

# Carbide Magic Chisels

## For your Safety

- Read this guide before using Carbide Magic Chisels
- Always maintain tool flat on tool rest
- Never use tool with the handle below level of tool rest
- Set tool rest height to align top of cutter on center
- Read and understand your lathe's owners manual
- Secure work piece properly
- Use the right tool for the job
- Do not force the tool, give it time to cut
- Do not use chisels with a dull cutter edge
- Wear safe clothing and eye protection
- Travel the tool slowly along the cut for the best cut quality

## Available Cutters

- 2 Way Cutter (included with tool) #LXCMPG for Pen Genie
- Square Cutter #LXCM2SQ for Pen Genie
- 2" Radius Cutter #LXCM2R2 for Pen Genie
- Round Cutter (included with tool) #LXCMF3 for Cove Master



## GETTING STARTED WITH CARBIDE MAGIC TOOLS

This tool is used unlike any other turning tool you may have ever used. This revolutionary new way to turn is likely the easiest possible method to turn, but you must observe some basic tool use principles to make your time at the lathe as safe and productive as possible.

### **A) Maintain all tools flat on tool rest –**

Place your front thumb on top of the tool bar and apply downward pressure. (Other grip styles, such as an overhand grip, will likely cause the tool to rotate from the tool rest as you tighten your grip.)

Even a very slight rotation of the tool from flat reduces performance & safety. So, if you find the tool to be unstable during a cut – STOP cutting and reposition the tool flat on the tool rest by relaxing your handle grip and applying firm front thumb pressure.

Flat is not just a recommendation but a requirement for safety and proper performance as you learn this new way to turn.

### **B) Maintain all tools level to the floor -**

Use the hand you grip the handle with to maintain the tool level.

Be sure to maintain a relaxed handle grip (too much grip pressure on the handle may cause you to rotate the tool from 'flat' on the tool rest) At the beginning of a cut position the handle level and then bring it in close contact with their body to give an anchor point. As you turn, you may begin to forget about keeping the tool level. If you do start to have trouble with stability of your cut – STOP cutting and reposition the tool level to the floor.

Level is not just a recommendation but a requirement for safety and proper performance as you learn this new way to turn.

**C) Turn at work piece center -**

When you first begin using your Carbide Magic® tools, set the height of your tool rest so the top of your cutter is at the work-piece center when the tool is held level to the floor. This is easily accomplished by using the point of a drive center in your headstock spindle for reference. Once the tool rest height has been determined, you can use a hose clamp on your tool rest post to keep it set at the proper height.

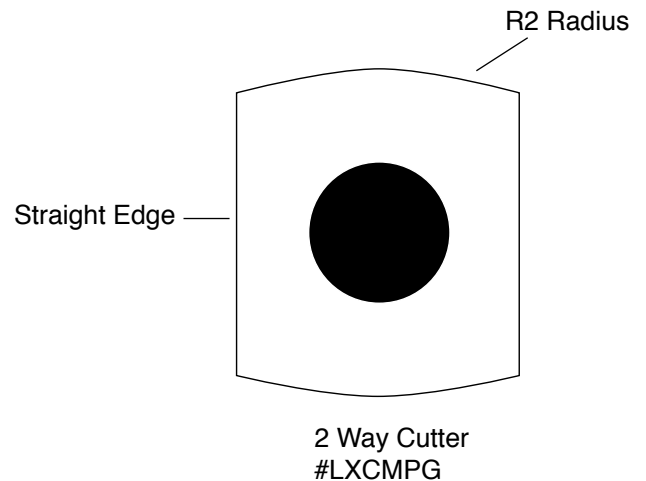
**USING THE PEN GENIE 2 WAY CUTTER**

2 Profiles are provided on the Pen Genie for best roughing and finishing results

Roughing – use the straight edge of the cutter. It's ok to take aggressive cuts to bring the work down to nearly round. Keep your cuts straight until your work is turned down to the general diameter of the finished work.

Finishing – Switch to the R2 radius edge of the cutter. With the edge you'll be able to turn profiles and final finish your blank without gouging your work. Move the tool slowly for best results.

For faster results, purchase an extra Pen Genie tool. Mount a square cutter: #LXCM2SQ on the tool for initial roughing. On the other tool mount the R2 cutter #LXCM2R2 for detailing and finishing. This will prolong your cutters and allow faster turning and finishing.

**SCREW MAINTENANCE**

A) Clean out the hex socket of the screw to the point you can see the bottom of the socket before inserting hex wrench. This allows the wrench to make full contact with the screw and will prevent you from stripping out the hex socket.

It is best to use a small pick to loosen the dust in the hex and then compressed air to blow it out. We often use the tip of a paper clip and a can of keyboard cleaner at our demos.

B) Do not over tighten the screw – Just grip the short end of the hex wrench to lightly hand tighten the screw. This will provide adequate force to secure your cutter. Excessive torque is not required to hold your cutter firmly in place. The design of the tool will hold the cutter with minimal wrench torque.

C) Lightly grease your cutter screw threads – Each time you replace a cutter, use the new screw provided and lightly grease the screw threads. (Any machine grease will do)