

Workshop Wrinkles: Work Holding in the Lathe - Roger Stephen

For my current project I had to turn some buffer stocks from $\frac{3}{4}$ " square steel bar. Following Martin Evans instructions from one of his books I turned the body end first (left hand end in the sketch) and then had to turn them round to machine the mounting spigot and thread. For this operation Mr Evans said to turn a mandrel in the three jaw chuck such that the embryo stocks are a tight fit on it and just push them on. I didn't fancy that because it is an intermittent cut and the stock was sure to slip at a vital moment. So what to do?

Answer: turn the mandrel such that the stock is a close sliding fit on it, glue the stock on with Loctite 603 Retainer or similar engineering adhesive, and then do the turning and threading. To get the stock off the mandrel you just warm it up with a blowtorch to about 250°C and pull it off with a leather gardening glove. Then ditto repeat the other three stocks. Easy!

