LAPPING PROCEDURE FOR GP-B ROTORS

GP-B PROCEDURE NO. P0074

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Supplies:
Microgrit Alumina Lapping Powder WCA-9T (coarser), WCA-3T (finer)
Deionized water from supply behind HEPL

Lapping Powder Supplier:
Industrial Tool and Supply
1177 North 15th Street
San Jose, California 95115
(408) 292-8853

Procedures:
1. Clean, lubricate and if necessary align the machine.

2. Preparation of Slurry:
   (a) 400 ml deionized water
   (b) 200 ml Alumina Lapping Powder 9T
   (c) Load into mixer, start mixer, start pump to check slurry delivery.

3. Load Sphere into Lapping Machine
   (a) Check Laps for Burrs.
   (b) Load the sphere by making first contact with one lap, then second lap and then third lap.
   (c) Wet the sphere with slurry.
   (d) Insert upper lap (A). Lower upper motor and lap.
   (e) Tighten upper motor. Adjust position of slurry delivery tube.

4. Starting Motors and Timer:
   (a) Initialize digital controllers by pressing ENTER.
   (b) Motors should run at 250 RPM.

5. Replenish slurry as necessary.

6. After lapping, the rotor should be thoroughly washed and a fresh packaging should be used.

Monitoring the diameter of the sphere and change to finer abrasive (3T):
Measurement of the diameter is described in P0076.
When at 1.51," switch to finer abrasive WCA-3T.
Repeat the steps open (1) through five (5) and carry on the process until diameter is 1.4964”
+ .0001” /- .000.”
Perform the measurement by comparing the diameter with the standard sphere R7 and weigh the sphere.
Record polishing time and diameter in laboratory notebook at the end of each run.