Floating Reamer Holder

The holder is made from 9/16 in. cold rolled steel and the handle is 3/8 in. alum. I used an end mill cutter of 3/8 in. to bore the reamer end after I pre-drilled close to size. The tailstock attachment was made from a soft #2 Morse center. This is the size required for my mini lathe. The center was placed in a sleeve in the headstock and machined to true for drilling and taping the front for the round bearing nose. The nose is O-1 steel and harden. Drawn to light straw and leave it hard. Leave about .020 clearance between the ball and the inside of the handle area. This will allow for enough clearance so the reamer can line up with the bore if the lathe is checked to be on line with a tailstock center and a headstock center before you start the chambering. The area inside was milled to 3/8 in. with a flat base so the hardened insert for the ball to push against is true to the center line of *90. The ball does all the pushing and the angle of the tailstock center shoulder will not touch under pressure. A set screw holds the reamer in place. Use care in removing the reamer when you are ready to withdraw to clean the chamber and reamer.