## **Protocol for Operating Polisher XP-08**

- 1. Inspect initial condition of the material in question and determine whether it is fine enough to be polished or whether it requires mechanical finishing before hand.
- 2. In the case of metals it is advised to first do filing and sanding operations on the Lathe machine before using the polisher.
- 3. Before using the polisher, take care of the following:
- a. Check whether previous polishing cloth can still be used.
- b. If the cloth cannot be used, remove slowly from the aluminium plate and apply the 3M Adhesive remover. Allow the remover to stay on the plate for about 2 minutes; start the machine and wipe the residue using a roll of tissue.
- c. After ensuring that the plate is clean, paste the polishing cloth on to the plate.
- 4. When using the polisher take note of the available diamond compounds and arrange them in descending order.
- 5. Apply the diamond paste with the largest size on the outer rim of the polish cloth and using high RPM, gently but firmly press the metal to the polish cloth. Ensure that gloves are worn, as the material tends to get very hot.
- 6. Clean the surface by gently moving it towards the inner part of the disk that is free from the diamond compound.
- 7. Apply the diamond paste with smaller size at a smaller radius than before and then proceed as before.
- 8. Clean again and if necessary, change the polish cloth to use the remaining diamond compound.
- 9. Keep rotating material at 90 degrees to previous position to ensure even finish.
- 10. Repeat steps again if results do not seem satisfactory; however, spend at least 3-4 minutes on each compound.

## **Precautions**

- 1. Wear an apron, as material will fly on to clothing
- 2. Wear glasses as material may fly in to the eye
- 3. Wear gloves, as material gets very hot
- 4. Always keep a firm steady hand, object may fly outwards and cause injury