

# COMPANY INTRODUCTION AND OVERVIEW OF MAJOR GAS & OIL PROJECTS

**AN UPCOMING MULTINATIONAL COMPLETE LPG ENGINEERING COMPANY**

 <b>8 Service Branch Offices in India</b>	 <b>Over 150 Employees</b>	 <b>Concept to Commissioning and Beyond</b>	 <b>Over 700 Installations Worldwide</b>	 <b>Award Winning Team</b>	 <b>Latest Fabrication Equipment</b>
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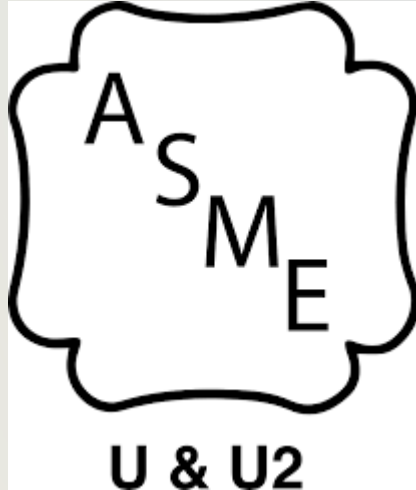
# A LEADING OIL AND GAS EPC CONTRACTOR

## SPECIALISED IN STORAGE AND HANDLING FACILITIES

1. OVER 1000 COMPLETED PROJECTS WORLD WIDE
2. OVER 200 PERMENANT EMPLOYEES AND OVER 600 CONTRACT EMPLOYEES
3. THREE WORLD WIDE OFFICES NAMELY - MUMBAI, NAIROBI AND DUBAI
4. STRONG FINANCIALS
5. ETHICAL PROJECT EXECUTION



# MANUFACTURING CAPABILITIES



**SHOP APPROVAL  
FOR ASME  
U, U2 AND R STAMP**



**SHOP APPROVAL  
FOR PRESSURE VESSEL  
MANUFACTURE**



**SHOP APPROVAL  
FOR CRYOGENIC TANK  
MANUFACTURE**





[www.optechengineering.com](http://www.optechengineering.com)

An ISO 9000:2008 Certified Company

Optech Engineering Private Limited, incorporated in 2005 by two experienced technocrats Siddhartha Desai (Chemical Engineer) and Trisit Bhuiyan (Mechanical Engineer), is dedicated to create a benchmark in the Global hydrocarbon sector. Optech Engineering is committed in delivering high quality products and innovative technology to its customers.



In order to give our customer the end to end solution company has four main wings

**OPFAB** Fabrication of Pressure Vessels and Process Equipments

**OPCON** Turnkey Projects for Hydrocarbon Storage and Handling

**OPSERV** 24x7 Operation and Maintenance of Customers Assets

**OPTTEST** Periodic Non Destructive and Statutory Testing Services



Shop Approved for  
Pressure Vessel

Approved Auto  
LPG Installer

PESO  
(DEPARTMENT OF EXPLOSIVES)  
NAGPUR



ISO 9001:2008  
Certified Company



# OPFAB

THE FABRICATION SHOP



Our ISO 9001-2008 certified Pressure Vessel Fabrication Facility at Murbad, Thane Dist, (India) is a state of the art facility with most modern equipments to handle a job of 10 meters height and 40 meters in length and 20 meters in width.

- Total Area of 3000 SqM
- 15MT Demag OT crane
- Plate rolling Machine for 60mm x 3m wide plate
- Trolley Mounted Column and Boom Welding Machine with Rotators
- All In-house NDT facilities

We have decades experience in Designing vessels as per the ASME, PD5500, IS 2825, AD MERKBLATT standards and Our Process is certified by LRIS, BVIS, DNV, TUV, PDIL, Mec Elec and many reputed firms.

