



Chisel & punches

We decided to do chisel and punches because they are easy to make for a beginners like us. Our plan was simple. Eight sided base, 250mm long, 25mm thick. One chisel and few punches. Our first plan for the material was EN 1.220 silversteel but we found rock drilling steel from our storage and we decided to do our project from it instead.

Starting piece. Unknown rock drill steel.



First thing we did was to forge all the pieces to a hexagonal shape with the help of a powerhammer.





We battered the other end of the pieces and drew out the other end. The head of the pieces can be mould to whatever shape you want. We made one chisel and three punches from our four pieces. After forging, we grinded the heads smooth and right size.



After all the forging and shaping it was time to normalize the steel before quenching. We normalized all the pieces twice before proceeding to quench them.



We had made a hardening test to a small piece of the rockdrill steel and we found out the right temperature for a good quench, which was around 750-810 C°. We hardened only the tips of the tools and quenched them in pre-heated (+40 C°) oil.

After the quenching we tempered the tools in a 200 C° in a oven for a 4,5 hours.

The chisel and punches were finished.

