

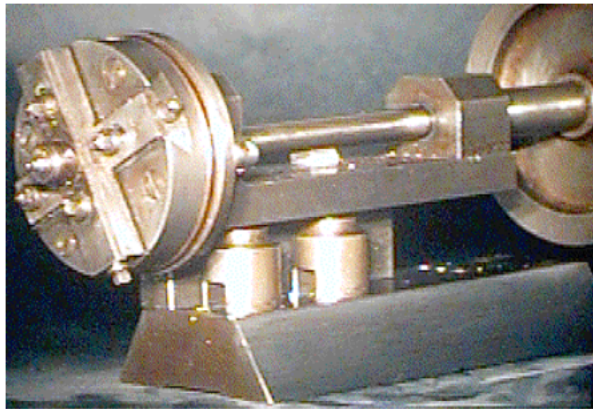
8. Spotting: When the Tool Moves

An introduction to the Spotting Tool and its Work

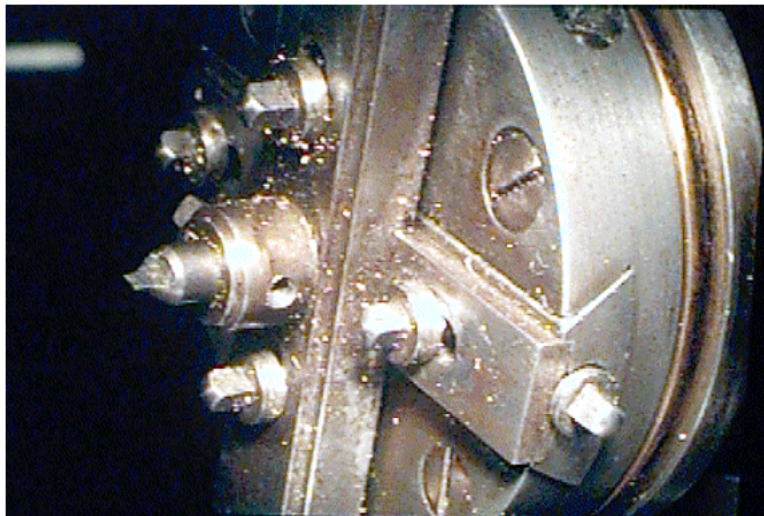
Spotting tools provide almost the only exception to the usual rule where the cutting tool is basically stationary while the workpiece is moved against it. The only other exception is the low relief or Brocade machine.

The spotting tool is mounted on the sliderest in place of the normal tool and guide. Fixtures vary, but replacing the normal tool and guide is the common objective. When the spotting tool is in use, cutting metal, the workpiece is usually stationary.

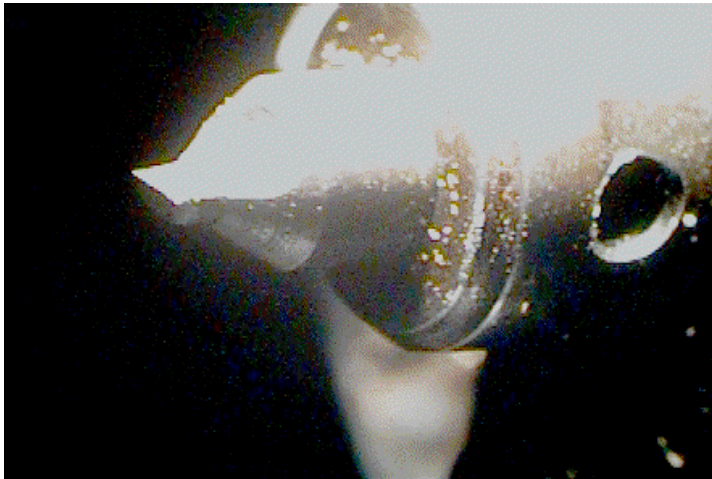
A spotting tool is a kind of small drilling attachment which rotates whilst the work is held stationary. The one illustrated here even do tiny wavy circles, as the tool has miniature rosettes inside it.



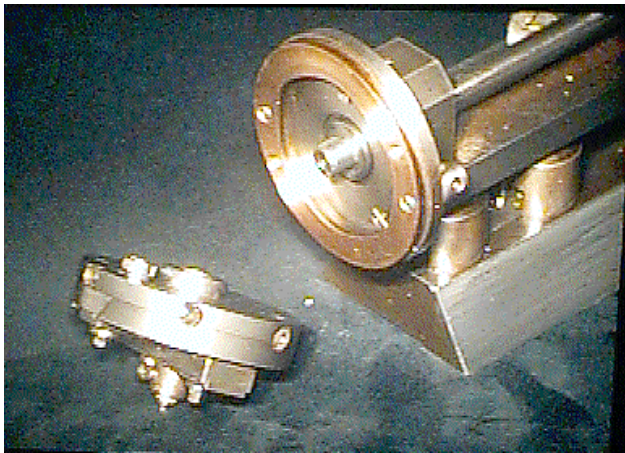
Double Eccentric spotting Apparatus with interchangeable internal rosettes This is a very versatile example, seen here already mounted on the tool slide Note the heavy flywheel for stable cutting