Our Products include:

- LPG / Propane Storage Tanks
- Ammonia Storage Vessels
- CO<sub>2</sub>, H<sub>2</sub>, N<sub>2</sub> and other Industrial Gas Pressure Vessel
- Large Capacity Vaporisers and Heat Exchangers
- Speciality Structures and Process Skids
- Stainless Steel Storage Tanks and Vessels
- Containerised Bottling Plants

DESIGN AND MANUFACTURING STANDARDS FOLLOWED:



CODE FOR PRESSURE VESSEL DESIGN:





# OPCON

PROJECTS AND CONSTRUCTION DIVISION



With over a two decades of experience of promoters in the large scale projects, Customers are assured of innovative and reliable designs, well coordinated project execution, Fast and quality Construction in all projects.

Over 700 projects to its credit in India and abroad makes Optech a Reliable Company to choose for your projects.

Our ISO Certified Design, Procurement and Execution process assures lower costs and better quality for our customers.

Our Core Expertise is mainly in the following areas:

- **PROPANE /LPG Storage and Handling Import Terminals and Bulk Storage Facilities with Indigenous & Imported Equipments**
- **LNG Storage Terminals for small Industries**
- **Large Crude Oil Terminals and Floating Roof Storage Tanks**
- **Auto LPG Dispensing Station Skid Mounted and Elaborate**
- **LPG Bottling Plants**
- **Large Diameter and Specialty Process / Utility Piping**
- **All Types of Industrial Hydrocarbon and Chemical Storage Facilities**
- **Innovative Instrumentation and Control Systems**

**COMPLETE CONCEPT TO COMMISSIONING**



# OPSERV

24x7 ONSITE SERVICES



An innovative “Business Process Outsourcing” for Large manufacturing companies to save costs and improve safety at your hydrocarbon storage and handling facilities.

Optech offers a dedicated well trained team to operate and maintain your Hydrocarbon storage and handling facilities on 24x7 basis.

What we offer:

- Regularly Trained technical manpower for round the clock operation of facilities
- Maintenance schedules prepared and followed meticulously
- All statutory compliances taken care
- Spares planning
- Safety Drills and Regular Improvements with KAIZEN
- Backed by large OEMs and Service Providers for any Break down



# OPTEST

NON DESTRUCTIVE TESTING AND CERTIFICATIONS



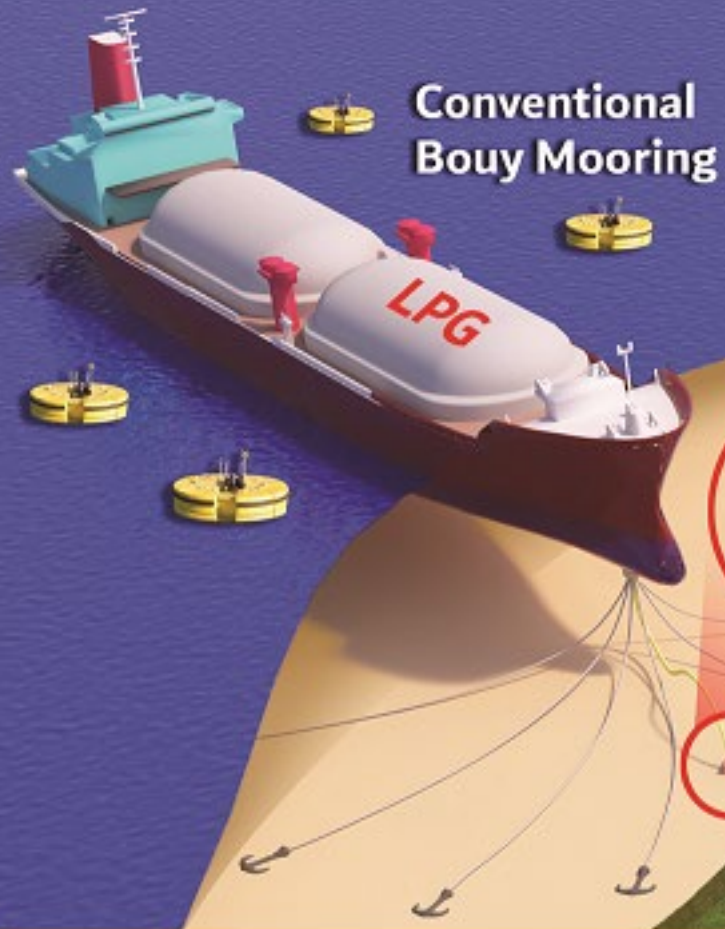
In our best endeavor to become a complete solutions company, Optech has its fourth division which undertakes all the “Non Destructive Testing Procedures and Statutory Certifications” for Hydrocarbon storage and handling facilities.

