

## **SOVISY INDIA PVT. LTD.**

Highest Quality,
Pioneer Manufacturing and
Installations are our spirit

# Empowering Lives, Sustaining Futures: SOVISY'S Enduring Commitment



## SOVISY's 25-Year Legacy in Innovative Water Storage Solutions

SOVISY started journey with experience of more than **25 years** and in between threw hat in arena of GRP/SMC Panel tank thus acquired enough expertise bagged in this field too. We used to design and provide a simple innovative SMC/ GRP Panels in modular and flexible pattern with global certification. We did haven't compromise with quality and reliability for better sustainability. Thus insured preservation of water to the highest degree of purity.

We have ensure the latent shortcomings of thus traditional storage systems for better sustainability, such as those made of Plastic, concrete and steel and-eradicated menaces. Thus SOVISY Water Tanks attract world-wide fame and became the first choice of users for the purpose of conserving water. Sovisy water tanks are maintenance free, thus save recurring expenditure for the users.

Our focus of world-wide marketing effort is concentrated on state-of-art technology on to store water hygienically for longer duration. We develop tanks with different sizes from 1 KL to 2500 KL and even more. Thus these tanks can be used for domestic and industrial purposes.

SOVISY Private Limited is an ISO 9001 certified company that manufactures water tanks in using the SMC-Hot Press Moulding process to the highest specification and hygienic standards.



#### What is

## **SOVISY - SMC WATER TANK**

- Sheet Molding Compound (SMC) is a mixture of unsaturated polyster resin with impregnating augmentation material, filling material and glass fiber.
- The SMC water tank body (Floor, wall and ceiling) is made of bolting type square SMC panels, which are molded under high heat & pressure.
- SOVISY SMC water tanks guarantee sanitation, excellent durability, absolute water tightness, versatile capacity design and easy installation.









Research and Development of most modern global Technology is the keynote of our mission. We are sensitive to the needs of our customers. We devote energy with all honesty and integrity for everlasting solution to their needs. We take almost care of our suppliers, employees, technologists too.



The Vedas, humanity's oldest script, highlight the significance of preserving water in its purest form. Clean water storage is vital for society, industry, and life itself. In the 21st century, as nations grapple with the challenge of securing clean water, Sovisy aligns with modern, innovating storage solutions.









Customizable to fit
any Capacity at any Location

- Easy to handle/ Ship.
- be Easy to assemble at site in any size.
- **b** Easy to dismantle and re-locate.
- be Easy to increase and decrease the size.
- Maintain the quality of stored water for longer duration.
- Lightweight, extremely strong and durable panels.
- Easy fixing for plumbers/technicians using conventional tools.
- 100% weather resistance, water moisture & rot-proof.
- 100% safe for drinking water storage.
- Ideal for storing water from sub-zero to extremely hot climates.
- Proven life, over 50 years even in the worst climates of the world.
- Water storage and transportation in the dry lands.
- ldeal for chemical, pharmaceutical and corrosive factory areas.





## STRENGTH & DURABILITY

## SOVISY SMC/GRP PANEL TANKS

- Hydrostatic Pressure Water pressure reinforced 4 times standard transformation rate in filled with: Less than 1% form the water tank height.
- Wind Force Less than 60 m/sec.
- Factor of safty 6 times as prescribed by IS 14399 Code
- Earthquake Force Stable and safe till magnitude5.0 (>5.0, it needs add'l. reinforcement).
- Snow load 60 Kg/m2, Snow fall less than 30cm.
- Illumination Rate Less than 0.1%.
- Out-fit Force -No leakage under condition of vertical 100 Kg after installation of 100 A fitting with 70 mm span support.
- Water Quality Tap water, well water chlorine below 50 mg/l. Seawater: application Externally can Sustain Reinforced water tank (max 4 m height).
- PH Rang will be range- 4 to 8.

