

Hi-Tech House, B/H V-Murti Complex, Near Gurukul Tower, Gurukul, Ahmedabad-380 052, Gujarat, INDIA

Design Solution for Bunded Fuel Tanks of Different Capacities & Regulatory Standards

Case Study Highlights

Client Profile:

Fuel & Water Tanks Manufacturer

Objective:

To offer design solution through CAD tools for bunded fuel tanks of different capacities and global standards

Challenges:

- Identifying global above ground fuel storage regulations
- Determining required wall thickness to sustain fuel pressure
- Developing detailed manufacturing drawings and 3D layouts
- Providing on-site support for manufacturing requirements

Solution:

The bunded container for fuel storage with different capacities were developed with a team of design engineers and CAD professionals, maintaining the required regulatory standards such as UN, ADR, PPG2, BS799, UL, etc. Detailed manufacturing drawings were prepared along with on-site support to the manufacturing team. Bunding is a secondary containment system required to store chemicals and fuels to protect the environment from leakage and spills. Bunded containers are legally required in most countries to avoid spillage and hazardous impact on the environment. Their design specifications depend upon the capacity and regulatory standards developed specifically for different countries.

A major bunded container manufacturer with a global presence approached Hi-Tech for design solution and manufacturing support for their different range of storage tanks.

Solution

The design of bunded containers for fuel storage was developed using professional CAD tools by a team of design engineers and CAD specialists. Considering the regulatory norms of different countries, customized tank designs were developed with detailed manufacturing drawings to assist manufacturing team comprehensively.

Initial assistance included a design solution for a bunded container 20/40 feet above ground level with different variance and regulatory standards. At present, Hi-Tech extends design solution for tanks with capacity ranging from 100 to 16000 Gallons.

Software Used: AutoCAD





Benefits

- Comprehensive design solution for bunded tanks of different capacity reduced time to market
- Detailed manufacturing drawings assisted in reducing manufacturing time frame
- Easier design modification for future requirements

About Mechanical 3D Modelling

Mechanical 3D Modelling is an India based company that caters for global clientele and plans to penetrate deeper into the existing and emerging markets. Proficiency lies in offering qualitative, cost effective and time bound mechanical engineering design services, including 2D, 3D CAD drafting, 3D solid modeling, FEA, CFD, rapid prototyping, reverse engineering. Professional and highly experienced team can handle all kind of CAD projects with the use of AutoCAD, Wildfire, 3D Max, Inventor, Solid Works, Solid-edges and Pro-e tools.