

Product Review

Universal Deluxe Mandrel Pen Turning Kit

by Kurt Hertzog



Fig. 1

The rotur Universal Deluxe Mandrel Pen Turning Kit is delivered in a sturdy plastic box that keeps everything in one spot for organization and travel. It is available through the Planet Plus folks who specialize in woodturning and woodworking tools.

I recently had the chance to use and review the Universal Deluxe Mandrel Pen Turning Kit offered by rotur. The kit is complete with everything in the box, including five 7mm pen kits, so that all you add is the wood and the lathe. A Planet *TheToolDirectory* Issue 4 is also included with the package. It is an 84-page catalog with a nice array of woodturning and woodworking products (see Fig. 1).

PACKAGING

The packaging for the kit is unlike most other pen turning mandrels. It is a nicely molded box with a soft cushion insert that has been cut to position and protect every one of the pieces included in the kit (see Fig. 2). It keeps all the parts and pieces in one place, which is great if you travel with it. When all the parts are in the cutouts, you have everything you need to work with wherever you go (see Fig. 3).

UNIQUE FEATURES

The kit has several unique components and features. First, it is delivered with the Colt parabolic fluted drill. This has been available for some time, but including it with the kit provides the user with one of the nicest drill bits available. My only problem with the Colt design (with its unique nose



Fig. 2

The kit comes with a storage location for each of the component parts. Not only is it easy to quickly determine that all is there, but each piece is protected.



Fig. 3

The kit contains everything needed to turn pens. There is not only the adjustable mandrel and tools, but also drill, barrel trimmer, bushings, nuts, and five 7mm kits.

geometry) is that I'm unable to sharpen it with the equipment that I use to sharpen my standard twist drills—the Colt is somewhat of a marriage between a twist drill and a brad point with some geometry changes included. That said, the Colt drill does a fine job of tracking and drills a good hole for the tube insertion (see Fig. 4).

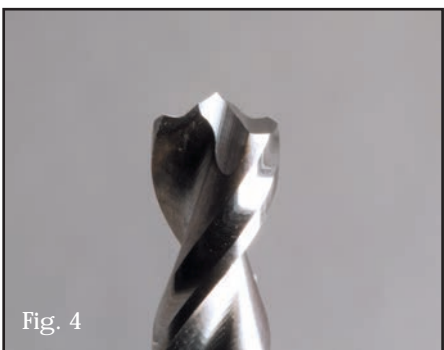


Fig. 4

The Colt parabolic flute drill has a unique design. It works nicely for difficult drilling materials in woods and plastics. Because of its special geometries, it isn't easily sharpened by the typical user.

The barrel trimmer included with the kit has a different inner diameter clean-out design. The nose on the pilot is a taper with clean-out cutter surface starting partway up the taper. It extends up past the end of the taper onto the full diameter of the shaft (see Fig. 5). The barrel trimmer is a bit shorter than most, but works quite nicely. There is plenty of shaft to grip with the chuck of whatever tool you use to do the trimming, be it a drill press, pistol drill, or lathe-mounted chuck. A thoughtful feature is the small flat machined on the shaft to provide a setscrew-tightening surface. It locates the cutter appropriately and allows for tightening on a flat rather than the outer diameter of the shaft surface itself. The four-wing cutter design is similar to everyone else's and performed well in use. I'm not a plating expert, but I believe the barrel trimmer has a black oxide coating for protection.



Fig. 5

The barrel trimmer has a different style of inner diameter clean-out cutter. It centers nicely with the taper on the nose and cleans out excess glue as it is inserted further to pilot on the full outer diameter.

The mandrel itself is machined nicely with great fit and finish. The process for tightening and loosening the adjustable length shaft is with a wrench and pin that are provided (see Fig. 6). The clearance between parts is minimal, allowing for smooth adjustment and use, yet there is little room for intrusion of dust and debris. The clamping mechanism worked well with the shaft held securely with minimal tightening (see Fig. 7). The kit includes the bushings for two sizes of pen kits along with the nuts for clamping the kit parts and bushings. I am much more a fan of mandrel savers rather than the traditional threaded nut operation. When used with my mandrel saver, the clamp-

ing of the mandrel shaft was snugged up finger tight and rather lightly at that. Though tested with a #2mt, it is available with other tapers if needed. A complete complement of replacement parts is available should you need them.

FINAL THOUGHTS

The Universal Deluxe Mandrel Penturning Kit is a well-made, complete package for the penturner. Billed "for the penturning professional," it certainly fills that niche. It is fully equipped and has unique features, such as a dust-free collet area. I found that it not only worked flawlessly with all that I put it through, but I also had an appreciation of the workmanship that went into the design and manufacture. It is not inexpensive by comparison to other adjustable mandrels and penturning kit packages, but it does fit into the market for those wanting a high-end piece of gear to be used and amortized over the long haul. You can find out more about the Universal Deluxe Mandrel Penturning Kit by *rotur* at www.planetplus ltd.com.



Fig. 6

Tightening and loosening the clamp mechanism is accomplished with the wrench and lock pin that are provided. Pin positions are located on both sides with a set of hex flats on the mandrel nose for the wrench.



Fig. 7

The workmanship on the kit and packaging, particularly the mandrel, is superb. Everything fits nicely and works smoothly without any extra play or slop. The clamp mechanism seals out the dirt and debris, clamping easily, often with only finger tightness.