



## **CHOOSING QUALITY TOOLS**

Have you ever bought a hammer where the claws broke the first time you tried to pull a nail out? Or, how about a screwdriver that did nothing but strip the head of the screw? Did you ever see a drill bit that straightened out the first time that you drilled a hole through some aluminum? At some point in life, we all learn the lesson that you get only what you pay for. This lesson is as true for tools as in any other area.

There are a few keys to what makes a good tool that are common across the board, no matter what type of tool you are thinking about buying. Start by looking at the tool. Does it look like the toy hammer that you used to pound pegs with? Take a look at the brand name – do you recognize it? Then, touch and feel and hold the tool. How does it feel to you? Does it fit your hand, is it comfortable, does it feel as if you could hold it all day – some day you may have to. Look at the way the tool is designed – does it seem like a good design to you? How about the structural material of the tool? Is it a cheaper smooth plastic, or a tougher textured plastic that won't crack the first time it is dropped. Generally, with hand tools, these are the things you should consider when deciding if this is the best tool to buy.

With power tools, you start by looking at the same things. However, since most power tools are a little more involved, there are more things to consider than just these factors. The most important variable, and the one that you are paying the most money for, is the power source for the tool. There are four basic categories of power tools that you will probably be exposed to.

Cordless tools tend to be the weakest category of power tools. These tools are operated by self-contained or removable, rechargeable batteries. They generally have less torque than corded tools, but recent advancements have made them much stronger. They are very handy to use in awkward or out-of-the-way locations, where power is not readily available. What you need to consider when purchasing them is the capacity of the battery (rated in volts and amp-hours), the features you desire (such as a driver clutch), availability of replacement batteries (usually rated for 1000 charges), the amount of RPM's (revolutions per minute) that the motor will generate, and the weight of the tool.

Next come the electric-operated tools. They come in many shapes, sizes and purposes. The size of the motor (rated in amperage or horsepower) is usually most important here. In most applications, if you try to use a tool that is underpowered, you will not only get a poor job from the tool, you will also damage the material that you are using. (If the tool doesn't have the power to go through what you are working with, it will slow down and start to burn or make a jagged cut.) Another area to consider is how the motor shaft of the tool is supported – does it have a bronze sleeve, or the superior ball-bearing system? Most of the best quality tools have not only ball bearings, but also a way for the owner to grease and maintain them.

Then, you have gasoline-powered tools. Because they operate with a much larger motor, they are more powerful. They are usually more expensive and require more maintenance. Again, the motor is the most expensive part of the tool; in most cases, the reputation of the motor manufacturer will be the most telling consideration. Watch out for weight here, too, as some gas power tools can be real monsters when it comes time to work with them.

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Finally, there are air-powered tools. These are gaining a lot of popularity in the construction industry, for good reason. First, they don't have their power source built into the tool. That means that you can buy one motor (called an air compressor) to operate many different tools. And these air tools are generally much lighter than their electric- or gas-powered counterparts. (Imagine struggling with a heavy power tool and extension cord on a 40 ft. ladder!) Second, with this system, the tools themselves have fewer moving parts to break down. Third, they can generally develop many more RPM's than an electric or gas-powered tool. The biggest drawback is the initial cost, which is higher than for a comparable electric tool. But, if you are buying tools to use for a lifetime, check into air-powered tool systems.

As you can see there are some common threads running through all purchase decisions, no matter what type of tools you are seeking. Spend some time researching and looking at tools before you buy. Purchasing an expensive tool may be a better option than renting it, if you have to use it over a week or so – and you might look at it as one of the costs of completing your project. (That's how many contractors acquire their tool collection.) Finally, consider quality over the long haul. While you may not need a more expensive professional-grade tool, it's better to have three good tools that will last a lifetime than twenty tools that don't last till the end of the year.