# Hand tools

A tool manually operated without any electricity or power



**Pliers** 





**Handsaws** 





**Utility knife** 



Hammer

Clamp







**Tape** 





Level

# HAND TOOL RULES AND SAFETY

- Always ensure that you are using the correct hand tool for the job. (the end of a screwdriver should not be used as a hammer)
- Keep hand tools in good and working conditions. Always return them to the tool room.
- Inspect hand tools prior to using for any defects or damages.
- Keep cutting tools sharp.
- Make sure that handles are fitted and not loose.
- ❖ Always point sharp tools AWAY from yourself and others.
- **❖** Do not apply excessive force or pressure to the tools.
- ❖ Do not throw tools to give them to someone else.
- ❖ Do not carry sharp tools in your pockets.
- Do not leave tools unattended.

# Types of Hand Tools:

- Layout Tool a tool used to mark and measure materials. Examples are wooden folding rulers, carpenter pencils, chalk lines, and a speed square.
- <u>Cutting and Shaping Tool</u> a tool used to cut and shape materials (also known as a boring tool)
- Holding and Turning Tool- tools used to grip materials and hold them in place
- ❖ <u>Driving Too</u>l- tool used to fasten materials together
- Wrecking Tool tool used to "destroy" or separate materials

## **PLIERS:**

They help to hold objects firmly, bend other materials, and remove unwanted elements. It can be used for bending or straightening wires, cutting or slicing wires, removing nails or tiny needles, or to just hold objects firmly at one place. Pliers with needle-nose ends and wire-cutting abilities are the best kinds to have.



# **HAMMER:**

A hammer is designed to deliver high force on a small area. The tool is made of a long wooden stick, attached to a block of metal. It can be used for driving nails, breaking objects and forging metal. The hammer should be heavy, so it is effective while hammering nails on the wall. But make sure that it is of proper weight for the user. One should be able to lift the hammer easily without any difficulty. When picking a hammer, one should choose carefully among the wide variety of sizes and weights available.



# **SCREWDRIVER:**

Screwdrivers come in various shapes and sizes by hand tools manufacturers in India. It is one of the must-have tools in a household utility kit. They can be used to screw or unscrew nails on any surface, to tighten the hinges, install light switches, or assemble furniture. The screwdriver is made of blades with various widths and lengths suited for special purposes. The blade is made of forged carbon steel that is heat treated for hardness. The handle can be made of high quality plastic to get a good grip.



# <u>CLAMPS:</u>

Device used to hold or secure objects tightly together to prevent movement or separation via inward application. Clamps can be temporary, as used to position components while fixing them together, or they can be permanent.



#### WRENCHES:

Used to grip and turn objects. They are helpful in assembling furniture or bike repairs where it can be used to loosen or tighten nuts and bolts. Wrenches are also used for plumbing jobs where they are used to turn pipes.



# **SPEED SQUARE:**

A triangular carpenters' marking out tool. The Speed Square combines common functions of the combination square, try square, and framing square into one. Carpenters use it to make basic measurements and mark lines on dimensional lumber, and as a saw guide for short 45 and 90 degree cuts.



## **HANDSAW:**

Using force, this device is used to separate various types of lumber. With its thin but wide steel blade it cuts on the push stroke.



#### TAPE MEASURE:

Used to measure size or distance of any room or object. Come in various forms and sizes. Can also be used to mark various measurements.



#### **UTILITY KNIFE:**

These are built with hard material and can be used for opening boxes, letters, or cutting not so tough materials. For safety measures, make sure the knife blade has a locking mechanism when not in use.



# LEVEL:

A device for establishing a horizontal plane. It consists of a small glass tube containing liquid and an air bubble. The small glass or plastic container that the bubble is in consist of two markings. When the bubble is lined up perfectly between both markings, the object that you are trying to mark is levels. When the bubble is not centered in between both lines, the object is off level.