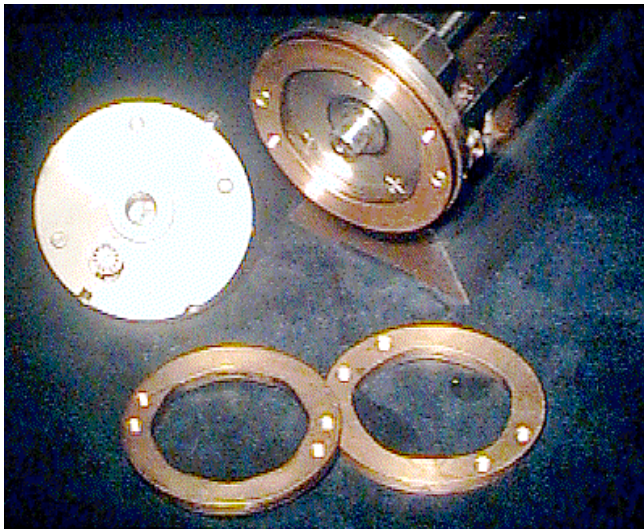
Two eccentric slides are provided for centring or offsetting the tool, and a third slide, for rose cutting, with it's lifting off screw visible at bottom right, runs parallel to one of the eccentric slides



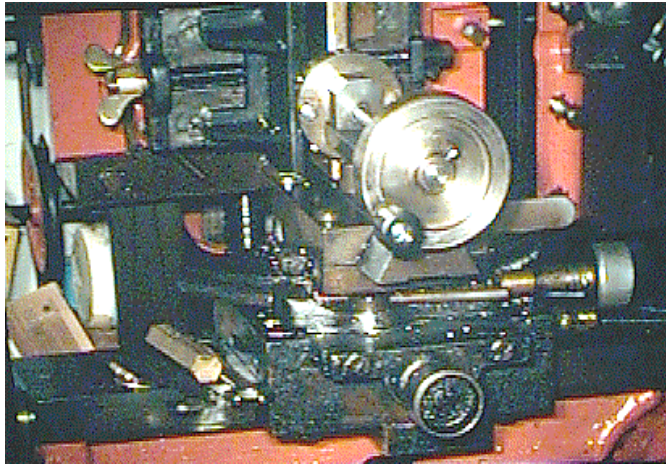
In the first example the tool is a flat ended sinking tool which will be used with a six lobed rosette The edge of the tool measures about 1mm



When the head of the cutter is removed, the rosette, which has the waves on the inside, is visible, and on the back of the head, a roller-touch which, when the lifting off screw is released, is sprung outwards against the rosette to drive the slide



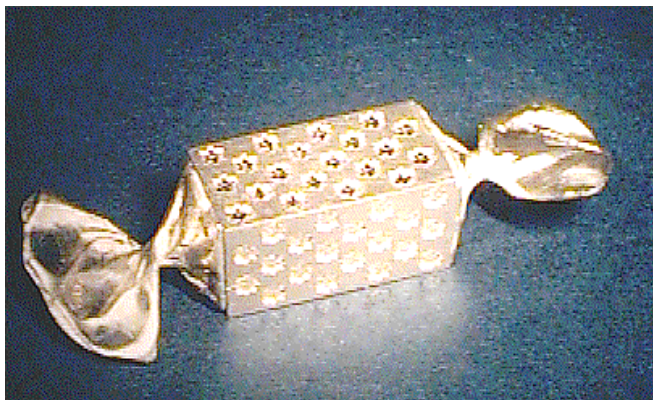
Numerous rosettes are provided or can be made With this device, as with the rose engine, it is even possible to turn a square!



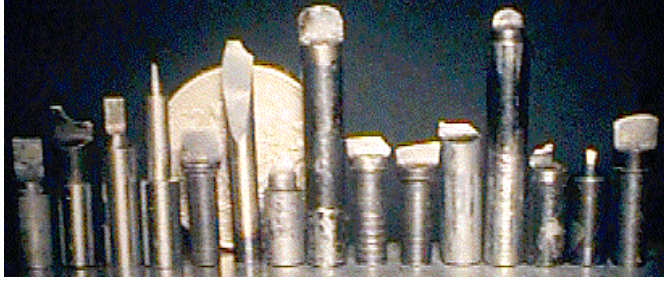
As can be seen in the top illustration the spotting apparatus is attached to the ordinary tool slide, in this case on a straight line machine. The handle and flywheel, which helps to eliminate chatter, are visible in the foreground, and the two jaw chuck holding the workpiece is just visible behind.



A small pill box for sweeteners in the shape of a wrapped sweet is being recessed with tiny flower shapes about 3mm across for enamel.



The 18ct pill box as it left our workshop. The next stage was enamelling the recessed flower shapes to create the wrapping paper effect in colour.



A selection of different cutters The two to the right of the coin have concave edges for creating shallow dome headed screws seen below



Some samples of the types of spotting possible The Screws are not real



An 18ct Pocket watch richly decorated with spotting