

## **RCA Report - Photolithography Scanner (PLS-400) - Incident #54**

Incident Summary: Photolithography Scanner (PLS-400) experienced an operational anomaly resulting in a production delay during shift C.

Data Analysis: Sensor logs showed abnormal readings in chamber pressure and temperature. Comparison with baseline identified drift of over 10% in the affected module.

Root Cause: Faulty calibration of the pressure control valve caused instability in process conditions, leading to wafer misalignment.

Corrective Actions: Recalibrated the valve, updated the control firmware, and scheduled preventive maintenance checks every 4 weeks.

Follow-Up: Yield restored to baseline levels after 3 monitored lots. No recurrence observed over 2 weeks.

Incident closed.