**Westech 372 : Pad Change Procedure**

Note: To give easier access to the platen/spindle for pad changing, select MENU, MACHINE CALIBRATION, FINAL PLATEN CENTER (or PRIMARY PAD CENTER), MOVE ARM. This moves both the carrier and counterweight on the arm out of the way. Make sure the spindles are ON before doing this, using the BLUE SPINDLES button.

1. Select OPERATION, MENU, PAD MAINTENANCE PANEL; then select PRIMARY or FINAL WET CYCLE TIME as required. Set time to 0. This will stop the periodic wetting of the pad.
2. Open door on side of tool with pad to be changed. This will stop the platen from spinning.
3. Rinse off pads with DI water if used within approximately the past hour. This step is optional if pads have been continually wetted on a regular basis within the last hour.
4. Remove tie wraps from around dispense tubes if required.
5. Remove dispense tubes, noting which ones came from which holes in the dispense mechanism.
6. Remove pads, rolling them up as you do so. Tie-wrap rolled pads and place in bag or designated drum. If pad cannot be rolled, then fold in half and press together to keep flat. **\*\*\* TAKE EXTREME CARE NOT TO DAMAGE POLISHING TABLE!!! \*\*\***
7. Check table for adhesive residue. If found, use the back of a just-removed pad to "pick up" the adhesive from the table.
8. Dry table with blue wipes, spray with IPA to clean it, and then dry it again.

**Tri-stack configuration, Primary Side :**

1. Peel back about 4" of backing on the SUBA IV pad and fold down.
2. Place the section down on the platen.
3. Rub hand back and forth across pad to promote adhesion. A roller can be used to smooth out any air bubbles.
4. Pull back more of the backing, press down, and rub hand back and forth.
5. Repeat until all backing is removed.
6. Take hand and smooth pad on table, ensuring there are no air bubbles or bumps. If so, remove pad and try again or use hand to push air bubbles out from under pad.
7. Peel back about 4" of backing on the K GROOVE pad and fold down.
8. Place the section down on the SUBA IV.
9. Note that with the thicker pads it may be necessary to bend the pad first to be able to get a grip on the backing to peel it off.
10. Rub hand back and forth across pad to promote adhesion. A roller can be used to smooth out any air bubbles.
11. Pull back more of the backing, press down, and rub hand back and forth.
12. Repeat until all backing is removed.
13. Take hand and smooth pad on table, ensuring there are no air bubbles or bumps. If so, remove pad and try again or use hand to push air bubbles out from under pad.
14. Peel back about HALF of the backing on the PERF pad and fold down.
15. Place the section down on the K GROOVE.
16. Rub hand back and forth across pad to promote adhesion. A roller can be used to smooth out any air bubbles.
17. Pull back the REST of the backing, press down, and rub hand back and forth.
18. Take hand and smooth pad on table, ensuring there are no air bubbles or bumps. If so, remove pad and try again or use hand to push air bubbles out from under pad.
19. Rinse pads with water from hose.
20. Replace dispense tubes.
21. Replace tie wraps around tubes to hold them in place, if required. Tubes must be set up so they do not interfere with each other, the conditioner, or the arm; and that the dispense goes to approximately the middle of the pad. Be sure the water dispense tube (short tube) is not pushed in too far, as this will restrict the flow of water.
22. Change to the POR conditioner for standard polishes.
23. Change to the TiStop conditioner for TiStop Tungsten (W) polishes.
24. When removing old conditioner on tool keep the diamond surface UP and off of other surface to avoid loosening diamonds which can lead to poor performance and/or scratching of wafers.
25. Condition pad for 10 minutes.
26. Run three oxide dummies for 2 min each with the standard CuC recipe (70/38 rpm, 5/1.5 psi)
27. Qualify the tool with a 2 min CMP-TOXxxx monitor
28. Expected oxide rate is ~750-1100 A/min with a standard deviation no greater than 6.1% (15 mm exclusion zone).

**VP5000XY configuration, Primary Side :**

1. Peel back about 4" of backing on the VP5000XY pad and fold down.
2. Place the section down on the platen.
3. Note that with the thicker pads it may be necessary to bend the pad first to be able to get a grip on the backing to peel it off.
4. Rub hand back and forth across pad to promote adhesion. A roller can be used to smooth out any air bubbles.
5. Pull back more of the backing, press down, and rub hand back and forth.
6. Repeat until all backing is removed.
7. Take hand and smooth pad on table, ensuring there are no air bubbles or bumps. A roller can be used to smooth out any air bubbles.
8. If any air bubbles found, remove pad and try again, or use hand to push air bubbles out from under pad.
9. Rinse pad with water from hose.
10. Replace dispense tubes.
11. Replace tie wraps around tubes to hold them in place, if required. Tubes must be set up so they do not interfere with each other, the conditioner, or the arm; and that the dispense goes to approximately the middle of the pad. Be sure the water dispense tube (short tube) is not pushed in too far, as this will restrict the flow of water.
12. Change to the Nalco conditioner for standard polishes.
13. When removing conditioner keep the diamond surface UP and off of other surface to avoid loosening diamonds which can lead to poor performance and/or scratching of wafers.
14. Condition pad for 20 minutes. (Two cycles of 10 minutes.)
15. Run three oxide dummies for 2 min each with the standard Nalco recipe (120/90 rpm, 5/2.5 psi)
16. Qualify the tool with a 12 min SIPOLISH monitor polishing the smooth side.
17. Expected Silicon rate is ~1.6um/min at the CENTER and ~1.8um/min at the MID/EDGE. This will counteract the incoming profile from the coarse grind tool.

**Politex configuration, Final Side :**

1. Peel back about 4" of backing on the Politex pad and fold down.
2. Place the section down on the platen. BE CAREFUL NOT TO INTRODUCE ANY AIR BUBBLES.
3. Rub hand back and forth across pad to promote adhesion.
4. Pull back more of the backing, press down, and rub hand back and forth.
5. Repeat until all backing is removed.
6. Take hand and smooth pad on table, ensuring there are no air bubbles or bumps. If so, remove pad and try again or use hand to push air bubbles out from under pad.
7. Rinse pad with water from hose.
8. Replace dispense tubes.
9. Replace tie wraps around tubes to hold them in place, if required. Tubes must be set up so they do not interfere with each other or the arm; and that the dispense goes to approximately the middle of the pad. Be sure the water dispense tube (short tube) is not pushed in too far, as this will restrict the flow of water.
10. To break in the pad, run at least 5 dummies of 30 seconds each with Ta33 or the like.
11. There is no standard qual for this side
12. As the pad ages, insure that it has less than 300 wafers and that the POR carrier was properly qualified on the other platen when the Politex is to be used, if possible.