

Fig. M1 - project example: cutting a perfect Morse taper. Extended tailstock center. (Morse #0 Taper cut with the help of the LASER Protractor.)



Fig. M2 - project example: inexpensive chucks for center drills. A good Jacobs drill chuck with Morse adapter would cost you probably close to \$50. (Morse #0 Tapers were cut utilizing the LASER Protractor.)



Fig. M3 - project example: Jacobs chuck (1/2-20) to tailstock Morse #0 adapter. Less expensive Jacobs chucks, including larger sizes, are often available. However, typically they come with a tapered hole and not with a Morse #0 taper. (Morse #1 are easily commercially available, but Morse #0 ...) This type of an adapter is shown here: \$1 for materials, 20 min work. (Morse #0 Taper was cut with the help of the LASER Protractor.)



Fig. M4 - project example: Endmill holder. Perhaps the best way to perfectly center an endmill is to use a Morse type holder and drawbar, as shown here. (Morse #1 Taper was cut with help of the LASER Protractor.)



Fig. M5 - project example: Morse #0 blank adapters are the starting point for most tailstock tools. These shown here have O.D. 1/2" and are 3" long. However, you can now make whatever size you may need. These typically cost \$7-\$20/piece. (Morse #0 Taper was cut with help of the LASER Protractor.)



Fig. M6 – project example: Center with a concave end. This is sometimes useful when modifying a work piece with a pin end. (Morse #0 Taper was cut with help of the LASER Protractor.)



Fig. M7 - project example: Morse #0 to 3/4"-16. Allows mount of a lathe chuck into the tailstock for, e.g., headstock drilling. A piece like that sells for around \$40. (Morse #0 Taper was cut with help of the LASER Protractor.)



Fig. M8 – project example: You can now make Morse taper by the dozen - easily. Morse blanks in different sizes and different materials. (Morse #0 Taper was cut with help of the LASER Protractor.)



Fig. M9 – project example: Left to right Morse #0, #1, and #2 blanks. Although a #2 Morse taper is more common on full size systems, it is actually simpler cutting it precisely on a small lathe. (Morse Tapers were cut with help of the LASER Protractor.)



Fig. M10 - project example Morse #1 and Morse #0 to Jacobs chuck (½"-20) adapters. Morse #0 to ½"-20 is quite uncommon and hard to find. You can now make whatever size you need. Use a hex bar if you want to use a wrench. (Morse Tapers were cut with help of the LASER Protractor.)





Fig. M11 - project example Morse #1 and Morse #0 arbors. (Internal Morse tapers were cut with help of the LASER Protractor.)