

## **What Materials Can the Machine Carve?**

You can think of the CarveWright machine as a desktop publishing system for wood and other soft materials. The CarveWright can work in soft materials including wood, suitable plastics, and foam. Any materials outside these families are not to be used with the machine unless explicitly stated by CarveWright.

### ***Wood***

The machine can carve the full range of wood types from soft pine to exotic hardwoods. While we have not tested every conceivable hardwood, we have yet to find one that cannot be used in the CarveWright machine.

We have found that hard materials with tight grains produce the best finishes. In most cases, feathering and chip out will increase as the grain size increases. Also dry materials tend to produce a better quality finish than material with high moisture content. The CarveWright Designer Software has several tools to control chip-out to help when working across all types of wood grain.

### ***Plastic***

Suitable carving plastics include polycarbonate (Lexan), cast acrylic (sign makers plastic), and Corian (acrylic base). Most other plastics such as Nylon, ABS, and extruded acrylic (Plexiglas) tend to melt and gum up because the melting point of the material is lower than the temperature generated at the bit tip when carving. The great thing about cast acrylic and Corian is that they come in many different colors and opacities.

Note that the machine is always expecting soft material like wood as the carving medium and will automatically set the speed and feed rates based on this expectation. Therefore it is very important to keep any carving in plastic to less than 1/8" deep. Deeper carving will put excessive load on the machine by trying to push a bit through this hard material and can cause damage.

The only bit currently approved for plastic is the tapered carving bit. This means that some functions will not be available to you when using hard plastic. Do NOT use any machine function that employs a bit other than the tapered carving bit when using plastics. For example do not use decorative bits or the cutout function on plastics.

Also remember to clean the machine very thoroughly when using plastics. The "dust" and chips produced can damage drive components and belts.

### ***Foam***

Foam is a great medium for carving. Sign foam is particularly suited for creating signs and molds. The denser the foam the better the surface finish.

### ***Other Materials***

Any materials outside of those stated above are not to be used in the machine. In fact, note that the CarveWright warranty is null and void if the machine is used to cut metals, stone, or any other hard material not explicitly allowed.

We encourage all of our customers to be creative with materials within the wood, plastic and foam families and to report successes and failures so that we can share this information with the entire CarveWright community.