# **TOOLPOST GRINDER**

I have a cheap copy of the Dremel Multitool and wanted to mount it in the tool post of my lathe and use it as a small tool post grinder. The spindle nose of my tool has the same external thread as the Dremel and I decided to use this threaded nose to mount mine. The front of the holder is threaded to accept the Dremel spindle nose thread.

### Materials

I used some pieces from my scrapbox. A piece of 10 mm HRS 50 x 70 mm and a piece of 10 mm aluminium plate for the base plate and the front. The front is fastened to the base with to M5 Allen screws.

## **Baseplate**

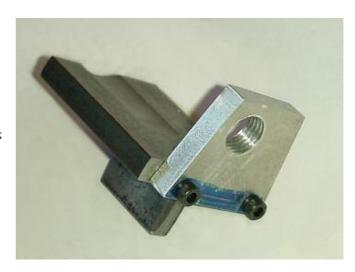
The baseplate was first squared in the mini-mill. Then I mounted the baseplate on a boring table on my lathe and used a boring tool mounted between centres to mill out a recess for the tool body (right picture). This way the Multitool will have a large area supporting it.

# Front plate

The front plate is made from a piece of aluminium. I mounted the front and base together and used a small centre in the Multitool collet to mark the centre of the threaded hole. The aluminium piece was then mounted in the 4-jaw and the hole drilled, bored and threaded for the spindle nose thread.

To hold the baseplate in the tool post I used a 20 x 40 mm piece of 10 mm HRS. This piece was attached with two M5 countersunk screws (right picture).

I also drilled and tapped a M12 hole in the base between the two countersunk holes. I will turn a steel rod to 20 mm diameter to fit the vertical column of my old Unimat. This way I can use the Multitool to sharpen small end-mills.



### Finished

To relieve some of the strain from the external thread on the spindle nose I used a strip of sheet metal as a clamp around the body. The holes for the two Allen screws in the front are a bit oversize so I can get the body of the Multitool to touch the base before tightening the screws. The picture also show the rod used to attach the holder to the Unimat column. I just remove the two Allen screws and mount the rod instead.



