

## EXAMINATION OF DRAWINGS

The installation of a boiler involves design, manufacturing and final erection of the boiler and pipe lines at site.

There are different types and capacities of boilers depending upon fuel to be used for firing or waste heat recovery, quantity and end use of steam by the user/owner.

A designer design a boiler according to the requirements of user, based on available raw materials and infrastructures. Detailed drawings are prepared complying Indian Boiler Regulation and other national and international codes and specifications by the boiler manufacturer prior to start manufacturing of boiler and by owner prior to start erection of boiler and pipe lines at site. Drawings are submitted to the boiler Directorate for scrutiny and approval. After approval of drawings, manufacturing or erection of boiler and pipe lines can be started at shop or site under supervision and inspection of Boiler Directorate.

The west Bengal Boiler Directorate have a full flagged drawing examination cell headed by a Joint Directorate of Boilers. There are several Asst. and Dy. Director of Boilers posted in drawing cell for scrutiny of drawings prior to approval.

This Directorate have a good library consisting of different test books, hand books, IBR, different national and international codes and specifications. There are several computers in drawing cell for analysis and checking of design of boilers and pipe lines.

Drawing examination starts after receiving original drawings in triplicate along with requisite fees. The cell checks design parameters, bill of materials, selection of materials depending upon service temperature, thickness to withstand working pressure, welding configurations, heat treatment requirements, non-destructive testing requirements, hydraulic testing requirements, flexibility analysis ,support requirements etc. as per requirements of relevant regulation of IBR,different national and international codes and specifications. Drawings are scrutinised by the Asst. /Dy. Director of Boilers, reviewed by the Joint Directorate of Boilers and finally approved by the Director of boilers. Two set of approved drawings are despatched to the boiler manufacturer or owner and one set kept in the Directorate for record purpose.