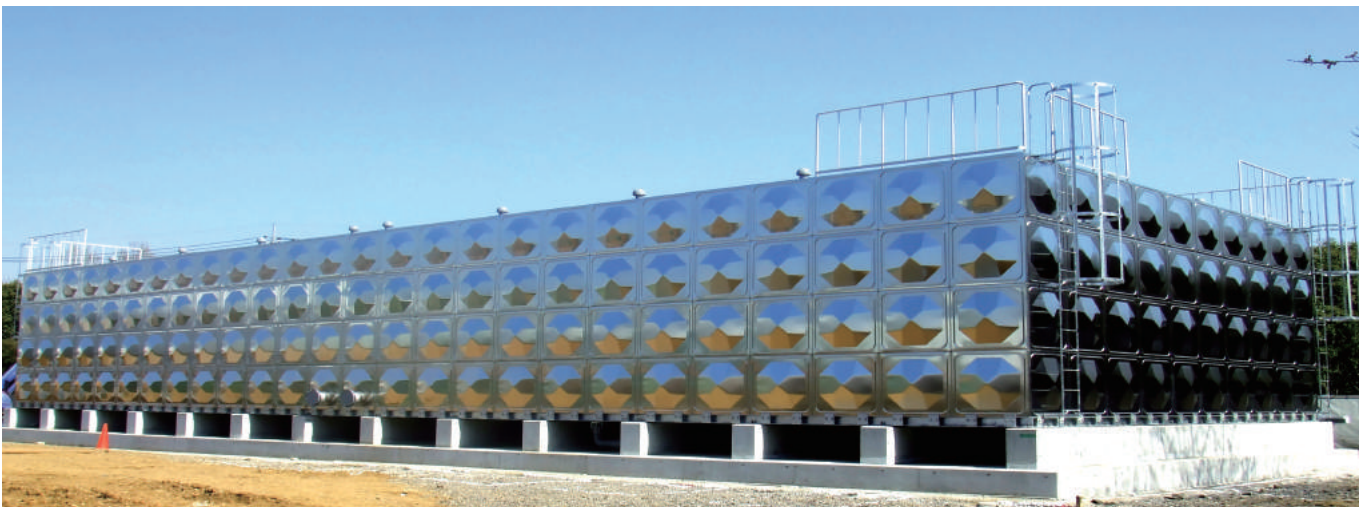


Stainless Steel Panel Tanks

- Now, panel tanks are made by stainless steel, instead of FRP or concrete -

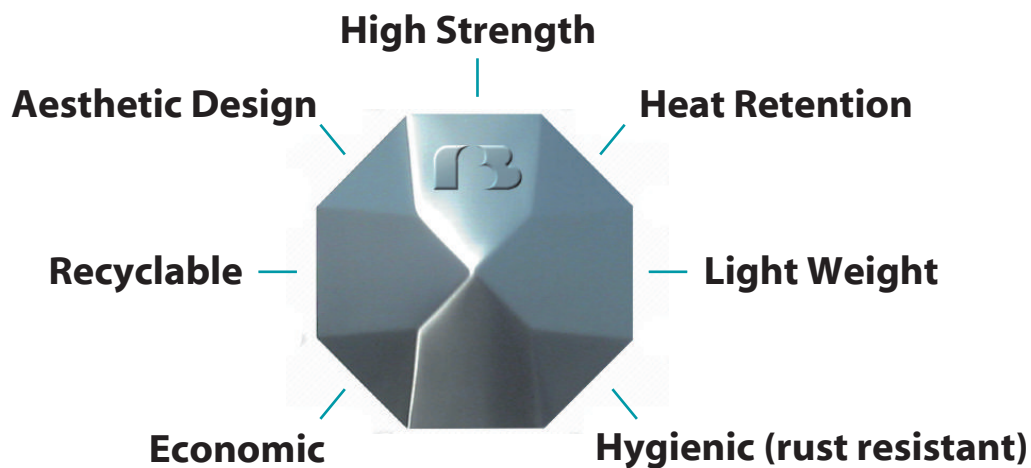


1. Features of BELTECNO Stainless Steel Panel Tanks



1-1. Seven Benefits of Stainless Steel Panel Tanks

Stainless steel has great corrosion resistance, durability and heat resistance. Stainless steel panel tanks are hygienic, with many low long term benefits, economic and maintenance costs. This is why Japan is shifting from FRP (Fiber-Reinforced Plastics) and concrete tanks to stainless steel panel tanks. Advanced users in India and Nepal are also starting to use stainless steel panel tanks.