Our Expertise is Follows:

- Large Diameter Horton spheres and Pressure Vessels Rectifications
- Floating Roof Storage Tanks (API 650)
- Auto LPG Stations and underground storage tanks
- LPG/Propane Bulk terminals
- Radiographic Inspection (ASME Sec VIII Div 1 and Sec IX)
- Wet Fluorescent Magnetic Particle Inspection (ASTM-A-709 / T-700)
- Hardness Test (ASTM-E-110-89)
- Dye Penetration Test (ASTM-E-165-89)
- Ultrasonic Flaw Detection Test (ASME Sec VIII Div 1 App12)
- Ultrasonic Thickness Measurement (ASTM-A-4535-89)
- Hydro Testing (ASME Sec VIII Div 1/2)



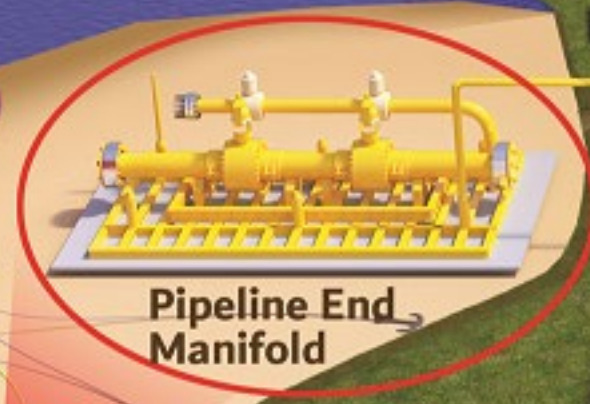
# WE BUILD LPG ASSETS END TO END SUPPLY CHAIN



Conventional  
Bouy Mooring



LPG Hortonspheres



Pipeline End  
Manifold



Submarine  
Piping

On shore  
Piping

Mounded Storage  
Tanks



**WE BUILD LPG ASSETS END TO END SUPPLY CHAIN**



**Large & Satellite Bottling Plants**



**Road Tankers**



**Industrial Installation & Vaporisers**

**Auto LPG Stations**



The image features a light beige background with decorative elements in the corners. These elements consist of thin, dark blue lines that resemble circuit traces or a stylized tree structure. Some lines terminate in small, empty circles. The decorations are located in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

**IN AFRICA**

# CONSTRUCTION OF MOUNDED TYPE 1650 MT X 15 NOS TANKS, TOTAL 25,000MT LPG IMPORT TERMINAL AT MOMBASA IMPORT TERMINAL, MOMBASA, KENYA

Design code	: ASME Sec VIII Div 2
Design Pressure	: 17.24 Bar at the Top
Capacity each of Bullet	: 3450 Cu M
Thickness of Shell	: 38 mm
Diameter of Sphere Length	: 8.0 meter Diameter c 68 meter



**OPTECH**





# CONSTRUCTION OF 4 NOS X 2500 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT KENYA, MOMBASA

Design code	: ASME Sec VIII Div 2
Design Pressure	: 17.5 Bar at the Top
Capacity each of Sphere	: 5000 Cu M
Thickness of Shell	: 44mm
Diameter of Sphere	: 21.25m
Ship Unloading Rate	: 450MT/ Hr



