

Student Project

Create and assemble all the components of the Tool Head of Shaping Machine shown in Figure 1 and Figure 2. After creating the assembly, generate the top, front, right-side, and the isometric view of the assembly. Add the parts list similar to the one shown in Figure 3. The dimensions of the individual components are shown in Figures 3 through 20.

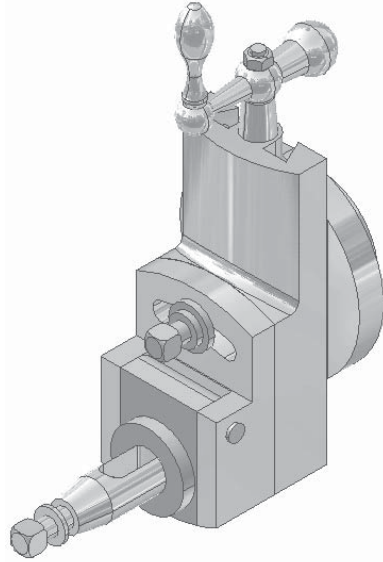


Figure 1 Assembled view of Tool Head of Shaping Machine

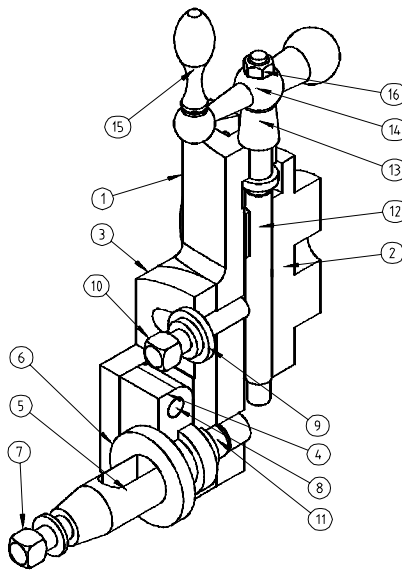


Figure 2 Different components in the assembly

Bill Of Material			
Item	Qty	Name	Material
1	1	VERTICAL SLIDE	CAST STEEL
2	1	BACK PLATE	CAST STEEL
3	1	SWIVEL PLATE	MILD STEEL
4	1	DRAG PLATE	MILD STEEL
5	1	TOOL HOLDER	MILD STEEL
6	1	WASHER	MILD STEEL
7	1	TOOL FIXING SCREW	STEEL
8	1	PIVOT PIN	MILD STEEL
9	1	WASHER	MILD STEEL
10	1	CLAMPING SCREW	MILD STEEL
11	1	SWIVEL SCREW PIN	MILD STEEL
12	1	SCREW ROD	MILD STEEL
13	1	SPACER BUSH	MILD STEEL
14	1	HANDLE BAR	MILD STEEL
15	1	HANDLE	MILD STEEL
16	1	NUT M 10	MILD STEEL

