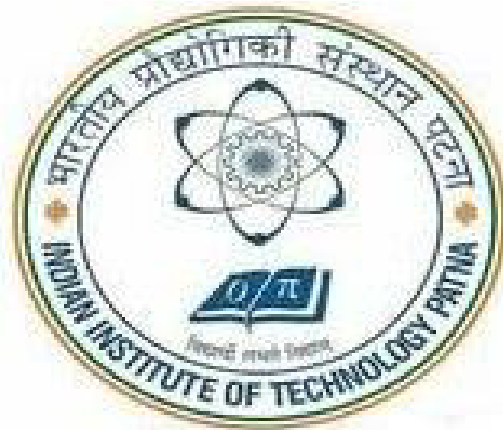


CARPENTRY SHOP



OBJECTIVES

- ✓ INTRODUCTION
- ✓ Types of woods
- ✓ TOOLS USED
- ✓ Types of joints
- ✓ APPLICATIONS

INTRODUCTION

The operations performed on the wood to get the required shape are called as Carpentry.

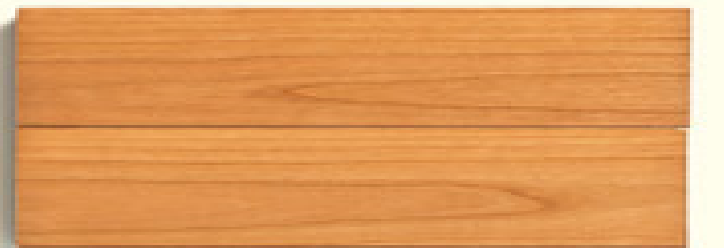
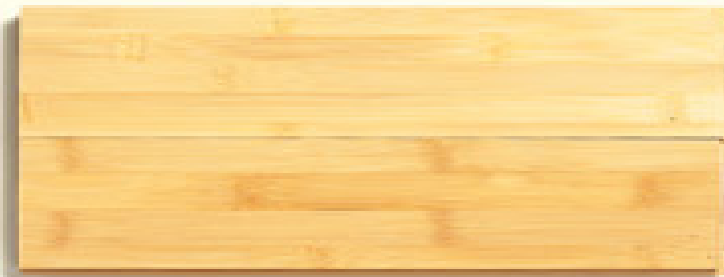
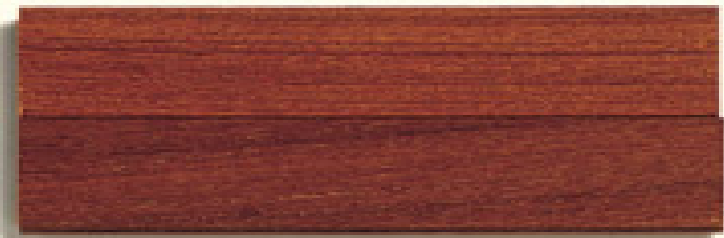
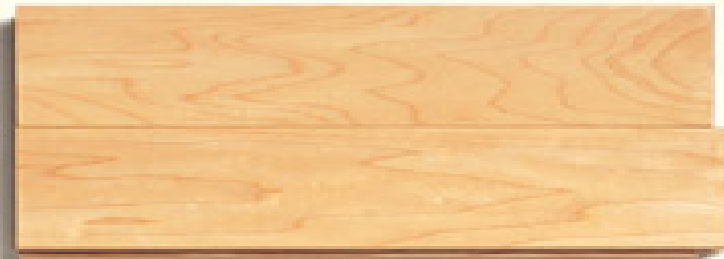
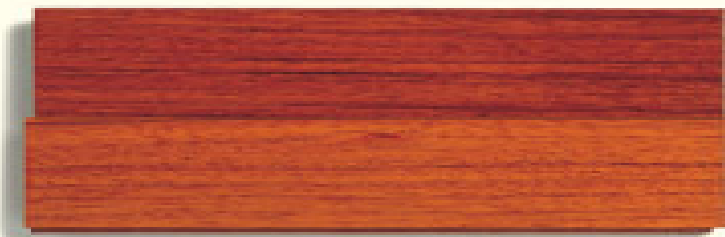
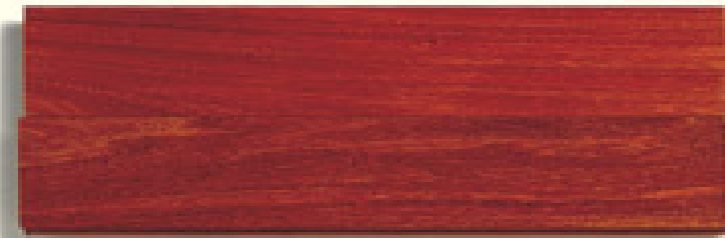
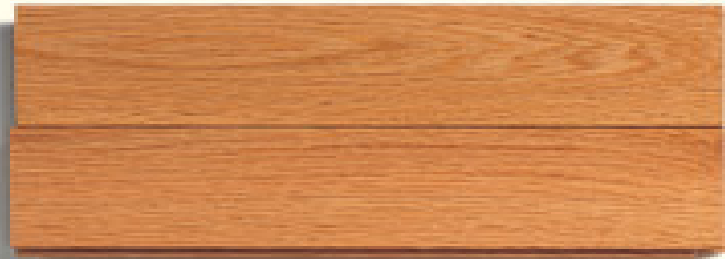
- Involves art of cutting, framing, and joining timber, as in the construction of buildings.
- An assemblage of pieces of timber connected by being framed together, as the pieces of a roof, floor, etc.
- Used for making the pattern in the foundry shop.



