

**EXTRA CO**  
COMPOSITES INDIA PRIVATE LIMITED



# FIBER GLASS REINFORCED PLASTIC **CHEMICAL STORAGE** TANKS

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**LINED WITH TRUST AND  
REINFORCED WITH PERFECTION**



## ABOUT OUR COMPANY

- ❖ Extraco Composites India Private Limited, a bench mark in Composites Field in India, providing excellent quality and maintenance free products.
- ❖ We are a leading manufacturer of FRP Chemical Storage tanks, specializes in the Design, Manufacturing and Erection of FRP Chemical Storage Tanks and Scrubbers.
- ❖ We have our Art Factory located at Tada Village and Mandal, Tada, Andhra Pradesh
- ❖ The Plant has been commissioned and running successfully since Aug 2009 serving customers all over the world.
- ❖ Our Factory is situated at Tada, Andhra Pradesh 70Kms away from Chennai Airport.

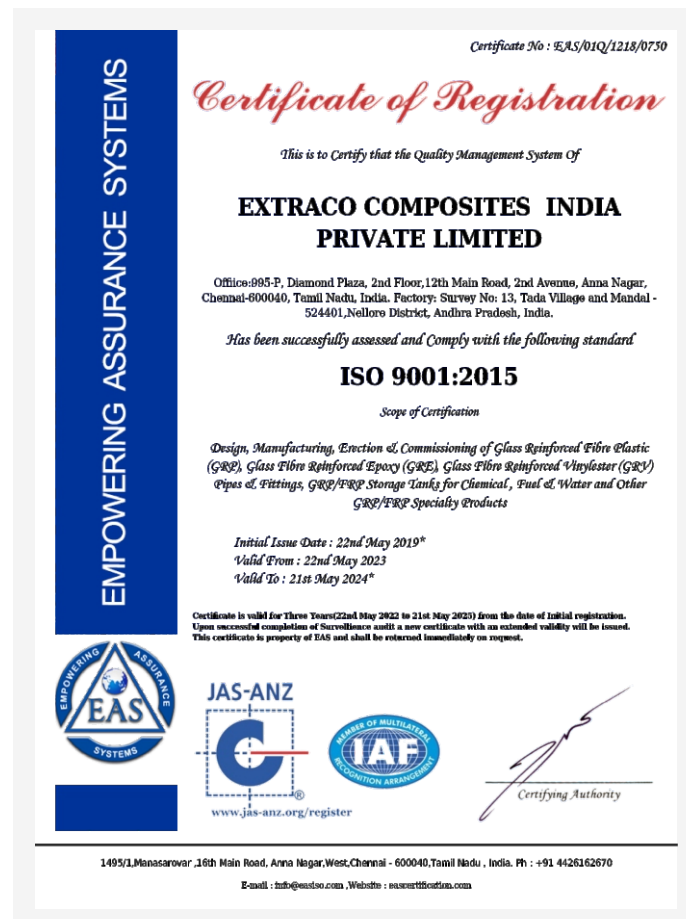
## ACCREDITATIONS

Extraco has obtained the following Accreditations:

- ❖ ISO 9001:2015 Certified for Quality Management.

## QUALITY ASSURANCE POLICY - ISO 9001 : 2015

To build Quality into the processes with Continual Improvement, to the customers standards, for achieving defect free products on time, every time aiming at Total Customer Satisfaction, by involvement of personnel and upgradation of technology with commitment to satisfy applicable legal requirement.



## OVERVIEW

FRP, has become an increasingly popular choice for use in chemical storage tanks. This material boasts many advantages over traditional metal tanks, including excellent chemical resistance, extreme durability, and a huge range of sizes and shapes.

Because of these benefits, more and more companies are turning to FRP for the containment of potentially hazardous chemicals. Additionally, since these tanks are lightweight and easy to install and maintain, they have become a very cost-effective option for many businesses.

