

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch :B.E - AERO/M&P/MECH

Title of the Paper :Machine Drawing

Sub. Code :6C0067

Date :05/05/2010

Max. Marks :80

Time : 3 Hours

Session :AN

PART – A

(10 x 3 = 30)

Answer All the Questions

1. What is fits? Give the classifications of fits?
2. What is hole basis and shaft basis system? Which is preferred? Why?
3. Explain the functional dimension and non functional dimension with the a help of an example.
4. What are form positional and run-out tolerances?
5. Explain the following:
(i) $\text{Ø}50 \text{ H7}$ (ii) $\text{Ø}50 \text{ p6}$ and (iii) $\text{Ø}50 \text{ H7/p6}$
6. With neat sketch explain the various elements of surface roughness symbol.
7. How do you indicate the surface lay which is particulate, non-directional or protuberant?
8. Sketch the conventional representation for tension spring and leaf spring.
9. Show the simplified representation of the following:
(a) Hexagonal nut screw (b) Hexagonal nut

10. Explain the screw thread designation: M20* L3-P1.5—RH-S.

PART – B

(2 x 25 = 50)

Answer All the Questions

11. Draw neat sketches to show how a cotter-joint differs from a pin-joint.

(or)

12. Sketch a protected type flanged coupling and indicate important proportions.

13. Draw the sectional front view and top view assembly of the Lathe Tailstock for which the part details are furnished in Figure 1.

(or)

