

## Polishing of carbide punches in SF-machines

---

In the past, OTEC has often tried to polish tungsten carbide punches in the DF-machines. Unfortunately, the results have been unsatisfactory for the customer. Now, we did new tests in the SF machine and this time the customer has been very satisfied.

These hard metal dies are used to manufacture:

- Studs
- Screws
- Wire Forming
- Perforated sheet manufacturing
- Sheet metal forming.

The aim of polishing is to achieve a roughness of less than Ra 0.1 $\mu$ m. The roughness before is usually about Ra 0.2  $\mu$ m.

### Processing in a SF-3 machine

- Process time: 8-12 minutes
- Polishing media: M 4/300

Some examples:



Picture 1: forming punches

## Polishing of carbide punches in SF-machines

---



Picture 2



Picture 3 Needles for impact extrusion

Needles for impact extrusion are used to manufacture hollow parts.