Figure 3 Parts list for the assembly

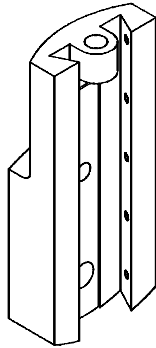


Figure 4 3D view of the Vertical Slide

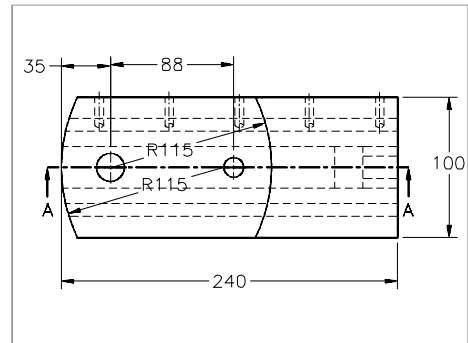


Figure 5 Top view of the Vertical Slide

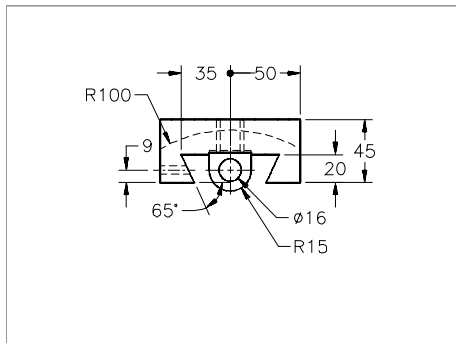


Figure 6 Side view of the Vertical Slide

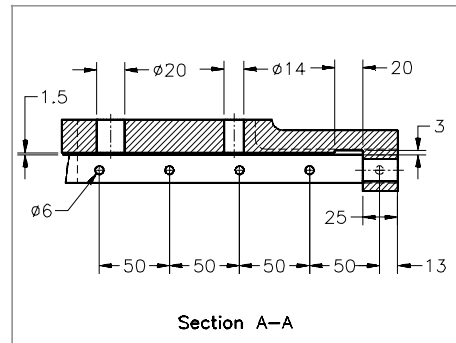


Figure 7 Sectioned front view of the Vertical Slide

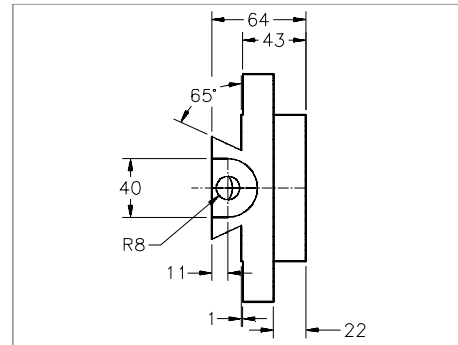


Figure 9 Side view of the Back Plate

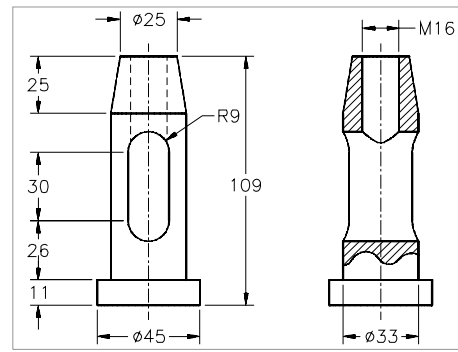


Figure 11 *Dimensions of the Tool Holder*

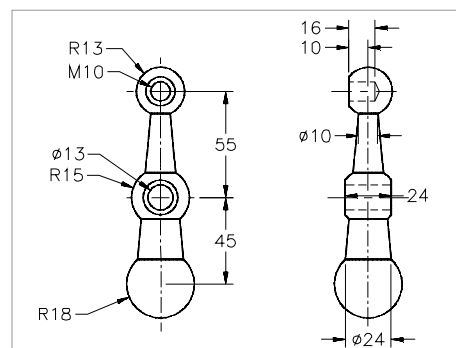


Figure 13 *Dimensions of the Handle Bar*

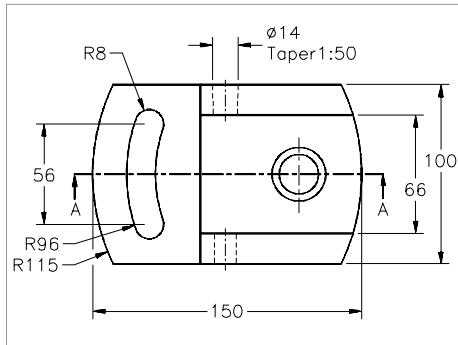


Figure 14 Top view of the Swivel Plate

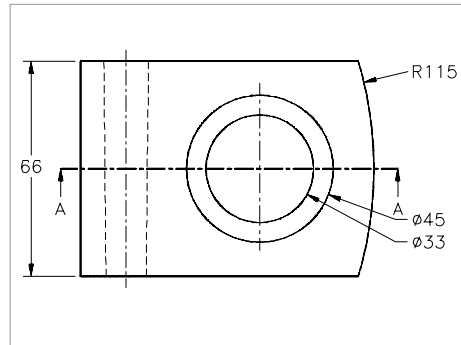


Figure 15 Top view of the Drag Plate

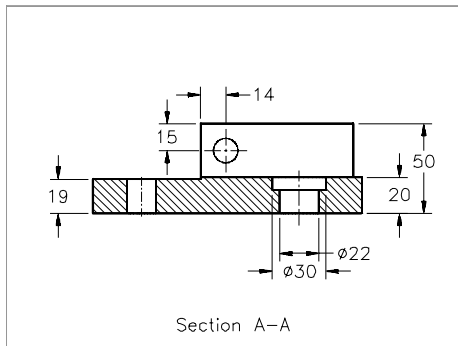


Figure 16 Sectioned front view of the Swivel Plate

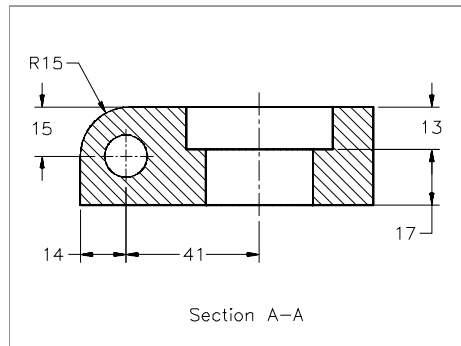


Figure 17 Sectioned front view of the Drag Plate

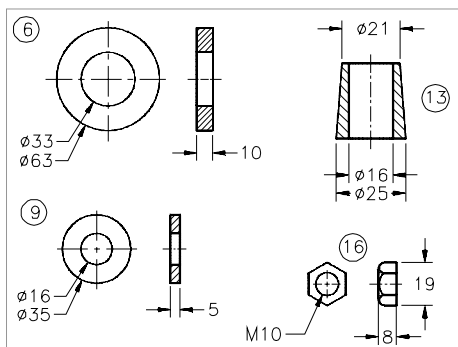


Figure 18 Dimensions of the components

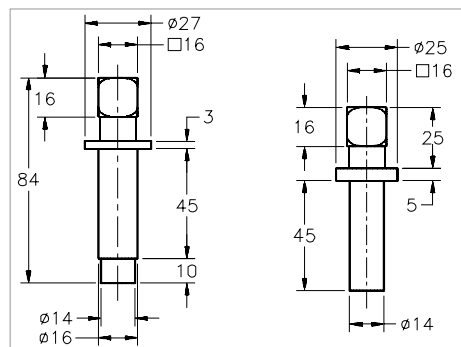


Figure 19 Dimensions of the components

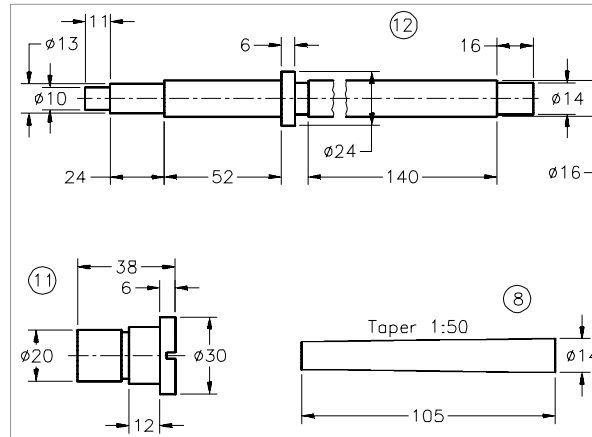


Figure 20 Dimensions of the components