Design & Fabrication Of Storage Tanks In Accordance With API 650

Course Description:

This course provides a background for principal organizations issuing codes and standards for design and fabrication of storage tanks (API), indicating code requirements and guidance on design, selection of materials, fabrication, testing and practical methods and trends in design and construction. Compliance with the code requirements for design and construction is needed to assure the safety petroleum refinery and chemical plant. The designer, fabricator,

Supplier, erector, examiner, and inspector understand and application of these requirements is essential in producing this desired safety.

Who Should Attend?

This course is designed for engineers entering the design, fabrication, inspection engineers, project engineers,maintenabce engineers, plant engineers requiring background on Code compliance, plant owners, fabricators and suppliers wishing to extend their knowledge to induce a supplementary understanding of design,

fabrication and installation of petroleum & petrochemical equipment. The course also of interest to practicing piping/vessel/ exchanger design and fabrication personnel interested in expanding their knowledge by interaction with other people, viewpoints, and experience in the field; and supervisory personnel requiring a review on current design and fabrication techniques and procedures.

Course Objectives:

Principal organizations issuing codes and standards for design and fabrication of storage tanks (API) 650,

Course Certificate:

BTS Consultant certificate will be issued to all attendees completing minimum of 75% of the total tuition hours of the course

Course Outline:

PART I.

- Definitions.
- Principal organization (API) issuing codes and standards.
- Design Conditions.

PART II.

- Materials.
- Design of Supported Roof Storage Tanks.
- Design of Self Supported Roof Storage Tanks
- Thickness of Shell, Bottom and Annular Plate.

PART III.

Roof Design:

- Roof Plate
- Top Angle
- Rafter

Column

- Design of Top & Intermediate Wind Girder.
- Design of Floating Roof Storage Tanks (Single Dick and Pontoon Type).
- Wind Loads & Earthquack, ANSI, UBC, ASCI.

PART IV.

- Calculation of Normal Venting Capacity.
- Surface Preparation, Painting and Coating, SSPC.
- Safety & Fire Protection, NFPA.