Square Tray Making
(Sheet metal shop)

DATE: 17 december, 2021

Aim

To make a square tray from given sheet metal of required.

Material

Galvanized iron of dimension 150mm X 150mm

Tools Required

1) steel rule   2) Scriber   3) mallet   4) Straight snip   5) stake
6) Anvil

Sequence of operations

1) Checking   2) Layout marking   3) shearing   4) Folding   5) hooking and finishing

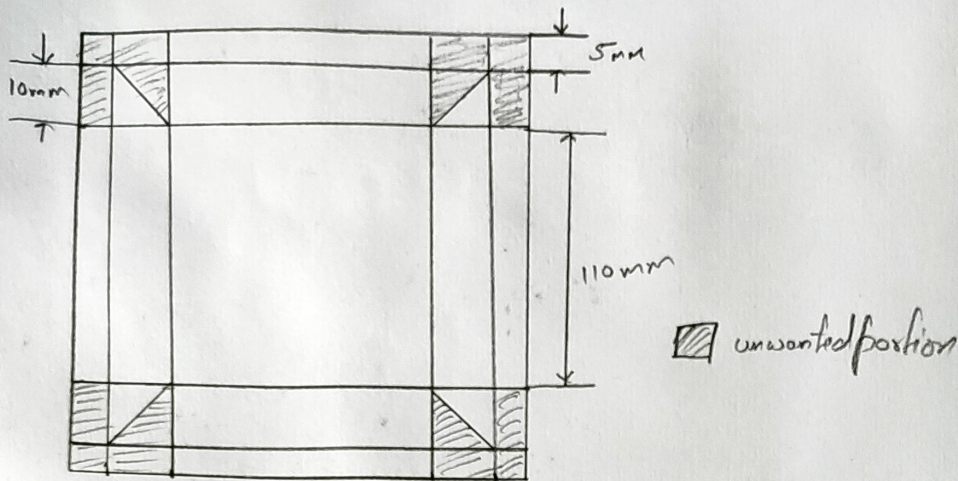# Working Steps

1) Checking

check the given sheet is having dimension 150mm X 150mm. If there is excess then trim the excess material using snip. If these dimensions are less than required than change the sheet

Layout marking

1) Keep one side of square sheet horizontal and start marking from bottom left position
2) Using steel rule and scriber draw four vertical lines at distance of 5mm, 15mm, 130mm, 145mm. from the edge.
3) The first and the last (5mm) space is for hemming i.e hooking
4) Second and before last 15mm space is for height of tray
5) base is made of third space which 110mm wide
6) Repeat the above steps by rotating the workpiece by 90°.

5mm
10mm
110mm

⬚ unwanted portion

Shearing
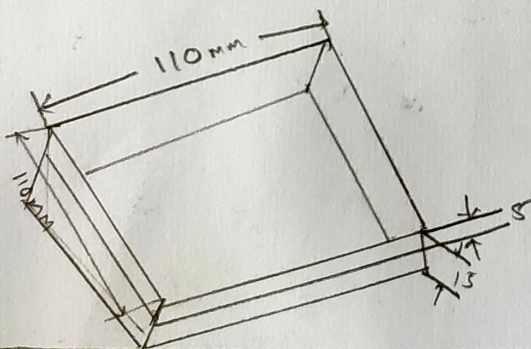
1) Remove the unwanted portion shown in layout
2) while cutting, cut along the proper line and remove the triangle portion after cutting along line by twisting

Folding

1) First fold hem portion 5mm of one side by keeping pattern over the anvil edge for 180° towards the making, repeat this step for other Edges.

2) The incomplete tray is having four corners in align with corner of stake. Using the mallet, fold the triangle shape projection 90° towards the tray. Repeat this step for all other corners

Locking and Finishing

1) fold the remaining portion 5mm heming 180° outwards using using and stake and mallet to lock triangular folds.

2) use mallet makes it perfect shape

3) check for the dimensions

110mm
110mm
5
15

Result

Thus the required square tray of dimensions given is made of given sheet metal