- The raw material for carpentry processes is the output of the tree which is in the form wood. Typically, woods are sold as flat, rectangular or in the standard size. If the woods are thin ,thick or long, they may be in the form of logs. Therefore the first step in any carpentry shop is to cut the correct shape and sized from larger Wooden block.



Types of Woods:-




TYPES OF WOODS:-

a) Teak

- An undisputed first choice for making furniture and doors, Teak has come a long way from being a practical choice to a lifestyle statement. Its prices are always on the rise and coupled with the fact that it's maturity time varies between 50-70 years.
- Teak is classified as a hardwood due to it's properties. It is famous for its weight (heavy feeling) and durability.

b) Rosewood

- If teak is the king, then rosewood would be considered to be the queen of wood. It is heavy and hard.
 - Rosewood is noted for it's stability and resistance to decay. Being dark reddish brown in color has perhaps earned it the name.
- 

c) Rubberwood

- A new entrant into the furniture scene in India, Rubberwood is from the same tree which is used to extract latex for manufacturing rubber!
- It is sturdy and cheaper compared to the king and queen woods we mentioned above. Very few people are even aware of such types of wood.
- . Although lighter than teak, rubberwood still has a good density and is quite resistant to screw and nail withdrawal.
- This means longer life for your fixtures. Rubberwood is also easily available as its maturity varies between 7-16 years.

d) Plywood

- The first three wood types are naturally occurring. Plywood is artificially created.
- Plywood is preferred by many carpenters because it is cheap, resistant to cracking, shrinkage and has a high degree of strength.

TOOLS USED



Saw and hammer



Planer





Pliers



Chisels



CLAW HAMMER



wood chisel



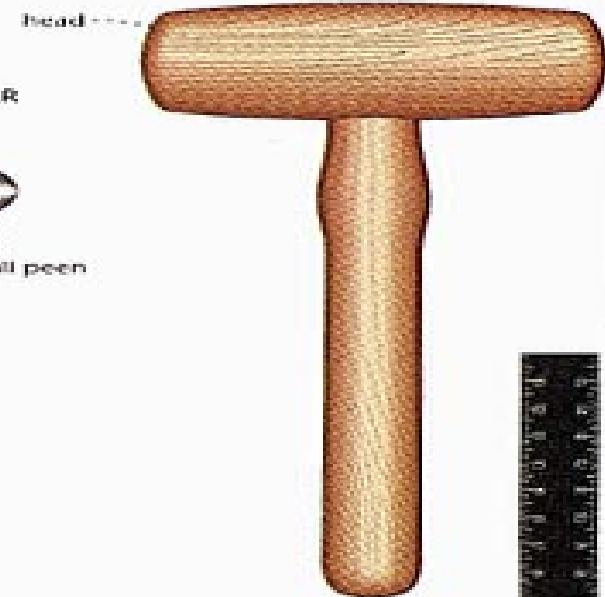
carpenter's hammer



BALL-PEEN HAMMER



MALLET



NAIL



framing square



Hammer:


- Hammer Used for driving nails, fitting parts and breaking up objects. Available in various shapes and structures, Hammers are designed for specific purpose.
- The hammer consists of a handle to which a heavy head, usually made of metal is attached, with one or more striking surfaces .