**OPTECH**



# CONSTRUCTION OF 2 NOS X 2500 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT BERBERA, SOMALILAND

Design code	: ASME Sec VIII Div 2
Design Pressure	: 13.5 Bar at the Top
Capacity each of Sphere	: 5000 Cu M
Thickness of Shell	: 36mm (SA 537 Class 2)
Diameter of Sphere	: 21.25m
Ship Unloading Rate	: 450MT/ Hr



# CONSTRUCTION OF 2 NOS X 2500 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT MOGADISHU, SOMALIA

Design code	: ASME Sec VIII Div 2
Design Pressure	: 13.5 Bar at the Top
Capacity each of Sphere	: 5000 Cu M
Thickness of Shell	: 36mm (SA 537 Class 2)
Diameter of Sphere	: 21.25m
Ship Unloading Rate	: 450MT/ Hr





# CONSTRUCTION OF 2500 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT KIGAMBONI, DAR ES SALAAM, TANZANIA.

Design code	: ASME Sec VIII Div 2
Design Pressure	: 14.5 Bar at the Top
Capacity each of Sphere	: 5000 Cu M
Thickness of Shell	: 40mm
Diameter of Sphere	: 22m
Ship Unloading Rate	: 250MT/ Hr



# SHIP UNLOADING PIPING

SIZE : 12 INCH

ONSHORE : 4000 METER

OFFSHORE : 1500 METER

OTHER FACILITIES

PIG RECEIVING FACILITY

CONNECTION TO CBM JETTY



# RE-CONSTRUCTION OF 10000 KL CRUDE OIL FLOATING ROOF TANK AT OIL AND NATURAL GAS CORPORATION, ANKLSHWAR, INDIA

Design code	: API 650
Capacity each of Tank: 10,000 Cu M	
Type	: External Floating rood Tank
Design Pressure	: Atm
Thickness of Shell	: 10/12 mm
Size of Tank	: 34 meter Diameter x 12 meter
Height	



# PETROLEUM TERMINAL IN SOMALIA X 2 TERMINALS

Design code	: API 650
Product	: PETROL/DIESEL/JET KERO
Capacity each of Tank	: 10,000 KL x 5 Nos
Type of Tank	: Floating Roof Tank
Size of Tank	: 34m x 13.2m
Ship Unloading Rate	: 350MT Per Hr



# PETROLEUM TERMINAL IN NIGERIA

Design code	: API 650
Product	: PETROL/DIESEL/JET KERO
Capacity each of Tank	: 5000 KL x 4 Nos
Type of Tank	: Floating Roof Tank
Size of Tank	: 25m x 17m
Ship Unloading Rate	: 250MT Per Hr



The image features a light beige background with decorative circuit board patterns in the corners. These patterns consist of thin blue lines forming various shapes, including straight lines, right angles, and small circles, resembling a printed circuit board (PCB) layout. The patterns are located in the top-left, top-right, bottom-left, and bottom-right corners.

**IN OTHER PART OF THE WORLD**

# CONSTRUCTION OF MOUNDED TYPE 1650 MT X 6 NOS TANKS, TOTAL 10,000MT LPG IMPORT TERMINAL AT DHAKA, BANGLADESH



**OPTECH**

Design code	: ASME Sec VIII Div 2
Design Pressure	: 17.24 Bar at the Top
Capacity each of Bullet	: 3450 Cu M
Thickness of Shell	: 38 mm
Diameter of Sphere Length	: 8.0 meter Diameter c 68 meter

# 2500MT LPG BARGE -CLASS APPROVED

Design code	: ASME Sec VIII Div 2 + IGC
Design Pressure	: 13.0 Bar at the Top
Capacity each of Bullet	: 2502 Cu M X 2 – On One Barge
Thickness of Shell	: 44 mm / 60mm
Diameter of Bullet	: 11.0 meter Diameter
Class Approval	: RINA, China





