

READING THE VIEWS

METHOD OF READING

Reading is primarily a reversal of the process of making drawings. A drawing is read by visualizing units or details one at a time from the orthographic projection and mentally orienting and combining these details to interpret the whole object finally.

Beginner can develop this ability as follows:

- 1- He must have a reasonable knowledge of the principles of orthographic projection
- 2- Beginner must acquire a complete understanding of the principles behind the meaning of lines, areas etc. and the mental process involved in interpreting them, as these principles are applied in reading.

There is very little additional learning required. Careful study of all these items plus practice will develop the ability and confidence needed.

PROCEDURE FOR READING

The reading steps are not always identical, because of the wide variety of drawing types. On the other hand the following outline gives the basic

procedure and will serve as a guide:

- 1- Orient yourself with the given views
- 2- Obtain a general idea of the over-all shape of the object. Think each view as the object itself. Study the dominant features and their relations to one another.
- 3- Start reading the simpler individual features. Look for familiar shapes or conditions that your memory retains from previous experience. Read all views of these familiar features to note the extent of holes, thickness of ribs and lugs etc.
- 4- Read the unfamiliar or complicated features. Remember that every point, line, surface and solid appears in every view and that you must find the projection of every detail in the given views to learn the shape.
- 5- As the reading proceeds, note the relationship between the various portions or elements of the object. Such items as the number and the spacing of holes, placement of ribs, tangency of surfaces, and the proportions of hubs etc. should be noted and remembered.
- 6- Reread any detail or relationship not clear at the first reading.

Do not forget that, ^{the} shape of the object can not be assumed from one or two views, all the views must be read carefully.