- ❖ Extraco Chemical Storage Tanks are used for aboveground applications for storage of chemicals such as HCL, NaOCl, NaOH, Cl<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, etc., at different temperatures and concentrations.
- ❖ They are designed for a life of minimum 30 years. Employs the latest design standard EN 13121-3:2016 for checking all loading conditions, stability of tanks under internal and external pressures.
- ❖ FRP Scrubbers are used in removing some particulates or gases from industrial exhaust streams and also used for the process of control of acid gas emission and to recover heat from exhaust and flue gases. Our premium range of scrubber system offers complete solution for hazardous gases.

## WHY EXTRACO?

- ❖ We supply different kinds of tanks with Conical bottom with steel legs, Flanged top, Flat top / Flat bottom, Dome top / Dome bottom
- ❖ Vertically cylindrical, single skin
- ❖ FRP flanged nozzles, PN 16 FF
- ❖ Dia 600mm - Manhole on top with cover + nuts, bolts & washers.
- ❖ MS - GRP laminated lifting hooks
- ❖ FRP hold down brackets.
- ❖ UV Resistant
- ❖ Shell by filament winding process
- ❖ Extraco can manufacture tanks with any customised size and design.
- ❖ Extraco Tanks exhibit superior mechanical properties due to its proprietary Raw Material.

## APPLICATIONS

### Applications of Chemical Storage Tanks

- |                       |                        |
|-----------------------|------------------------|
| ❖ ETP Plant           | ❖ STP                  |
| ❖ Waste Water Plant   | ❖ Fertilizer,          |
| ❖ Chemical Industries | ❖ Wood pulp and paper, |
| ❖ Petroleum Companies | ❖ Metal extraction     |

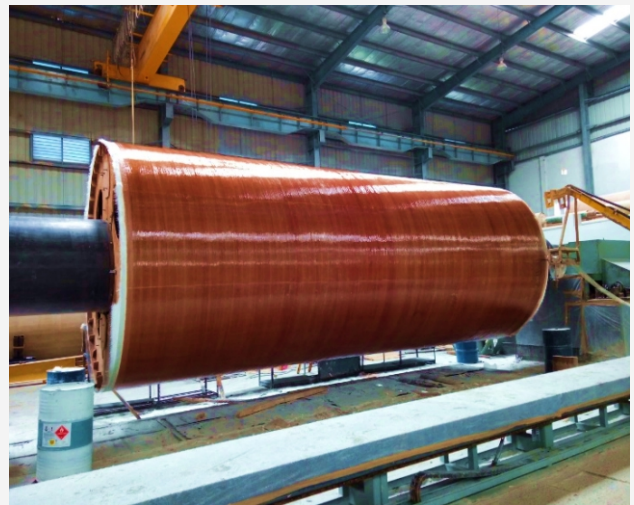
## RAW MATERIALS

- ❖ Selection of resins will provide the physical and chemical properties. Vinylester resin is usually designed and recommended for chemical storage tanks. It is suitable for chemical and chemical storage tanks.
- ❖ Extra Co tanks are subject to quality control testing/inspection and thorough checks as per inspection test plan. All incoming raw materials and finished products are inspected and tested in accordance with international standards in line with the inspection test plan.

## MANUFACTURING

### The tank construction is as follows:

- ❖ Shell: The Shell is produced by Filament Winding process
- ❖ Tank ribs: The tanks construction shall include stiffener ribs to provide sufficient stiffness and rigidity to the tank.
- ❖ End caps: The end caps are fabricated by hand lay-up application.
- ❖ Assembly: The shell and end caps are then joined together by alternate layers of CSM and woven roving impregnated with resin.



## SPECIFICATIONS

- ❖ Conical bottom tanks with steel legs, flanged top, flat top/ flat bottom, dome top/dome bottom.
- ❖ Horizontal and Vertical Tanks.
- ❖ FRP flanged nozzles, PN 16 FF.
- ❖ Dia 600mm – Manhole on top with cover + nuts, bolts & washers.
- ❖ FRP hold down brackets.
- ❖ UV resistant.
- ❖ Tanks with any customised size and design.
- ❖ MS – GRP laminated lifting hooks.



## PRODUCT PHOTOGRAPHS



Extraco can manufacture chemical storage tank of any diameter and length on request.

