



Guide to Carbide Tools

Trow & Holden strongly believes the first step in providing excellent customer service is delivering the highest quality product. To do so, we remain committed to the materials, innovation and craftsmanship required to manufacture long-lasting, reliable stoneworking tools.

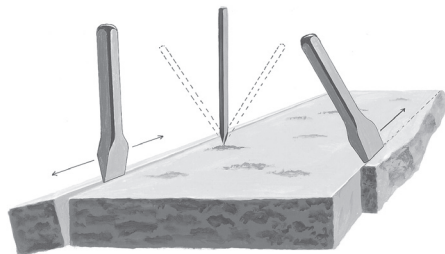
To help you get the most out of your carbide-tipped tools, we have assembled this overview of the best practices for their use and maintenance. Please take a few minutes to review this information before putting your Trow & Holden tools to work.

Choosing Your Carbide Tools

Take time to consider the tool size and type best suited for your work. Choosing the right tool will help prevent breakage, achieve the best results, and make your work more efficient — saving time and money.

Basic Tool Functions

Start by taking into account the type of tool that best fits the task at hand. Hand tools will fall into three basic categories of function, which we have listed below. See all these tools in action by going to trowandholden.com and viewing our videos.



Splitting

Used to score and split off the largest segments of stone, **Hand Tracers** (left) are held vertically while being moved back and forth across the stone to score a split line. This process is continued until the stone has split.

Trimming & Squaring

For trimming, squaring, or “rock-facing,” **Hand Sets** (right) are used to define the edge of the stone. Tip the Hand Set slightly back onto its edge and strike along your trimming line. To achieve optimal material removal on a variety of stones and surfaces, there are variations of the Hand Set, such as the Offset, Mason’s Chipper, and Rocko.

Chiseling & Pointing

Used for roughing out or removing high spots, **Hand Points & Hand Chisels** (center) are ideal for fast, aggressive material removal and for preparing the stone’s surface for the use of wider carbide-tipped tools.

Size Selection

The right size tool will feel comfortable in your hand, allow complete contact of blade and stone, and be of a width and weight that provides controlled material removal. Don’t forget to pay attention to stock sizes (i.e. handle thickness) in addition to blade widths, and keep in mind that a larger, heavier tool does not always increase productivity. This is particularly true when working with soft or thin stone.

Stoneworking Hammers

Trow & Holden manufactures a wide range of carbide-tipped stoneworking hammers intended to enhance or combine the basic tool functions listed above. While we always recommend maintaining a basic set of versatile hand tools, stoneworking hammers can be an excellent way to shape stone faster and with less effort.

For a more detailed overview of our full range of hammers, please see our *Guide to Hammers* in the References section of trowandholden.com.

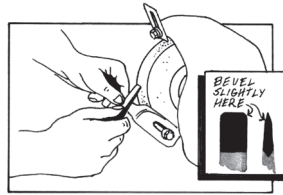


Proper Use & Care of Carbide Tools

Carbide maintains its shape under heavy usage because it is very hard. For this reason, carbide can actually crack or break if not handled correctly. Carbide tools can save a lot of time and be an excellent investment when treated properly. Here are some guidelines for use that will help you get years of excellent performance:

Once you have selected the tool best suited for your work, note the shape of the carbide. It is important to maintain this "like new" shape over the lifetime of the tool, which includes keeping a slight bevel or chamfer on all the edges and corners of the tool's carbide tip.

If the tool has been in use, check the cutting edge of your carbide for wear. While carbide-tipped tools should be kept slightly beveled, excessively rounded edges require harder striking to be effective and this will lead to breakage.



Check the striking end of your tool as well. Because the hammer and chisel cannot be the same hardness, your chisel is a little softer and will begin to show wear after some use. **Grind your striking end when it begins to distort or show signs of work hardening, before it "mushrooms."** Mushrooming and work hardening will lead to cracks in the striking surface, which can present a serious safety hazard if neglected. Take time to re-dress your tools regularly.



Use an 80 grit silicon carbide (or "green") wheel to sharpen carbide, or use diamond pads. Always air-cool carbide; never dip it in water or oil to cool it.

To re-dress steel striking surfaces, use a high quality aluminum oxide wheel and avoid overheating the steel, which softens the striking surface.

During use, make sure your carbide blade makes even contact with the surface of the stone. And, particularly with new tools, **make sure your first strike is a light hit.** This will help "set" the tool and put the blade in full contact with the stone.

Common causes of carbide breakage that are not covered under our warranty:

- Striking a carbide tool without properly setting the blade, or when wobbling on a high spot, causing a break or hairline crack due to uneven contact with the stone
- Using the corner of a carbide blade as a Point, depriving it of proper support when struck
- Failure to regularly regrind and maintain carbide in its "as new" shape, leaving an excessively rounded edge, and lead to a broken weld
- Re-grinding carbide to a very sharp edge without properly beveling edges before use
- Re-grinding a tool in a way that significantly changes the shape of the carbide or removes the steel supporting the carbide
- Inserting a carbide blade into a crack or saw mark in the stone, or using it as a wedge for splitting
- Using any carbide or steel tool as a lever
- Using a toothed chisel on granite or other very hard stone
- Using a carbide hammer to strike a hand tool, other steel object, or to be struck by another hammer

With proper care, carbide tools will give you many years of use and save time in the process.