14. Figure 2 shows the details of Cylinder relief valve. Draw the assembled front view in full section.

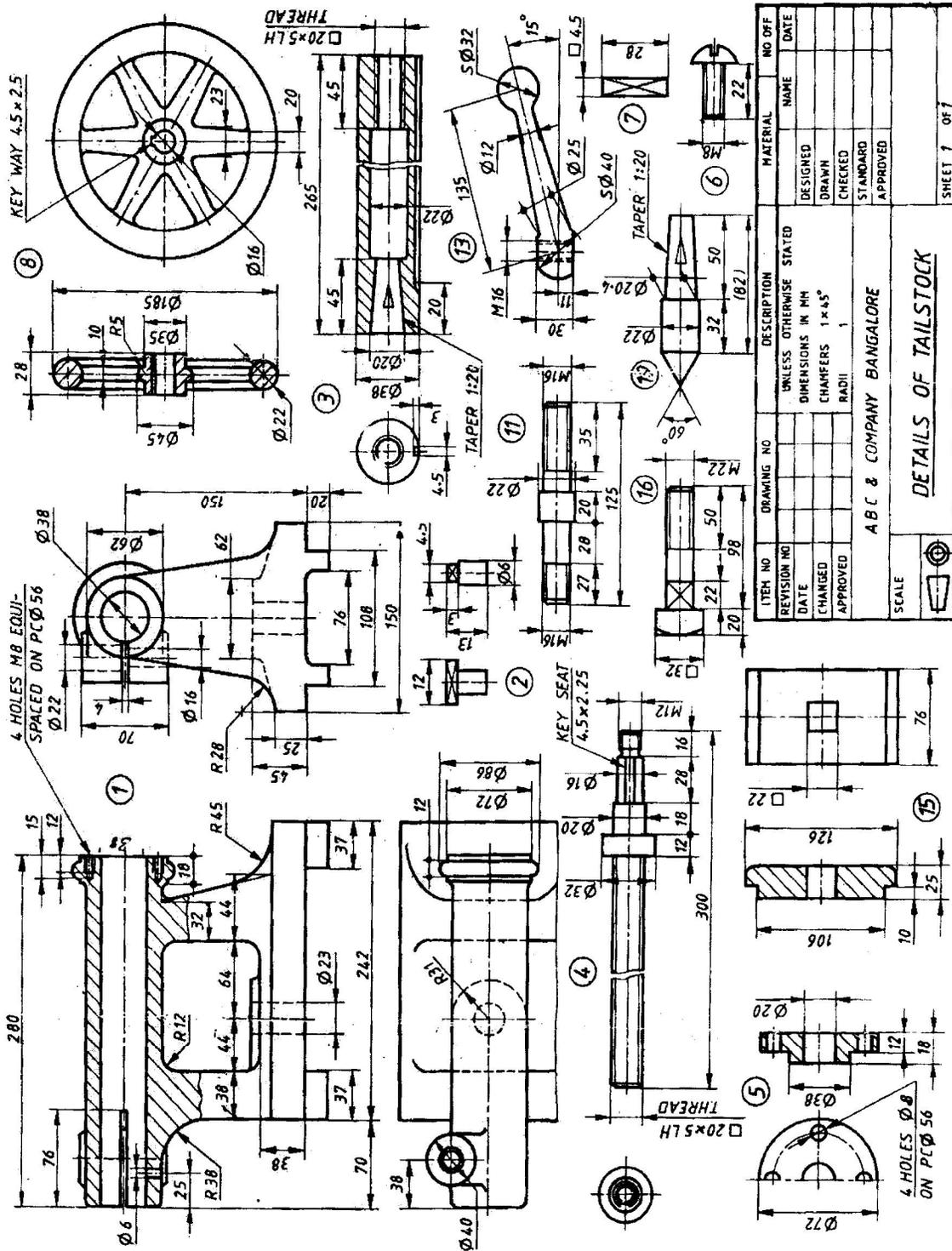


Figure 1 Details of a Lathe Tailstock

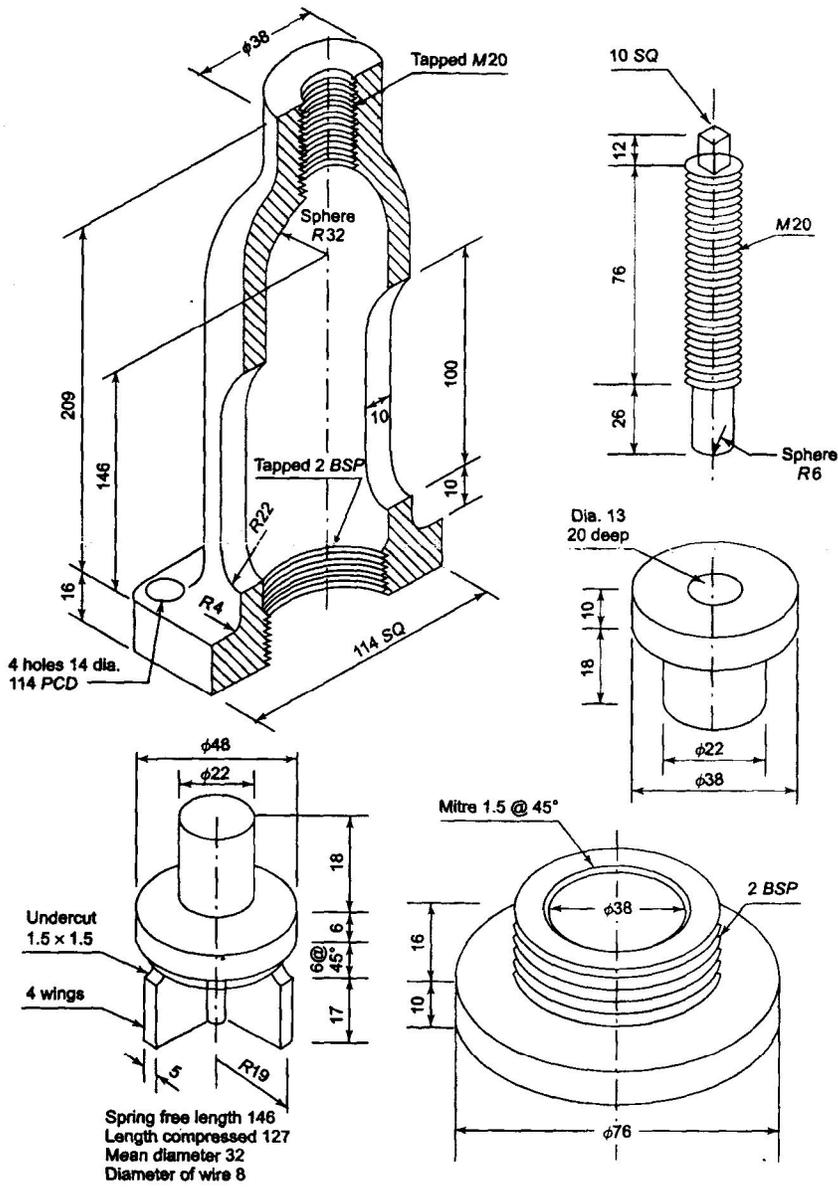


Figure 2 Cylinder relief valve