



Woodworking Guide
A step by step approach to woodworking

By

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Introduction To Woodworking

Woodworking encompasses a great number of diverse activities, including turning, woodcarving, marquetry, cabinetmaking and joinery, however, every specialist craftsman or craftswoman has at some time mastered the fundamentals of measuring and marking, dimensioning, assembling and finishing – considered the basics of woodworking skills that are the core of any woodworking calling.

The ability to think in three dimensions is needed to mark out the wood for a project and to imagine how one component fits with another and in what order is required of a woodworker. You will also need to know which tools will give the best results, depending on the level of accuracy required and the properties of the wood you are using.

Dimensioning is the process of reducing raw materials accurately to size. This almost invariably entails planning components square and true – a procedure that is simple in principle but takes a lot of practice to become perfect.

Cutting and assembling a variety of joints are part of all but the simplest of woodworking projects. Long been regarded as a measure of a woodworker's skills, joinery needs a steady hand-eye coordination, but experience will tell you the best way to fasten one piece of wood to another attractively and discreetly without sacrificing strength.

One necessary addition to these pivotal skills is an appreciation of how wood behaves. It is a unique, living material that continues to swell and contract with changes in humidity, a factor that a woodworker must deal with in the design and construction of every project. Some woods are easier to work with than others, and each piece, regardless of the species, is exclusive in the way the grain turns and twists.

There is no one right way to do anything in woodworking. The right way is the way that works best for you and what works best is a balance between the time something takes, the tools available, the pleasure you take in the process and the quality of results you are looking for.

There are arguments for both the use of hand tools and the use of machines for woodworking. Some say that using hand tools allow you to develop the 'knack' of cutting and shaping wood without tearing the grain. While other woodworking experts proclaim that you can often complete a project in less time with hand tools because of the set up required for the mechanical tools. Others believe just the opposite. We will discuss both options, hand tools and machine tools in this book.

With a little patience, the right tool and techniques and a good set of plans, you don't have to be Bob Villa to build something you'll treasure for years to come.

About Wood Working

Wood working is a method of building, carving or making something using wood. Wooden products are seen everywhere these days. If you want to enhance the appearance of a room in your home, then there is no doubt you can find something made of wood.

It requires a great amount of skill to make quality handmade wooden products.

Basically wood is of 3 types. They are hardwoods that is obtained from deciduous trees, man made materials that include plywood and softwoods that are obtained from evergreen trees. There are many wood workers who have made a mark in woodworking by building some of the finest architecture, furniture. Some of the popular wood workers of all times are Alvar Aalto, Norm Abram, and John Boson.

Today wood working tools are used most commonly to make furniture in the house. You will also see a variety of wood working tools at construction sites. Most wood working tools are power driven. Some of the common wood working tools that are commonly used on construction sites are chain saws, nail guns, rotary tools, routers, biscuit jointer and sanders.

For inserting a nail into the wood you should use a nail gun. A wood working tool is used for cutting polishing, carving, sanding and for many other applications. Without these wood working tools you simply cannot make a wood product. All these tools are easily available in market.

Before operating these tools you should have good knowledge about how to use these tools. If you don't have proper knowledge, could cause you injury and the end result will look funny. Generally skilled workers such as carpenters, train for years to a high standard to handle tools efficiently enough to produce quality products.

These tools are commonly used to make products such as cabinets, chairs, dining tables. And the better quality of wood used and top craftsmanship, you can expect the price to match!

Safety First

Any discussion of woodworking machinery should begin with shop safety; hand tools require safety precautions as well. Woodworking machines are made to cut, chop, abrade, slice, drill and shave materials that are considerably harder than human skin. When used carelessly, machines are dangerous and when used properly, machines can be a wonderful help.

Wherever woodworkers gather, stories of accidents and near-misses come up sooner or later. Perhaps the term 'accident' is misleading here because 'accident' implies the injured person is a 'victim' of circumstances beyond their control; in most cases, it may be more appropriate to say that the 'perpetrator' suffers the consequences of his or her own carelessness.

Consciousness of safety is the first requirement of good craftsmanship. Here are several things you can do to protect yourself while working with wood, either with machines or hand tools.

- Wear hearing and eye protection when using saws, routers, sanders and other equipment. To keep splinters and dust out of your eyes, use large plastic safety goggles, a face shield or safety glasses.
 1. Goggles – the rigid lenses of safety goggles are surrounded by a soft plastic frame that fits and seals against the contours of your face. The sides are ventilated to prevent condensation and they can be worn over prescription eye glasses.
 2. Hearing protectors – earplugs and padded ear muffs protect your hearing from overexposure to noise. Always wear protectors when using noisy power tools that could cause long-term damage to your hearing.
- Keep your workshop area clean and neat so you won't trip over a scrap of wood or an extension cord at an inconvenient moment.
- Tie up long hair; don't wear loose-fitting clothing or any jewelry. All of these items can get caught in the machines and drag you towards the blades or other sharp parts.
- Don't use machinery when you are tired or have consumed alcohol – any amount of alcohol, even a little bit is too much for operating machinery. This type of machinery is dangerous enough when you are fully alert, so why increase the odds of an accident?
- Focus on what you are doing at all times and take a break if your mind starts to wander. You are most likely to have an accident when performing the same operation over and over again. Walk away for a few minutes between cuts.

