

Mountlake Terrace High School

Drafting Technology

Unit 17:

Title: Machine Drawing - Working Drawings

Unit Objectives:

The student will be able to:

1. Develop detail drawings from an isometric view.
2. Develop an isometric assemble drawing

Textbook: *Basic Technical Drawing* by Spencer

Chapter 3: Mechanical Drawing

Reading Assignment: pp. 226-260: Study every picture and read each caption. Additionally read any sections necessary for clarification of any concept not fully understood through the pictures.

You may choose any one of the following figures for this unit and then complete the unit using that same figure.:

- p. 243 --> fig. 530: Pillow Block
OR
p. 246 --> fig. 536: Caster
OR
p. 255 --> fig. 550: Shaft Bearing

Plate 1:

- fig. 530: draw Base (1) - 3 views & fully dimension
fig. 536: draw Caster Fork (1) - 3 views & fully dimension
fig. 550: draw Shaft Bearing Body (1) - 3 views & fully dimension

Plate 2:

- fig. 530: draw Cap (2) - 3 views & fully dimension
fig. 536: draw Wheel (2) & Axle - 3 views & fully dimension
fig. 550: draw Shaft Bearing Cap (2) - 3 views & fully dimension

Plate 3 (double points):

- fig. 530: draw Isometric Exploded Assembly w/o dimensions
fig. 536: draw Isometric Exploded Assembly w/o dimensions
fig. 550: draw Isometric Exploded Assembly w/o dimensions