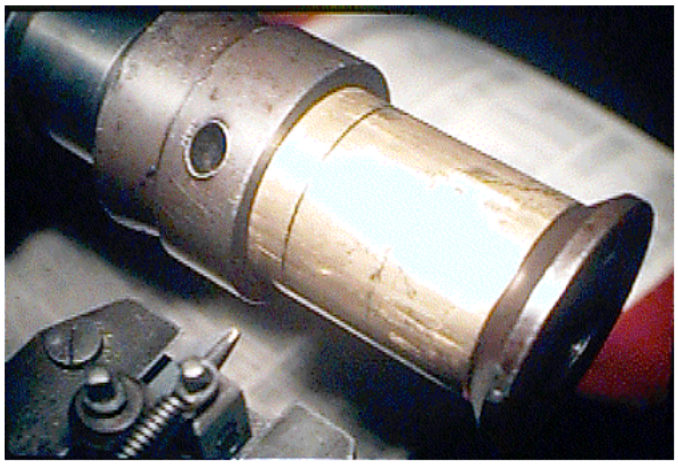
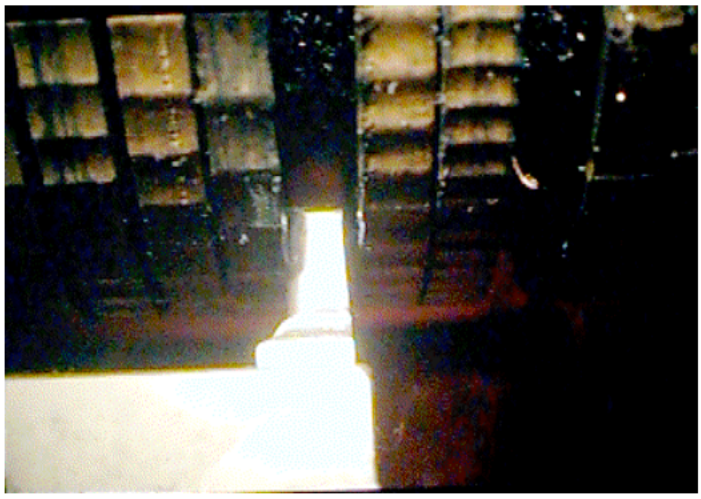
6. Three Dimensional Circular Work

Cutting Around Cylinders or Tubes

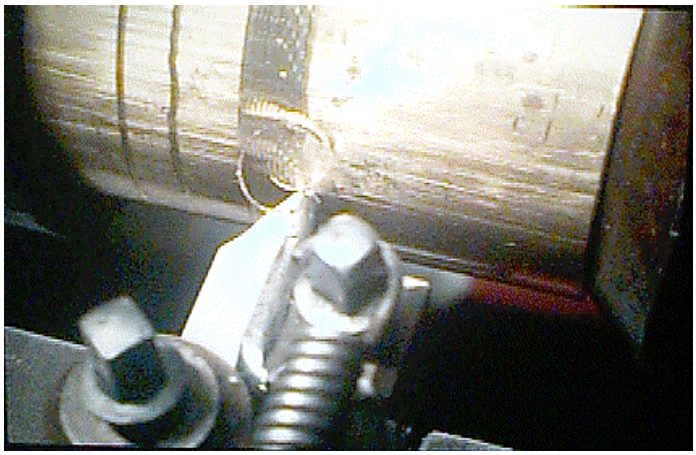
Cylindrical work is more reminiscent of most lathe work in the setup. The sliderest is set to run along the bed parallel to the spindle rather than across it as with face turning. The headstock is fixed not to rock, but may be allowed to traverse in a pump action along the line of the spindle's axis. The spindle bearings are specially made to allow this movement while running smoothly. Maximum axial movement is usually not possible to exceed about 7 or 8 mm, and for most work the movement is often not more that about 1mm.



As usual, the tool is fixed and the work rotates against it In this instance a single circular line has been cut around the tube



With the machine set for traversing, the spindle is sprung so that the side of the rosette pushes against the side of the touch The spindle will oscillate along its axis so that a wavy line can be cut around the cylinder



A single cut, then a series of uncrossed waves, then begin to rotate the rosette barrel using the crossing plate as we did when cutting circular waves on a flat surface The pattern begins to spiral around the tube

As with other work, one can use different tool profiles Here alternating vee and spoon cuts make a striking waved pattern for a napkin ring