## Stress Analysis of GRP Panel Tank

- GRP Water tank panel is designed with special shape for maximizing safety against stress and deformation, so it has better structural than normal circle designed panel.
- As GRP water panel is manufactured with Thermo Mechanical process, having no deformation in dimensions due to any climatic changes.



## TECHNICAL Specifications

#### "SOVISY" SMC/GRP NON-INSULATED PANEL TANK

Supplying and placing on position of ISI Marked SOVISY SMC panel tanks for water storage as confirming with IS 14399: 1996 and material to be confirming as per IS 4249:1967 for fire retardant, required capacity of suitable size including fixing and assembling / erecting the tank complete as per direction of engineer in-charge. The tanks to be leak proof after installation and having following specifications. Standard Non Insulated SMC Panels Hot pressed moulded UV stabilised made from Sheet Moulding Compounds (SMC) composing of glass fiber and formulation of selected resin from MENZOLIT, Germany.

SMC PANELS: MADE BY H	HOT PRESSED PROCESS MOULDED		
Bottom Panel	SMC Panel - 1 x 1 mtr. Convex Shape		
Drain Panel & Outlet Panels	SMC Panel - 1 x 1 mtr. Special design for complete drain		
Side Panel	SMC Panel - 1 x 2 mtr, 1 x 1 mtr, 1 x 0.5 mtr.		
Ceiling Panel	SMC Panel - 1 x 1 mtr textured type for anti skidding design		
Manhole	SMC Panel - 1 x 1 mtr with locable lid dia 700mm		
SPECIAL ACCESSORIES			
Corner Frame	HDG Steel Vertical Corner Angle		
Sealing Tape - Non Toxic	3mm thick with high level of resistance to ageing and superior recovery from compression (Make: Norseal by Saint Gobain, USA)		
Steel Bolts for Panel Joints	HDG Steel Nut-Bolt - 8.8 Grade M12 x 40mm		
Air Vent - Mosquito proof	Mosquito proof mesh Air Vent 100 dia.		
External Ladder - 1 each	Galvanised with Fixing arrangement outside		
Roof Support Pipe	FRP Internal Ceiling Panel support		
Inlet/Outlet/Overflow/Drain	G.I. Flanges with 9" Long Nipple 50NB each		
External Reinforcement	ISI marked C channel at every 1 meter except in the corner of steel with anti-corrosive paint and it is tie with top external tie rods. (If tank height is more than 1 meter)		
Internal Roof Supports	FRP Hollow Square section 5mm thick		
Airvent	Airvent - Mosquito proof mesh insect proof - 100mm		
Water Level Indicator	Aluminium body water level indicator with clear tube type and brass nozzle (For tank height more than 1 meter)		
Ladders	External ladder with all mounting arrangement. Internal ladder FRP (If tank height is more than 1 meter)		
Connection fixing	Inlet, Outlet, Overflow & Drain - 50 NB (as per Table D- BS 10) G.I. Flange type with 9" long thread end nipple.		

