



## FABRICATION OF MOLYBDENUM PUCK BODY

CIS

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This note summarizes the steps for fabricating the molybdenum “PUCK BODY” as described in drawing JL0047248.

1. Machine and Assembly Steps
  - a. Machine puck, key and dowel pin
  - b. Trial fit-up of puck, key and dowel pin
  - c. Initial cleaning of components with micro and acetone rinse (do not acid etch before key is pinned)
  - d. Install key and pin into puck body
  
2. Acid Etch Steps
  - a. Remove indium if needed (isopropyl + indium ball to get indium off)
  - b. Moly Etch Aqua Regalis (1:3 HCl:Nitric), 10 seconds, rinse, check surface, repeat for 10 more seconds if needed, rinse, check surface
  - c. Ultrasonic cleaning in DI water after (USC twice to ensure removal of acid from around ear)
  - d. Rinse, air dry in hood, bag for heat treatment
  
3. Vacuum Bake Steps
  - a. Use a vacuum oven to degas puck.
  - b. Use a ramp rate of 10-15 degrees Celsius per minute.
  - c. Ramp to 900 degrees Celsius.
  - d. Soak for 120 minutes, recording pressure every 30 minutes.
  - e. Ramp and cool to room temperature
  - f. Bag puck, if possible in GN2.