

DUSTER

Aim : To construct a duster from the given work piece.

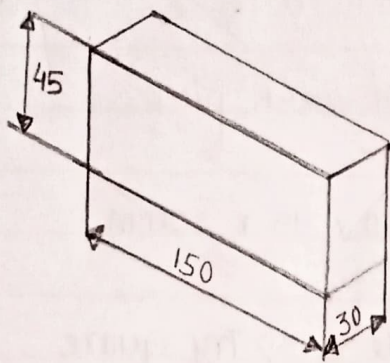
Materials required : Ventek wood of size 150 x 45 x 30mm.

Tools required :

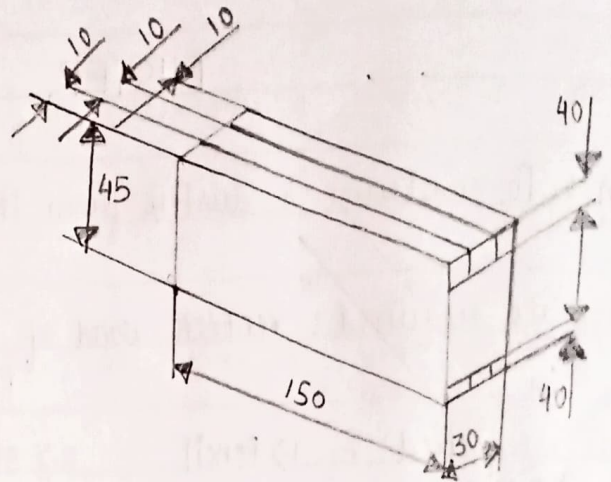
1. Pencil	2. Steel rule	3. Try square
4. Marking gauge	5. Hand saw	6. Firmer chisel
7. Mortise chisel	8. Rasp	9. Wooden mallet

Procedure :

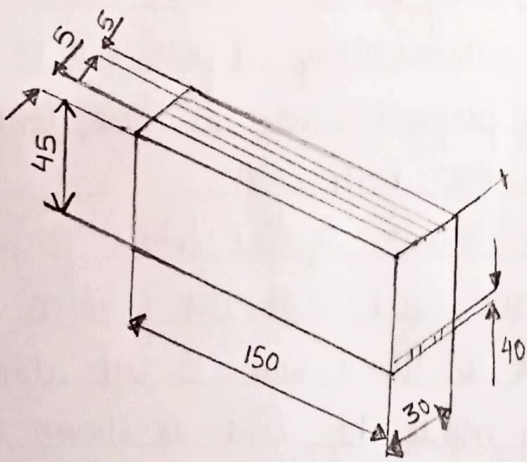
- Prepare work piece as per length of 150mm, width 45mm, thickness 30mm.
- Adjust marking gauge to 5mm and set distance along all four side of piece.
- Now mark a distance of 5mm perpendicular to these lines on the 30mm x 45mm side from the both ends.
- Mark a diagonal angle on at the inner square thus formed.
- Hold a piece horizontally in away such that the portion to be cut is just above the jaw. Use a hand saw to cut along the required line marking but slightly inside the line as shown as in figure to required 5mm depth.
- Now using a firmer chisel take a series of cuts to remove a wood up to this 5mm depth.
- Hold the piece again a firmer chisel slantly chip off the wood from the along the material diagonal side.
- Take a series of small cut delicately on both side to remove to the excess wood. Obtain fine finish of socket and shoulder assembly joint and clear off the waste by rasp.



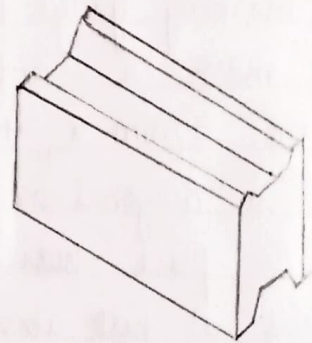
WORK PIECE



MARKING STEP-1



MARKING STEP-2



FINISHED DUSTER

∴ All dimensions are in mm

Pre Lab Questions :

1.) Which is the weakest wood joint?

Ans. The weakest wood joint is the Butt joint.

2.) List out 3 types of chisels?

Ans. Firmer chisel, mortise chisel, Diamond point chisel.

3.) How many types of rasp and mention any two?

Ans. There are eight types of rasp. for eg:- Cabinet rasp, square and knife rasp.

4.) Mention any four types of timber?

Ans. Oak, pine, teak and Cedar.

5.) What is the function of chisel?

Ans. Chisel is a cutting tool, used often by driving with a mallet or hammer in dressing, shaping or working a solid material etc.

Post Lab Questions :

1.) What is vice and name various type of vice?

Ans. A vice that holds workpiece rigid at a stationary point types bench vice, simple bench vice,

2.) How many types of joints are there in Carpentry ?

Ans. These are four types of joint in Carpentry.

3.) Classify the Chisels and their applications ?

Ans. Classification of chisel are hot chisel in which wooden handle is fixed in hole, whereas in cold chisel used in sheet metal for cutting or chipping when metal is in cold condition.

4.) List out the types of Hand saw ?

Ans. coping saw, hand saw, reciprocating saw, miter saw, table saw etc.

5.) What is the main purpose of the table saw ?

Ans. Table saw cut straighter lines and make smoother cuts on small and long boards.

Result :

The Duster was produced from the given work piece and submitted for evaluation.