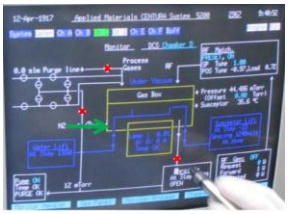
WSIX PM PROCEDURE

PM Type: YPM
Machine: WSIX CVD
PM Frequency: 20000 to 22000 wafer

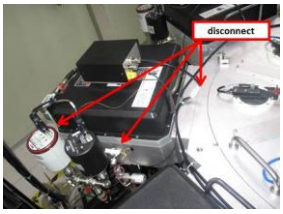
Prepared by:
Robin 羅彬森
S200 FURNACE
Date: May 2017

1. *Confirm if chamber is ready to PM, (No wafer process inside)*

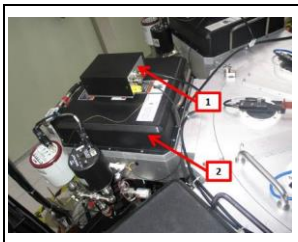
2. *Confirm if slit valve closed than Set chamber service to OFFLINE for Maintenance,*



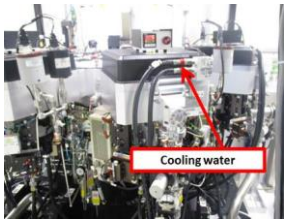
3. *Turn off throttle valve and AR gas supply and vent chamber*



4. *Remove heater connection, and TC cable wire*



5. *Remove TC monitor and top cover*

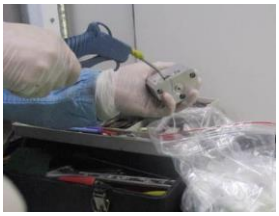


6. *Remove chamber lid cooling water hose connection*

7. *remove chamber (3screw) and takeout chamber lid*

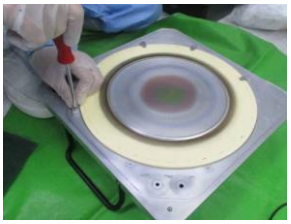
8. *On chamber Lid, remove gas feed line assembly,*

9. *Disassemble gas feed pipe to clean inside*



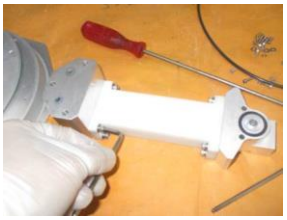
10. *Clean inside manifold part using pressured air*

11. *Change all o ring and change quarts tube pipe*

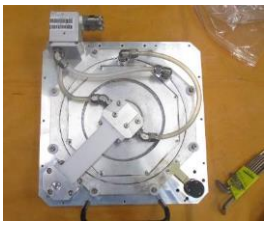


12. *Remove shower head assembly*

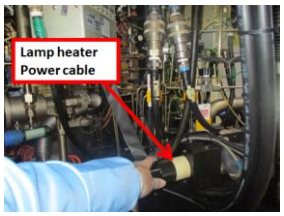
13. *clean shower head then clean by IPA and pressured air TOP and BOTTOM*



14. *Assemble and install clean gas feed pipe*

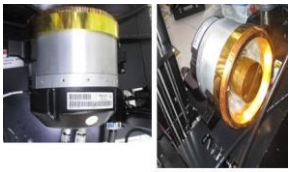


15. *Clean and assemble chamber lid with shower head and gas feed assembly. Change all O-ring*



16. *Remove lamp heater power cable*

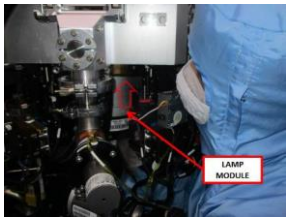
17. *Remove lamp heater cooling water supply*