## APPLICABLE STANDARDS

### SPECIFICATION STANDARDS

- ❖ ASTM D 3299
- ❖ ASTM D 4097

### DESIGN STANDARDS

- ❖ EN 13121-3:2016
- ❖ ASME RTP-1
- ❖ BS 4994

## QUALITY CONTROL AND INSPECTION

Extra Co tanks are subject to quality control testing/inspection and thorough checks as per inspection test plan. All incoming raw materials and finished products are inspected and tested in accordance with international standards in line with the inspection test plan.

Properties	Value
Specific Gravity	1580 - 1850 kg/m <sup>3</sup>
Flexural Strength	151 - 400 N/mm <sup>2</sup>
Flexural Modulus	15000 - 23000 N/mm <sup>2</sup>
Barcol Hardness	> 35
Tensile Strength	143 - 350 N/mm <sup>2</sup>

## TESTING STANDARDS

Type of Test	Standard For Test Method
Visual inspection	EN 13121-3:2016
Dimensional checks	ASTM D 3299/ ASTM D 4097
Barcol hardness	ASTM D 2583
Loss on Ignition	ASTM D 2584
Tensile strength	ASTM D 638
Flexural strength and Modulus	ASTM D 790
Lap Shear and Peel Shear Strength Test	EN 13121-3:2016

## FRP SCRUBBERS

- ❖ FRP Scrubbers are used in removing some particulates or gases from industrial exhaust streams and also used for the process of control of acid gas emission and to recover heat from exhaust and flue gases. Our premium range of scrubber system offers complete solution for hazardous gases.
- ❖ They are designed for a life of minimum 30 years. Employs the latest design standard EN 13121-3:2016 for checking all loading conditions, stability of tanks under internal and external pressures.

## GASES HANDLED IN SCRUBBER

- ❖ HCL
- ❖ NOX
- ❖ SO<sub>2</sub>
- ❖ H<sub>2</sub>SO<sub>4</sub>
- ❖ NH<sub>3</sub>

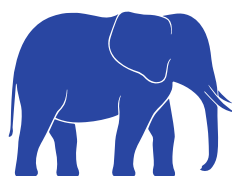
## THE SPECIFICATIONS OF FRP SCRUBBERS

- ❖ **Material:** Fiberglass Reinforced Plastic (FRP) construction for corrosion resistance.
- ❖ **Configuration:** Packed bed, tray, or spray tower scrubber.
- ❖ **Chemical Compatibility:** Compatibility with various chemicals that may be present in the air stream.
- ❖ **Design Standards:** Compliance with industry standards such as ASME, ANSI, or others.
- ❖ **Accessories:** Additional features like mist eliminators, demisters, fans, and instrumentation.

## ADVANTAGES OF CHEMICAL STORAGE TANKS

- ❖ **Corrosion Resistance:** FRP tanks are highly resistant to corrosion from a wide range of chemicals, making them suitable for storing various acids, alkalis, and corrosive substances.
- ❖ **Lightweight:** Compared to traditional materials like steel, FRP tanks are lightweight, making them easier to transport, handle, and install.
- ❖ **High Strength:** Despite being lightweight, FRP tanks have high strength-to-weight ratio, providing durability and structural integrity.
- ❖ **Design Flexibility:** FRP tanks can be easily molded into various shapes and sizes, allowing for customization to fit specific storage requirements.
- ❖ **Longevity:** FRP tanks have a long service life, often outlasting tanks made from other materials due to their resistance to corrosion and degradation.
- ❖ **Low Maintenance:** FRP tanks typically require minimal maintenance compared to tanks made from other materials, resulting in lower operating costs over time.
- ❖ **Thermal Insulation:** FRP tanks provide thermal insulation properties, helping to maintain consistent temperatures for stored chemicals.
- ❖ **Environmental Friendly:** FRP is a recyclable material, making FRP tanks an environmentally friendly choice compared to some other materials.





# EXTRA CO

COMPOSITES INDIA PRIVATE LIMITED

## GET IN TOUCH



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