

Eclipse Wafer Holder Rebuild Program

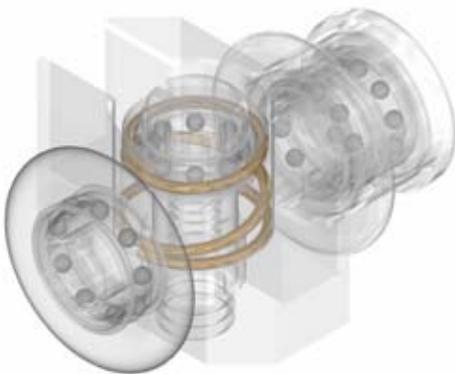


Program Overview

Introducing ASSET Solutions Wafer Holder Rebuild Program (WHRP) for the Eclipse PVD equipment platform. Our WHRP is engineered to help our customers optimize the quality of their wafer holders – reducing wafer breakage and overall tool downtime due to malfunctioning wafer holders.

How does our WHRP work? When a set of wafer holders (5) is removed for preventive maintenance, the set is shipped to us and our WHRP handles the rest. Once received, our highly experienced personnel disassemble each wafer holder, then strip and clean each wafer holder component. Depending on process requirements, each wafer holder clamp ring is grit blasted and/or arc sprayed, then flattened. Each component is then inspected for critical dimensions. Non-conforming components are discarded and replaced with conforming components prior to rebuild. Each clamp ring and housing is serialized and matched for tracking purposes. Once rebuilt, each wafer holder is cleaned, individually labeled, and the entire set is packaged together for shipment back to the customer.

Eclipse Hybrid Bearing Latch



Program Highlights

- All wafer holder replacement components are included in our WHRP. Therefore, our WHRP customers never have to purchase a wafer holder component again. In addition, current customer inventories can be phased out through our WHRP.
- If not already in use, our customer's current latch is phased out and replaced with our high performance Hybrid Bearing Latch. Our Hybrid Bearing Latch has proven over and over again to be the most reliable and cost effective latch in the industry – eliminating wafer breakage due to latch failure and reducing particles wherever implemented, especially at elevated process temperatures.
- Proven arc spray techniques can be applied to wafer holder clamp rings to further reduce particles around the wafer.
- Our customers don't have to consume valuable resources on tedious wafer holder rebuilds - resources that can be used elsewhere in the fab.



Program Quality Guarantee

- All wafer holder clamp rings are 100% inspected for flatness, finish and wafer vent depth (at flat or notch) prior to rebuild. Inspection reports are generated and can be provided for each clamp ring upon request.
- All latches are 100% inspected before and after rebuild to detect roller binding. To prevent actuator hang ups, each latch is leveled parallel to its respective clamp ring.
- All wafer holders are aligned in wafer holder alignment fixture during rebuild.
- All wafer holder components are assembled together using preset torque specifications.
- All wafer holder replacement components meet or exceed OEM specifications.
- All wafer holders are cleaned, assembled and packaged in a class 100 clean room environment and are ready to be installed upon arrival.

Cost of Ownership Reduction + PVD Equipment Enhancement