

Mini-Lathe Dream Cutter ®

Compound Radial Multi-Tool

The **Mini-Lathe Dream Cutter** ® is a bolt-on accessory positioned to revolutionize the mini-lathe market. Offering an unprecedented level of tool control in a compact package, the *Dream Cutter's* innovative design overcomes the limitations inherent in miniature machine tools. The *Dream Cutter* extends the mini-lathe's standard compound rest with two additional axes of controlled tool articulation combined with a fully adjustable quick release tool holder. The *Dream Cutter* performs traditional lathe operations better, and accomplishes other tasks previously considered impracticable on mini-lathe equipment. Key capabilities and features include:

- **Spheres;** up to 3" balls, start to finish in seconds
- **Tapers,** Any angle, either direction, any length
- **Facing;** Square, convex or concave
- **Roulette;** Radial action to create various effects
- **Toroid;** Cured rims and hoops
- **Productivity;** Highest rates of material removal
- **Bore;** Internal tapers and radial features
- **Parting;** Any depth without chatter
- **Milling;** Easy radial and angle cuts on small parts
- **Surface finish;** Reduce waviness
- **Ball and Socket;** Create precision mechanisms
- **Optimal tooling,** Accommodates most cutting tools
- **Radius Center Indicator;** Precisely orient the tool
- **Precise Control;** Pivoting action torque adjustment
- **Practical;** Installs in seconds without modifications
- **Flexibility;** Greater tool reach and clearance
- **Configurable;** Achieve optimum maneuverability
- **Inch & MM Scale;** Gauge settings at a glance
- **Adjustable Tool Post;** Quick release & shim less
- **Rigid;** Adjustable gib, Positive locking spindle clutch
- **Durable;** Steel construction & easily serviceable
- **Ergonomic;** Controls promote maneuverability

The *Dream Cutter's* multifunctional approach is ambitious, however diligent engineering and manufacturing craftsmanship has resulted a highly refined and capable product. The convergence of these functions also permits the *Dream Cutter* to perform **Compound Radial Cutting** ® *Compound Radial Cutting* (patents pending) is a new lathe turning technique where the cutting tool is swept simultaneously or independently in sub-ordinate radii arcs where the tangent to the work axis is controlled by an over-arching primary radius arc. *Compound Radial Cutting* is applied with the *Dream Cutter* to maintain radial tool path continuity, improve material removal rates, and reduce surface finish waviness. Recognizing rigidity is vital to the tool's effectiveness; structural integrity was an unwavering focus in the *Mini-Lathe Dream Cutter's* development. The result of this focus is a tool which maintains the highest possible degree of precision while demonstrating the full range of its capabilities.

The *Mini-Lathe Dream Cutter* is installed using a mounting plate which fastens to the cross slide saddle in place of a compound rest. Approximately ½" in height, the mounted body of the *Mini-Lathe Dream Cutter* is low enough to pass under a 3" lathe chuck. The *Dream Cutter's* controls can be configured in either in direction on the rail re-orient the tool post mount. The multiple configurations of the *Mini-Lathe Dream Cutter* allow for up to a 3" diameter sphere to be cut and perform tapers at any angles in either direction. The *Mini-Lathe Dream Cutter* includes a feature-packed tool holder that's fully adjustable to accommodate a wide variety of tools.

Hobbyist, craftsman, artisan and industrial machinists will appreciate all the ways in which the **Mini-Lathe Dream Cutter**® breaches barriers to creativity. Operators of small bench top lathes will discover the combined the features of the Mini-Lathe Dream Cutter can speed most cutting operations, allowing for complex turned pieces to be created with minimal interruption to cutting operations. Initial distribution will be through <http://www.dreamcutter.com/>

