



Procedure 03-8083-P07

Internal Surface Finishing



Purpose:

To create a uniform finish on chamber and chamber parts

Scope:

Applicable to chamber and components, as required.

Equipment:

- All equipment shall be nonferrous ceramics or nonmagnetic stainless steel and must be new or previously used on Inconel or austenitic stainless steel.

Belt sander
Red 'Scotch Brite' pads
60, 80, 100 and 120-grit sandpaper
Rapid-Tap cutting fluid
Methyl hydrate
'A-Tork' wipes
Face visor
Particle/dust mask
White, one-sided sticky plastic
Yellow sealing tape
Pocket-Surf Electronic Surface Gauge

Procedure:

1. Ensure to wear a face visor and particle/dust mask at all times while finishing to protect against contact with eyes and mouth.
2. Use the belt sander complete with 60-grit sandpaper and go over entire surface with uniform strokes to create an even finish.
3. Repeat step (2) replacing 60 with 80-grit sandpaper.
4. Repeat step (2) replacing 60 with 100-grit sandpaper.
5. Repeat step (2) replacing 60 with 120-grit sandpaper.
6. Visually inspect surface for any remaining scratches, machining line, etc. If any exist, return to steps (2) – (5) depending on how deep they are.
7. Test for roughness using the Pocket-Surf, as per Pocket-Surf Operator's Manual, to ensure finish is 32 RA or better in preparation for electro-polishing.
8. Proceed to 03-8083-P06 for cleaning.
9. Cover surface with tape and white plastic to protect from exposure.