## **ACHIEVEMENTS**



## **CERTIFICATION ACHIEVED**

















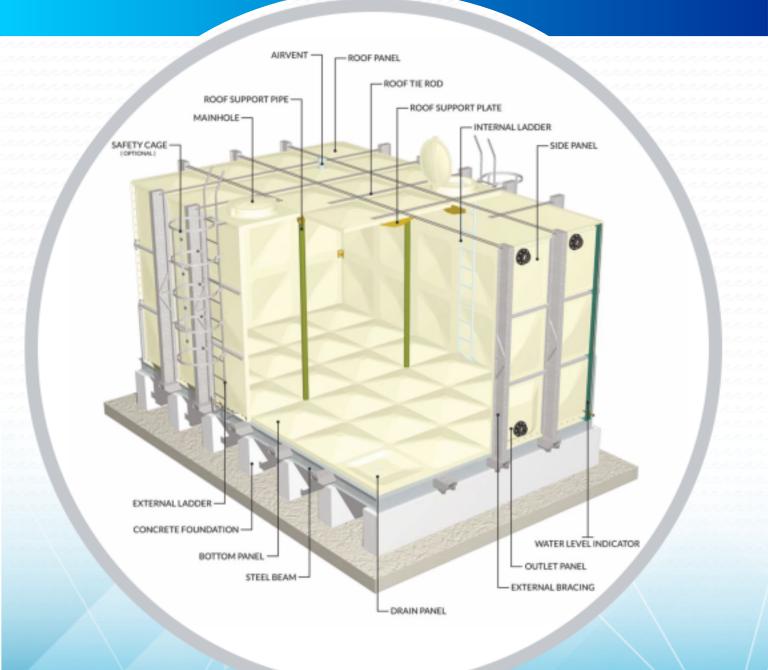
#### STANDARD DESIGN OF SOVISY SMC TANK

Sovisy panel Tanks are WRAS (UK) IS-14399 approved designed to the most relevant international GRP panel type water tank's standards such as BS 7491 (UK), SS245 (Singapore) and the latest AWWA D121-12 (USA). The Panel shapes are designed using Finite Element Analysis to allow optimization and ensure the required panel and tank safety factor.

Panel Strength:	Hydrostatic Pressure X6 (Safety Factor) 60 m/sec	
Wind Velocity:		
Roof Load:	120 kgf/m2	
AmbientTemperature:	55°C (Max)	
Water Temperature:	65°C (Max)	
Seismic Load:	Peak Ground Acceleration PGA = 0.25 (Group A)	
Seismic Zone:	B2	
Upgraded Design Available:	(Group B) 0.25 < PGA < 0.40	
for Higher Seismic Zones	(Group C) PGA > 0.40	

#### PHYSICAL TEST PARAMETERS

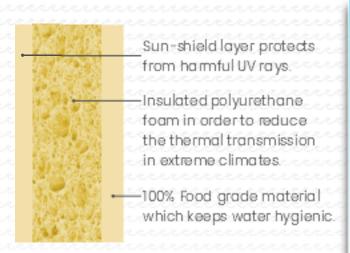
QUALITY ITEM	UNIT	SOVISY STANDARD	INDIAN STANDARD
PANEL THICKNESS	MM	6-12 (Max)	3-5
TENSILE STRENGTH	Мра	90	60
BENDING STRENGTH	Мра	140	80
ELASTIC MODULUS	Мра	11000	6000
GLASS CONTENT	%	33	25
BARCOL HARDNESS	-	52-58	30



## **INSULATED**SMC Panel Tank

## "SOVISY" SMC/GRP INSULATED PANEL TANK

Additionally, Sovisy offers pre-insulated panels as an option for its water tanks. These panels, crafted with PU foam insulation, effectively mitigate temperature fluctuations within the tank, providing reliable temperature control even in the face of extreme environmental conditions. Whether in high temperatures or low, Sovisy's insulated water tanks maintain optimal water temperatures, ensuring consistent performance and reliability.





Insulation: GRP panels are insulated by rigid polyurethane foam of density 40kg/m3 in order to reduce the thermal transmission in extreme climates. The thickness of the insulation foam is 25mm protected by 2mm GPP cover. (Only manufactured by SOVISY in the world) All 6 sides' insulation (roof, bottom & sides) is also available to reach the lowest thermal transmission.



Air Vent: Air vents are mushroom type made of uPVC 4" Dia with net of mesh no. 22. They are light, dust and insect proof.



Insulated Roof Man-Hole Cover: The roof manhole panel is insulated and has a 700mm diameter opening and access door fixed with Hinges and look device. The access door is designed to be opened at 180 hermetically closed and light, dust and insects' proof.

