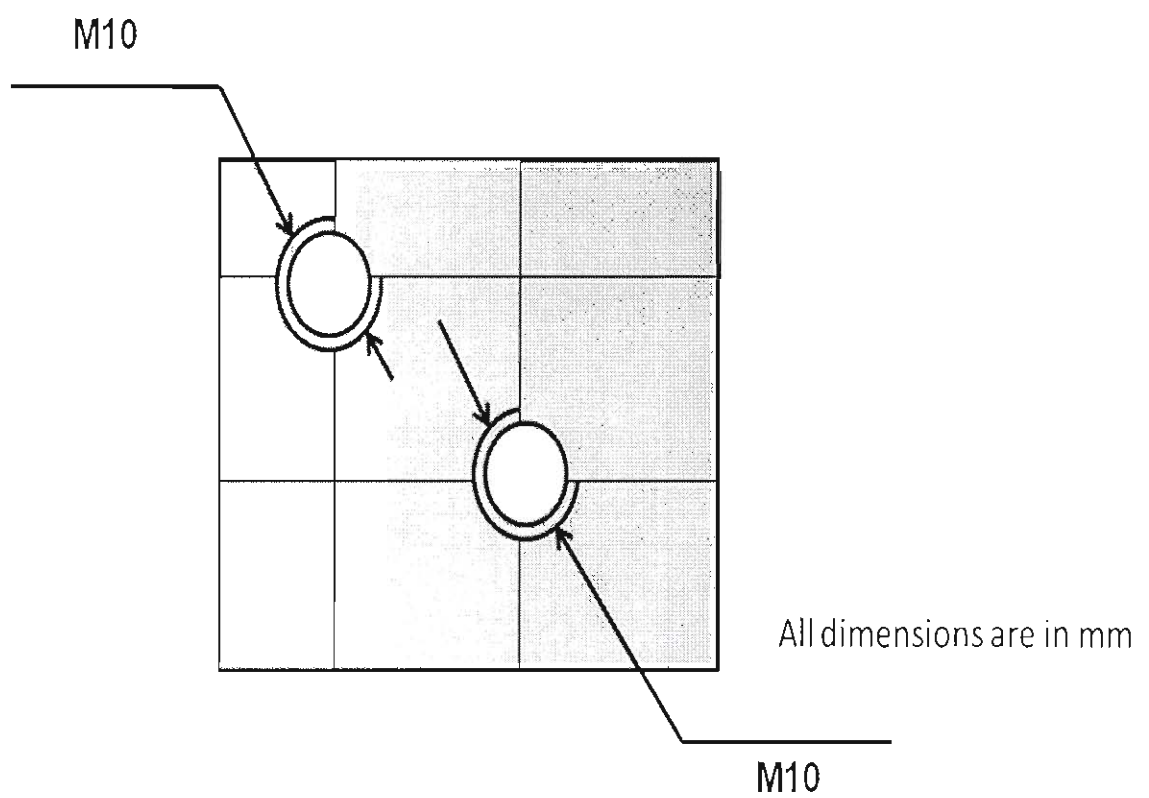


EXERCISE NO:2 DRILLING & TAPPING



DRILLING AND TAPPING

AIM:

To make drill and tap on given mild steel work piece.

SUPPLIED MATERIAL SPECIFICATION:

Mild steel metal plates of dimension is (50 x 50 x 6) mm

TOOLS REQUIRED:

- 1) Hack saw frame with blade. 2) Try square. 3) Steel rule. 4) Jenny caliper 5) Files.
- 2) Drilling M/c. 7) Tapping M/c. 8) Dot punch. 9) Thread pitch gauge

SEQUENCE OF OPERATION:

- 1) Preparation. 2) Marking. 3) Drilling. 4) Tapping. 5) Finishing.

WORKING STEPS:

1) PREPARATION

4. Check the initial dimensions using steel rule.
5. Fix the job on a bench vice and file and two adjacent sides using a flat file to form right angles.
6. Check for the perpendicularity with try square.

2) MARKING:

- i) Apply chalk on the work surface.
- j) Measure 20mm using jenny caliper from the steel rule.
- k) Transfer the measured dimensions to the work piece with edge 12mm.
- l) Draw lines along the dimensions on work piece with scribe.
- m) Make dots along these lines using dot punch..

3) DRILLING:

- e) Place the work piece on the drilling machine platform..
- f) Using drilling machine make two holes on the dotted place made by dot punch.
- g) Pour some oil for smooth drill and drill the work piece properly by adjusting the pilot.
- h) Repeat the steps twice for better finishing..
- i) **Lastly go to the thread pitch gauge machine & complete the drilling procedure on the work piece.**

4) TAPPING:

- f. Fix the work piece in the bench vice in such a way that it should not move.
- g. Using Tapping tool 1 make threads in the holes..
- h. Repeat the procedure for both .holes, then take the tapping tool 2 and use it carefully by rotating in clockwise, simultaneously do this process for both holes. .

5)

6)

7)

8)

9)

10)

11) FINISHING:

- b) Using a 10mm screw, check the accuracy of the finish.

RESULT: The required holes using Drilling & Taping techniques with proper measurements has been obtained,