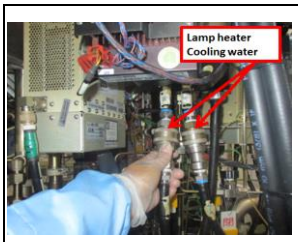
18. *Remove Lamp heater module*

19. *Remove quarts window, 8screw*

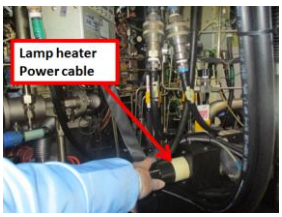
20. *Install new/clean quarts window using new o ring*



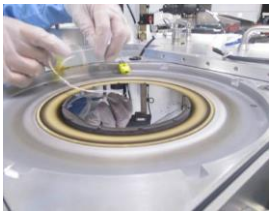
21. *Install Lamp heater module*



22. Connect chamber cooling water supply



23. Connect lamp heater and power cable

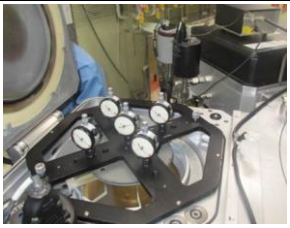


24. Install chamber lid and put TC wafer on suscepter (wafer process position

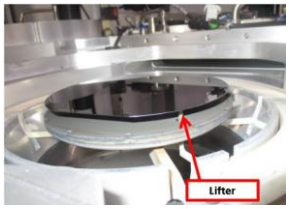
25. Close chamber and connect temperature meter

26. Pump down vacuum and heat up to 400 degrees

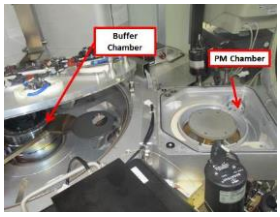
27. Check and adjust and check reading until TC wafer Temperature reading reach 340degC



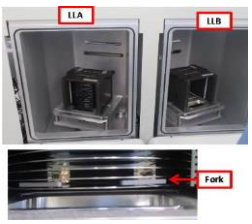
28. Cool down chamber, open and check horizontal level of suscepter. Adjust if needed



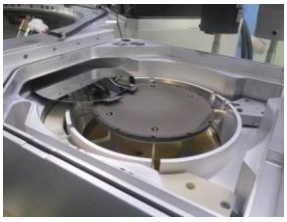
29. Move up lifter, put dummy wafer on top and check horizontal level. all finger position must touch wafer



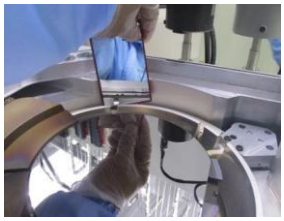
30. Open buffer chamber to check transfer



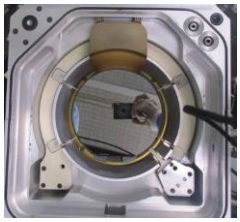
31. Remove dummy on chamber. Transfer check by loading cassette of dummy wafer from Load lock A and B



32. Check and watch transfer robot position 1 by 1 step to each chamber

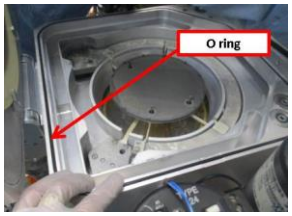


33. Check transfer if height of wafer do not touch chamber lifter



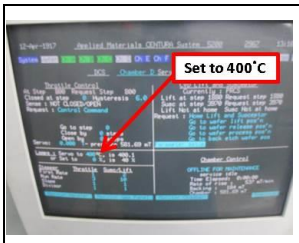
34. Do wafer transfer to chamber then check and adjust wafer position to center of susceptor.

35. Transfer Ok, change slit valve O ring



36. Change chamber lid O ring clean inside and close chamber

37. Close chamber pump Vacuum and purge AR gas



38. set heat up to 400degC

39. Conduct leak check average of <0.8mTorr/min

EA
TEST RUN

40. Inform EA for test run and PTC inspection