## "SOVISY" SMC/GRP INSULATED PANEL TANK

## **TECHNICAL**Characteristics

Discover the unparalleled quality and advanced engineering behind Sovisy SMC Panel Tanks through our comprehensive technical characteristics chart. Delve into the precise details of panel color, strength, wind velocity tolerance, and other key specifications that make Sovisy tanks the preferred choice for water storage solutions. Explore our commitment to excellence and innovation as we redefine industry standards with our state-of-the-art SMC Panel Tanks.

DESCRIPTION	DATA	
Panel Colour	Light Ivory (RAL 1015)	
Panel Strength	Hydrostatic Pressure x 4 x 6 (Safety Factor) on maximum anticipated load.	
Wind Velocity	60 m/sec	
Roof Load	120 Kgf/m <sup>2</sup>	
Water Temperature	65°C (Max)	
Specific Gravity	1.75	
Glass Content	33%	
Tensile Strength	84 MPa	
Bending Strength	171 MPa	
Impact Strength	80 Kgf. cm / cm²	
Compressive Strength	160 MPa	
Shear Strength	100 MPa	
Barcol Hardness	64	
Flame Spread (FSI)	60	
Thermal Conductivity	0.036 W/M <sup>2</sup> k	
Coefficient of Overall Heat Trans- mission (Thermal Conductance)	0.97 W/M <sup>2</sup> k	
Thermal Expansion	1.66 x 10 <sup>-5</sup> /°C	
Water Absorption	Less than 0.1%	
Light Transmission	0.00%	
Fire Rating Class	B/2	





#### INSTALLATION

SMC Panel TankS

Experience the ease and efficiency of installing Sovisy SMC Panel Tanks, revolutionizing the water storage industry with their remarkable features. With a weight 16 times lighter than steel tanks, Sovisy tanks redefine convenience, allowing for straightforward installation using conventional tools. Their lightweight design not only streamlines the installation process but also requires less manpower, saving you valuable time and resources. Say goodbye to complex installations and hello to effortless setup with Sovisy SMC Panel Tanks.





#### FEW COMPLETED PROJECTS OF SOVISY INDIA

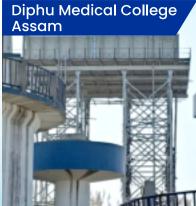
Discover Sovisy India's distinguished track record of successful projects across a spectrum of esteemed government and private sector organizations. From iconic institutions like IOCL Digboi and ONGC Sibsagar to prestigious ventures such as L&T High-Speed Railways at Navsari and DRDO Bengaluru, Sovisy has consistently delivered excellence.

Our portfolio extends to renowned landmarks like World Trade Centre - New Delhi and NBCC - New Delhi, along with collaborations with Indian Railways and major airports nationwide. With a proven commitment to quality and efficiency, Sovisy has earned the trust of industry leaders including Hindalco, Reliance, L&T, Tata Steel, Tata Motors, Sapoorji Pallonji, GMR, Hyundai, Goldman Sachs, and prominent players in cement and textile industries, among others.

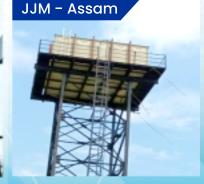
Our reputation for delivering projects of superior quality within stipulated timelines underscores our dedication to client satisfaction and operational excellence. Sovisy India stands as a trusted partner in realizing the visions of our esteemed clientele, driving innovation and progress in every endeavor.

































## **MAJOR CLIENTS**

#### **SOVISY'S EVER GROWING CLIENTELE**























































































































Shree





TATA

TATA STEEL

































## **SUPPLY CHAIN ACROSS THE WORLD**

SOVISY has completed many prestigious projects for the Private, Commercial, Industrial and government sectors in the South Africa & Asian territory which include Airports, Hospitals, Laboratories, Schools, Palaces, Hotels, High Rise Buildings, Networks and Residential Connections.





# Excellence

## **Water Storage**

with







## **WORLD'S FIRST GRP SKIN INSULATED TANKS**

Nilanjana: 9382861855 / Sutapa: 7863991096