

**Warning:** Sharp chisels are dangerous and should be handled with care. Dull chisels are even more dangerous and should be sharpened.

## Lie-Nielsen TOOLWORKS®

Heirloom Quality Tools®

## **Mortise Chisels**

## www.lie-nielsen.com

toolworks@lie-nielsen.com 1-800-327-2520

P. O. Box 9 • Route 1 Warren, Maine 04864

Made in Maine, USA, since 1981

## **Mortise Chisels**

Lie-Nielsen Mortise Chisels are designed with cabinetmaking in mind. They are ground with parallel sides and are taller than they are wide to help keep them straight in the cut. These chisels are well-halanced and comfortable in the hand

**Geometry**: The edges of the chisel are square and parallel along the length. The bevel is flat ground at 30°, but a higher secondary bevel of an additional 5° is advisable, depending on the wood and how the chisel is being used. Additional honing is recommended. On very hard woods, like oak, hard maple or exotic species, take lighter cuts and use a higher secondary bevel.

**Sharpening**: Chisels should be kept very sharp for best performance. Do not force the tool, especially when dull. Do not strike with a metal hammer. Basic sharpening instructions for chisels can be found on the Sharpening section of our website. For more advanced information on sharpening chisels, we recommend David Charlesworth's video, *Precision Preparation of Chisels for Accurate Joinery*, available via our website in both DVD and streaming formats.

**Removing Handles**: One of the advantages of the socket design is that if you want to change handles, you can simply tap the side of the handle on a board and pop the handle off.

**Reseating Handles**: When your chisel arrives, the handle may be loose from wood shrinkage or dry weather. To reseat the handle, simply rap the chisel handle upside-down to wedge the

wood into the tapered socket. We've had chisels in our shop for years without the handles coming loose, but some people have the opposite experience. One trick is to apply hairspray to the tapered section and re-seat as described. Strange as it may sound, it's effective — and unlike glue, it's reversible.

**Materials**: Our chisels are made of A2 Tool Steel, hardened to Rockwell 60-62, cryogenically treated and double tempered to hold an edge very well.

Chisel handles are made from Rock Maple.

Maintenance: To protect your chisels from rust, be sure to oil, wax and/or wrap the tools after use. We recommend Jojoba Oil, a vegetable oil based product that is non-toxic, odor-free and easy to use. You may also use a fine abrasive hand-block to remove any light surface oxide from tools. The oil and abrasive handblock are available from us. Handles are oiled and buffed with wax to produce a natural finish. Wipe with oil as desired to refresh.

**Guarantee**: Materials and workmanship are guaranteed for the life of your tool. Call for repairs or replacement parts. We are available for advice if you ever have a problem using your tool.