To start I made a hole so that the end could be held in a live centre, then started machining the ball either end for the 25mm between centres conrod.



This is some of the swarf – as you can see some very fine shavings.



This is the Valenite tip.



And again ...



Wanted to see what the linisher would do ... impressed by the white sparks, need to drop in water after just a few seconds to stop it getting too hot as the surface abraded maintains the heat and it doesn't travel into the metal well.



Now to try the HSS slotting mill cutter. And it worked better than any other metal, tried cuts of .2mm to .5mm and it cut very nicely. No sign of blunting the tool at all.



Next the centre drill, this has a 1/8<sup>th</sup> inch shank and a tiny needle like end, No problem again.



The time honoured way of reducing the gudgeon pin end – again with about .2mm cuts no problem.



## The finished article.

What looks like jagged cuts are my freehand attempt at making the ball end on the lathe, and these are tiny imperfections in a non critical area, so rather than chase them for aesthetics, have left them be.

Bigend orientation



Gudgeon pin orientation.

