heater circuit breaker.

The enhanced RF strap has changed both in its design and its placement. In tests across several processes, including Novellus BKM 400°C POR3L (Cu-Damascene) FSG, BKM SiO₂ and BKM SiN with C2F6O₂ clean, the results have shown a 3X improvement over the current design, increased availability and reduced cost of ownership (by eliminating the recommended PM at 60K* and requiring RF strap replacement only on an as-fails basis).



New RF Strap Design and Location

New RF Strap and Contact Configuration



Benefits

- Improves uniformity and yield (based on OEM BKMs)
- Through reduced Fork particle pattern appearance on wafers with FSG process
- Reduces AlF3 buildup on the contacts between RF strap and heater block
- Increased system availability by reducing PM requirements
- Extends lifetime by 3X over current design



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Concept One 150mm and 200mm
RF Strap

**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:

Heater Blocks manufactured before 2011 do not have the necessary holes on bottom to incorporate the new RF Strap

Ordering Information:

RF Strap & Clamp Bottom HTR

05-259784-00

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