# CONSTRUCTION OF MOUNDED TYPE 1000 MT X 2 NOS TANKS, TOTAL 2,000MT LPG IMPORT TERMINAL AT MONGLA IMPORT TERMINAL, BANGLADESH

Design code	: ASME Sec VIII Div 2
Design Pressure	: 17.24 Bar at the Top
Capacity each of Bullet	: 2100 Cu M
Thickness of Shell	: 46 mm
Diameter of Sphere	: 10.0 meter Diameter x 34 meter Length



# CONSTRUCTION OF 3000 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT SITAKUNDO, CHITTAGONG, BANGLADESH



**OPTECH**

Design code

: ASME Sec VIII Div 2

Design Pressure

: 14.5 Bar at the Top

Capacity each Sphere

: 3000 Cu M

Thickness of Shell

: 38mm

Diameter of Sphere

: 18m

Ship Unloading Rate

: 200MT/ Hr



# RE CONSTRUCTION OF 15000 MT X 2 NOS LPG REFRIGERATED STORAGE TANKS AT INDIAN OIL CORPORATION LIMITED, KANDLA IMPORT TERMINAL, GUJARAT, INDIA



**OPTECH**

Storage capacity per tank	15000 MT
Design code	API 620
Appendix R / 1990	
Inside diameter of Inner Shell	45200 mm
Inside diameter of Outer Shell	46800 mm
Height of Inner Shell,	18400 mm
Height of Outer Shell	20000 mm



# CONSTRUCTION OF 2000 MT LPG IMPORT TERMINAL WITH JETTY PIPING AT MONGLA IMPORT TERMINAL, BANGLADESH

Design code	: ASME Sec VIII Div 2
Design Pressure	: 14.5 Bar at the Top
Capacity each Sphere	: 3840 Cu M
Thickness of Shell	: 42mm
Diameter of Sphere	: 20m
Ship Unloading Rate	: 200MT/ Hr



**OPTECH**



# EPC CONSTRUCTION OF 20,000 CYLINDER PER DAY FILLING CAPACITY LPG BOTTLING PLANT FOR INDIAN OIL CORPORATION LIMITED, MYSORE, KARNATAKA, INDIA

Bottling plant Configuration:



**OPTECH**

- Storage Capacity : 600 MT X 3 Nos LPG Bullets ,  
Mounded Type
- Filling Shed : 24 Head Carousel x 2 Nos  
Supplied by M/s Kosan Crisplant
- Tanker loading shed : 8 Nos Tanker Loading, Unloading  
shed with latest equipment in Place



# EPC CONSTRUCTION OF 20,000 CYLINDER PER DAY FILLING CAPACITY LPG BOTTLING PLANT FOR INDIAN OIL CORPORATION LIMITED, THIRUNELVELI, INDIA

Bottling plant Configuration:



**OPTECH**

- Storage Capacity : 600 MT X 3 Nos LPG Bullets ,  
Mounded Type
- Filling Shed : 24 Head Carousel x 2 Nos  
Supplied by M/s Kosan Crisplant
- Tanker loading shed : 8 Nos Tanker Loading, Unloading  
shed with latest equipment in Place



# EPC CONTRACT FOR 1000MT LPG RATED MOUNDED TYPE INSTALLATION AT NEPAL GAS COMPANY, KATHMANDU BOTTLING PLANT, NEPAL. ALONG WITH 24 HEAD CAROUSEL AND COMPLETE BOTTLING PLANT.



Design code : ASME Sec VIII Div 2

Design Pressure : 14.5 Bar at the Top

Capacity each of Bullet : 1054 Cu M

Thickness of Shell : 28mm

Size of Bullet : 6.3 meter Diameter c 35 meter Length

Filling Shed : 24 Head Carousel of SIRAGA Make, All Filing Shed Equipment, Valve replacement without the cylinder evacuation.

