

CLASS REQUIREMENTS IN DESIGN & CONSTRUCTION OF SHIPS

COURSE OBJECTIVES

- On successful completion of the course, the participants will be able to:
- Enhance their knowledge and understanding of Class Rules in ship design and shipbuilding
 - Work with Class Rules effectively in their day-to-day work in design and shipbuilding projects
 - Minimise time taken to obtain approvals from Class in the design/shipbuilding processes

ABOUT THE COURSE

Before venturing into detailed design and development of production drawings, it is essential to meet with the Class Rules. Even in the detailed engineering stage, a number of Class Rules become applicable. Also, during the actual ship construction, a number of Class Rules need to be complied with. It is therefore critical for the shipyard team to have a clear understanding of the Class Rules and the criteria for approvals.

This course focuses on interpretation and application of Class Rules for ship design and shipbuilding.

PARTICIPANTS

Engineers and Naval Architects engaged in design of ships- engineers and managers working in shipyard design and drawing office, QA/QC personnel, engineers and supervisors engaged in shipbuilding, consultants and ship owners' technical managers engaged in developing specifications for shipbuilding, superintendents tasked with supervision of new building, etc.

DURATION

Four days

KEY TOPICS

- Role of Class, overview of Rules applicable to ship design/ construction.
- Quality Assurance Plan (QAP) and role of various stakeholders in its execution
- Ship design process, Rule requirements, plan approval, inspection/ survey of:
 - Hull: Design loads, longitudinal strength and scantlings, local strengthening, bottom structure, engine seating, bulkheads, damage stability, opening and closing appliances, ventilators, air pipes, anchoring/ mooring equipment, welding, NDE, hull inspection, workmanship, testing.
 - Machinery: General requirements, piping design requirements, pump ing and piping, prime movers, shafting, stern tube, propeller and rudder, steering gear, boilers and pressure vessels.
 - Electrical: Load analysis, electrical powering, single-line diagram, electrical installation.
 - Fire Safety Requirements: Prevention of fire & explosion, escape.