Pliers :

- Pliers have a pair of pivoted jaws, Used for holding, bending, turning, gripping or cutting a variety of things.
- They have different jaw configurations depending on their usages. The plier has a pair of handles with the pivot which is often formed by a rivet.
- The head section has the gripping jaws or cutting edges. Thereby, the plier consists of three elements- the handle, the pivot and the blades.
- In comparison to a pair of scissors or shears, the jaws of the plier always meet each other at one point.

Planes :

- A plane is a trowel-shaped carpenter's tool with an adjustable blade for smoothing and leveling wood, There are a wide variety of hand planes , which may be made of steel or from wood and almost all planes are meant to smoothen the surface.
 - The hand plane is one of the most basic of wood working hand tools.
 - Planes are used for trimming, beveling, fitting and shaping wood, and smoothing rough spots left by sawing and drilling.
- 

Chisels :

- Chisel is a hand tool with a flexible shaped cutting edge blade on its end.
 - A chisel is used for carving or cutting material like wood, metal or stone. The handles of most chisels are made from beech, ash, hickory, box wood or plastic.
 - A cutting blade is guided through the object with a handle that is specifically designed to aid the chisel's cutting task.
 - For cutting any material, the chisel is forced into the material. The driving force to cut is done manually by using a mallet or a hammer.
- 

Saw :

- Saw is a hand-operated tool that has a thin metal blade or disk with a sharp, usually tooth-edged, used for cutting wood, metal, or other hard materials.
- The toe is the front end of the saw. The heel is the end near the handle. The portion of the saw where teeth are found is the front of the saw. The back of the saw is the part opposite the teeth that faces up in normal use.



Measuring tools:

- Measuring tools Used for the purpose of measuring dimensions, measuring tools are imperative for implementing any work with precision.
- Measuring tools are essential tools for examining a finished product or semi- finished product.
- Inspection or examination operations include checking, testing an object by comparing dimensions of the object/ work piece to the required dimensions given on a diagram or a sketch.

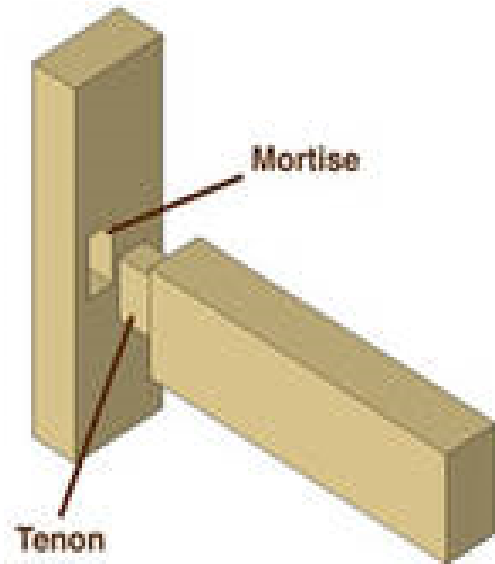


Leveling Tools :

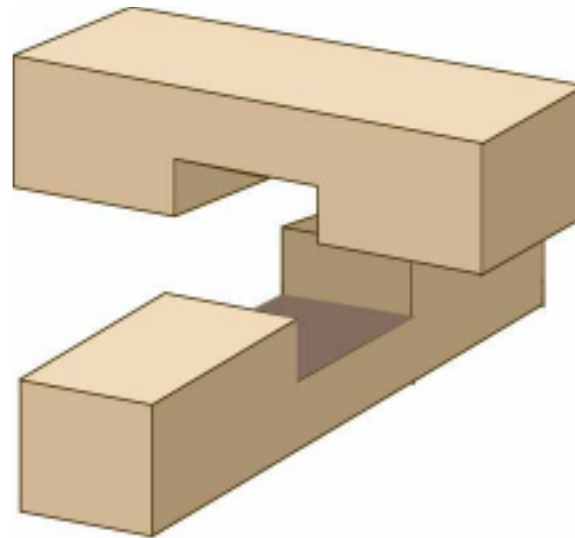
- Tool that employs bubble vials positioned in the center and both ends to check vertical and horizontal surfaces for level or plumb.
- Made of either hardwood with brass binding, metal (aluminum, magnesium) or high-impact plastic.
- Typically 24" to 48" long, but some models (generally mason's levels) are longer and can be up to 72" in length



TYPES OF JOINTS



Mortise & Tenon Joint



Academy Artworks

Lap Joint



Butt Joint



APPLICATIONS

- Countless everyday objects are constructed such as tables ,chairs ,boxes etc
- Widely used to make home appliances.
- Widely Used in shipping industry.
- Used for the temporary roofing of houses and for the manufacturing of the decorative structures.



Thank You