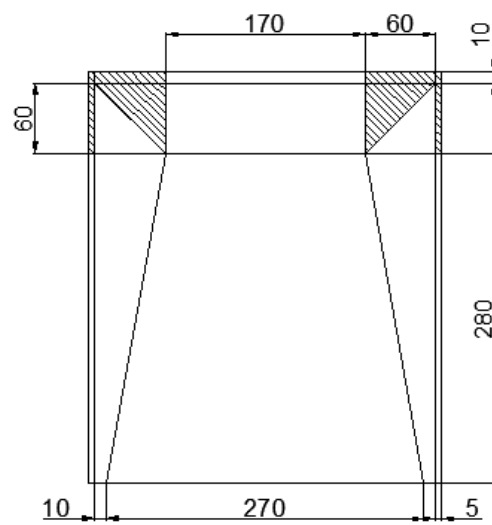


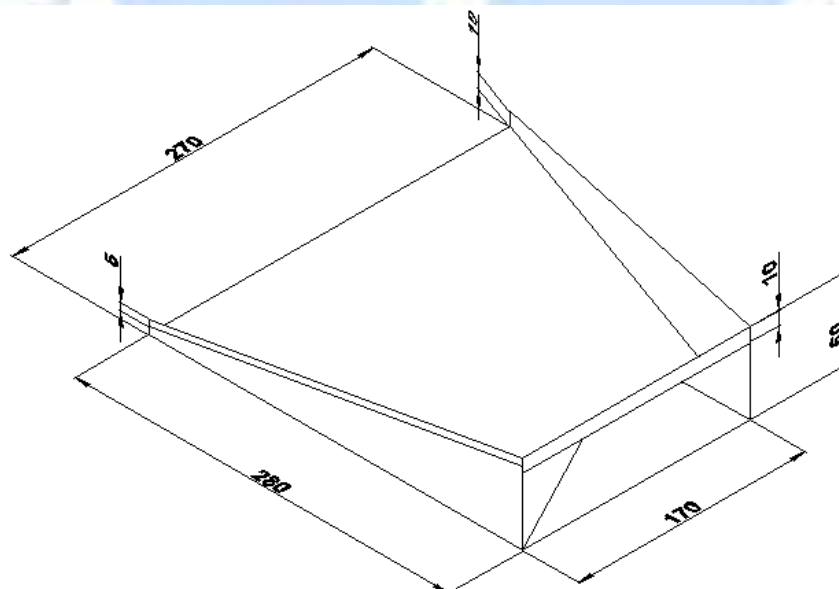
SCOOP MAKING



LAYOUT OF SCOOP
ALL DIMENSIONS ARE IN mm.



UNWANTED PORTION



FINISHED SCOOP
ALL DIMENSIONS ARE IN mm.

Activate Windows

EX NO:

DATE:

SCOOP MAKING

Aim:

To make a big scoop of given specification from a sheet metal piece

Application:

It's a device use to carry, pick and transfer the things

Material Specifications:

Material : Galvanized iron

Sheet of dimensions : 300mm x 350mm thickness 33 gauge

Tools Required:

1. Steel rule 2. Scriber 3. Straight snip 4. Stake 5. Anvil 6 .mallet

Sequence of operation:

1. Checking 2. Layout marking 3. Shearing 4. Folding 5.locking and finishing

Checking:

Check whether the given sheet is having its dimension as 300mm x 350mm. If the dimension is excess trim off using hand shear. If It's less change the given sheet.

Layout Marking:

1. Place the given sheet over working table, so that side of dimension 350 is horizontal.
2. From reference point to draw the vertical line 280mm, 60 mm and remaining portion 10mm for hemming allowance. (Given interval 280 mm for base and 60 mm for top height.)
3. Now place 300mm side, first to be draw 5mm line both sides. These line provided for hemming. Next to be marked 10 mm both side.
4. On the 280 line to be mark both side 60 mm point. (Note: Should be mark after hemming line). Then draw vertical line at both points. Connect the points above and the points below.
5. Now you get square on top corner both side and draw the diagonal line from the bottom.
6. Draw Hatch line shown in figure.

Shearing:

1. Remove the unwanted portion shown in the layout with the help of snip.
2. While cutting, cut along the proper line and remove the unwanted portions

Folding:

1. Keep the pattern over square and fold the 5mm hemming portion with **180°** towards marking side
2. Then fold 60mm height portion with 90° opposite to marking side
3. Again fold two slant lines opposite to the marking side.
4. The scoop is having two incomplete corners. In align the corner of stake, fold the triangular shape both side with help of mallet

Locking and finishing:

1. Fold the remaining portion 180° outwards using stake and mallet to lock the folds
2. To make perfect shape using mallet.
3. Check for the dimension

Pre Lab Question:

1. What type of material used in sheet metal generally?
2. Explain the use of scoop?
3. What is the minimum and maximum sheet metal thickness?
4. Mention the least count for steel rule?
5. Define layout?

Post Lab Question:

1. What is the purpose of anvil?
2. Which tool is used for measuring the thickness of sheet metal?
3. Mention the diagonal angle in scoop making layout?
4. At what stage the sheet metal is called as pattern?
5. What is a GI sheet? Why it is called so?

RESULT:

Thus the required scoop is made out of the given sheet metal piece as per the specification.