

- 7 - When hollow mill dimension is rough or varies in size.
  - a. Check for proper grind.
  - b. Worn or loaded cutting edges.
  - c. Check for proper alignment (work piece to mill).
  - d. Check for proper feed.
- 8 - When improper step or shoulder appears.
  - a. Check form tools for alignment.
  - b. Check box tools for alignment or distance of travel.
  - c. Check if drills are of proper depth and sharpness.
  - d. Check for loose tool holders.
- 9 - If rolled threads are out of form or flaky (scissor type).
  - a. Check feed or penetration of work.
  - b. Check proper blank size.
  - c. Check blank for taper.
  - d. Check when on high point of cam that rolls and work are on this same center.
  - e. Check for proper roll synchronization.
  - f. Check for nicks.
- 10- If reamer chatters.
  - a. Too much clearance on spiral relief.
  - b. All reamers should be able to float, but tension on float should be controlled. Therefore, check for proper alignment and float tension.
  - c. Make sure feed is right for size of reamer.
  - d. Check for low cutting edges.
- 11- If tap trouble.
  - a. If tap is cutting under size, low cutting edges (flute out tap) after tapping part, part should be able to be threaded on tap by hand.
  - b. Check timing on the threading clutch shifting.
  - c. Check radial torque on threading clutch (use torque wrench) See MB-226-SA - Sheet #3.
  - d. When checking torque make sure you can feel the chatter (If not it is possible the key in the clutch body may be sheared).
- 12- If knurl is out of form or flaky.
  - a. Make sure blank is correct size.
  - b. Check feed of penetration of work.
  - c. Check blank for taper.
  - d. Examine knurl pins and knurls for wear.