- If you are not comfortable making a cut or aren't sure if a particular cut is safe, get advice or help before you try it. Find a friendly woodworker to ask, perhaps at the local high school or college.
- Keep saw blades sharp. The harder you have to push, the less control you have over the wood. This can cause slips and loss of fingers or worse
- Be prepared for accidents. Consider these questions:
 1. Where is your telephone?
 2. Where is your first aid kit? – You should always have an extensive first aid kit available at all times.
 3. Where is the nearest person who can help you? – You should never be alone while woodworking.
 4. Can you give clear directions to your shop over the telephone?
 5. Are you familiar with basic tourniquet and first-aid techniques?
- If a serious accident does occur, call 911, not your friend. Your friend will not be able to help you if you suddenly go into shock on the way to the hospital.
- If you should be unfortunate as to sever any fingers, take them with you to the hospital in case they can be reattached. Severed fingers should be wrapped in gauze and soaked in a cup of salty water that is kept cold in ice; the fingers should never touch the ice.

Health concerns –

Breathing sawdust is not healthy; it can be allergenic, toxic and carcinogenic. The sawdust from some imported woods, including teak, is particularly harmful and is known to cause skin rashes and respiratory problems. Several studies have shown that woodworkers have a high rate of nasal cancers.

Because even a little sawdust can clog sinuses and aggravate allergies, try to wear a mask whenever you make dust, whether it's from machinery or sandpaper or sweeping the floor. Masks range from thin paper with an elastic strap to the thick rubber with a replaceable toxic-fume-proof filter. The heavy-duty masks are generally unpleasant to wear so some compromise will need to be made between efficiency and comfort.

Some of the solvents and finishes used in furniture finishing are also allergenic, toxic and carcinogenic. Petroleum distillates in commercial oil finishes, naphtha and benzene are all suspicious of contamination. Because many of these solvents are toxic to the human body by breathing or through skin contact, it's a good idea to wear rubber gloves and a toxic-vapor mask when working with them.

Wood shop accidents happen in an instant, especially with power tools. The results can be irreversible and even life-threatening. Your first line of defense against mishaps is really simple; Think Before Acting. Respect the capabilities and dangers of your tools and know how to use them safely.

Plan your work so you can get help lifting or moving heavy objects. Set high standards for tool maintenance and operations. Never use dull blades or bits. Remove guards and other safety devices only when absolutely necessary. And keep your work area clear of debris and clutter.

Where to Learn About Wood Working

Online

Wood working training online is a type of training in which person can learn different techniques in wood working through the internet. There are a number of institutes who provide such training. These institutes, which provide wood working training online, have their own website through which the training is conducted. A person willing to join such training program can sign up with them through the same website.

During such sign up, he will have to make an account for himself. He has to choose an identity name and a password. These are required to log on to the wood working training online course.

During this process they will get all the information about the basic ideas of wood working. A person will get to learn different techniques, which are used for wood working. Moreover, a person will also learn some standard patterns, designs, and styles of wood work pieces. The training about the use of the different tools and machines, which are used for wood working, also is an important part of wood working training online.

Moreover, some specialization course for the wood working training is available. Some examples of such types of courses are the course for making decorative articles, courses for non commercial wood workers, and courses for commercial wood workers.

There are many options for wood working training online. Therefore, you can choose according to your convenience. These courses provide different offerings to the users. Therefore you should first see what the website i.e. institute would offer to you up on joining their wood working training online program.

Moreover, the second most important thing that type should consider is the charges they would place on you. There are some websites, which provide free online training. However, most of the times in such cases the contents of the course are poor. The paid online training courses provide a lot of knowledge and training for wood working. Even though, they will charge for whatever they provide be assured as they will be even more useful.

Wood working training online will not provide you any certificate upon the completion of the course. Moreover, it does not even provide practical training. However, the theoretical knowledge that is obtained is very useful. Such knowledge and tips will make wood working a much simpler job.

Such training can be useful for both commercial as well as non commercial wood

workers. Moreover, all this you can obtain even from the comfort of your own home.

Schools

A program from wood working schools will generally include the subjects as mathematics, materials used for wood working, tools and equipments used for wood working, common standard patterns and plans for making the structures as furniture, doors, windows, floors, etc. also the practices as polishing, finishing, coloring are the jobs of the wood workers. These are among the basic skills required for wood working.

However, wood is being used in some complex structures as well. For example making houses, roofs, and for some other engineering applications as well. For these types of wood working, specialization courses are provided by some wood working schools. During these courses the skills, reading and understanding the structural plans, blue prints, etc and the basics of structural engineering.

Apart from the skills and the specializations taught during the course, the employers themselves may give additional training to the person whom their hire. This is important even on the completion of the course because, the requirements and the specifications will vary from employer to employer.

Ideally, the duration of the course will be around 2 to 4 years. This is the ideal time required for learning and developing the skills required for wood working. These courses are similar to the other graduation courses. The students after successful completion of these courses will get the degree of graduation in wood working.

While choosing from the wood working schools, any should consider whether the school is recognized. The certificates of only such schools are considered valid by the employers. Moreover learning wood working is not that simple. It may take some time. Therefore, the quality of education that they will provide is important too.

As mentioned earlier the students who has done a course at a wood working school will have an upper hand over others in finding jobs. In some of the top wood

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