High Strength

Rust resistant metal with durability and heat resistance

Stainless steel tanks are designed in such a way that their internal strength is highly stronger than concrete tanks. They are both strong and tough, with much higher specifications than concrete.

Heat Retention

Stainless steel is high thermal retention, prevents condensation, heat radiation, and burns.

Minimizes heat radiation, ensures high heat retention. Temperature change in the tank is only about 2.291°C in 8 hours.
* Heat dissipation varies greatly depending on wind conditions.

Light Weight

Very strong and light weight, suitable for any ground surface

Stainless steel is very strong even in thinner plates thus, the overall weight of the stainless steel tanks are 30 times lighter than concrete tanks.

Hygienic (rust resistant)

Extremely smooth surfaces resist stains, very easy to clean in minimal time making excellent hygiene

Stainless steel is rust resistant and stores the water hygienically. This is food grade material with no chemical reactions along with great corrosion resistance, durability, and heat resistance.

Economic

Great corrosion resistance, dramatically reduces running costs

Stainless steel has less costs, than FRP and concrete, including maintenance expenses. Its great strength and corrosion resistance unimaginably minimize costs in the long run.

Recyclable

Easy to recycle, environmentally friendly

Most stainless steel products are recycled and reused as resources after use. This financial benefit reduces the owner's costs.

Aesthetic Design

Stainless steel itself a beautiful material.

These panels are designed in "diamond shape" creating beautiful panel tanks.

1-2. Reasons for High Quality and High Customer Satisfaction

Technical and Structural Features of BELTECNO Stainless Steel Panel Tanks

BELTECNO manufactures the stainless steel panel tanks with advanced welding technology that we have developed in 70 years since our foundation. In addition to our “Seven Benefits”, the following 3 features create high quality and high customer satisfaction.

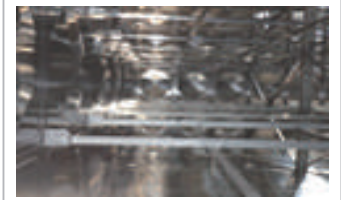
① Entire structure welded by expert welders:

All panels are joined by the special TIG welding method, preventing water leaks. Welding is done by well-trained welders under the guidance of technical expert and Japanese engineers.



② Frame & Panel Structure:

Thin plate structure water tank is created by press-molded thin sheet stainless steel panels, supported (reinforced) by beams and tension member etc.



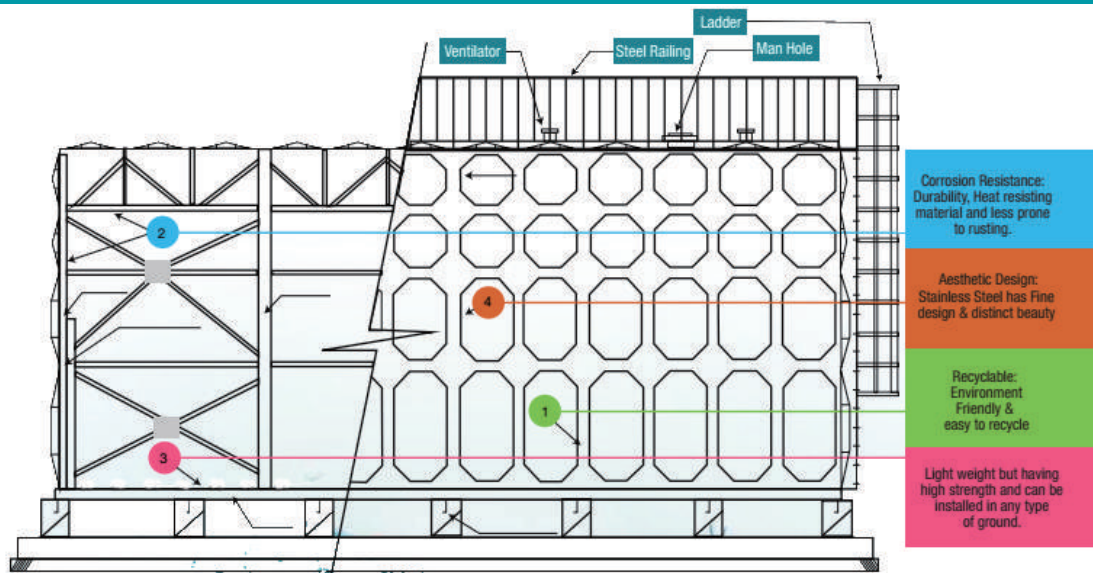
③ Customize - From thousand to billions liter levels:

Various capacities can be designed according to customer request. Tank shape can be changed flexibly according to the shape of the installation place, such as rectangle (square), L shape, polygon, etc.



BELTECNO stainless steel panel tanks are especially well suited for these uses and places.

- Government Projects
- Large facilities such as business complexes/ service complexes
- Pharmaceutical and Beverage Factories
- Hospitals • Hotels • Residential projects
- Schools





2. Compare to See Overwhelming Advantages of Stainless Steel Panel Tanks

2-1. Comparison of Stainless Steel vs. Concrete

Excellent characteristics of stainless steel panel tanks, and benefits of introducing it, becomes clearer when compared to concrete tanks. From a long-term view, stainless steel panel tanks can be considered as the best investment.

See the table below for details.

	Stainless Steel Panel Tank 	Concrete Tank 
Construction shapes (Customize)	★★★★★ Rectangle, L shape, polygon, etc. Capacity also can be designed according to customer's request.	★★ Rectangle, circle. Height limits.
Hygiene	★★★★★ Smooth surface resists dirtadhering. Excellent corrosion resistance, hygienic.	★★ Coating required
Heat absorbency	★★★★★ Comparatively Low heat absorbency, water temperature does not rise easily	★★★★★ Does not absorb heat
Durability	★★★★★ Small change of property, enable long-term use, if maintained	★★★★★ Chemical corrosion of gas phase part due to chlorine, and aging deterioration of concrete
Weight	★★★★★ Light weight, about 30 times lighter than concrete tank weight. This reduces foundation work cost.	★ Heavy
Installation time	★★★ Installation period is 3 times faster than concrete tank. Factory can make detailed plans.	★ Long time
Recycle	★★★★★ Almost 100% recyclable	★ Not recycled
Running (maintenance) cost	★★★★★ Very low maintenance cost	★★ There are durability problems, and needs periodic anticorrosive coating, so needs considerable long term maintenance expenses
Initial cost	★★★ High	★★★★★ Medium
Total evaluation	★★★★★	★★★

Note: BELTECNO evaluated the above based on our experience and information in Japan.

2-2. Comparison of Stainless Steel Welded Type, Stainless Steel Bolted Type, and FRP Bolted Type

There are two types of stainless steel panel tanks: welded type and bolt assembled type. When comparing the stainless steel welded type with stainless steel bolted type, and FRP bolted type, we distinguish that the stainless steel welded type is best in performance and functions. See the table below for details.



Right: Stainless Steel Bolted Type
Left: FRP Bolted Type

	Stainless Steel Welded 	Stainless Steel Bolted	FRP Bolted
Structure	★★★★★	★★	★★
	Has an internal welded structure. Can be manufactured up to 10 meters high (depending on conditions)	External bolt structure has limits on the plane area, height etc.	
Partitions in tank	★★★★★	★★★★	★★★★
	Entire internal reinforcement structure creates same strength as side plates	Sides are external reinforced type, and partition surfaces are internal reinforced type, so the strength of the connected parts is doubtful	
Construction shapes	★★★★★★	★★★★★	★★★★★
	Can also make in rectangle, polygon, or L shapes (depending on conditions)	Only rectangles	
Performance of Heat loss	★★★★★	★★	★★
	Internal reinforced, so heat loss is low	External reinforced, so heat insulation construction is rough, creating high heat loss	
Heat resistance (when strong hot water)	★★★★★	★★★★	★★★★
	No special problems	Seals deteriorate easily	Seals and FRP deteriorate easily
Water leaks	★★★★★	★★★★	★★★★
	Welded structure makes it very watertight	Joint parts are between seals, creating risks of leaks as they deteriorate	
Repairability	★★★★★	★★	★★
	Leaks are easy to find, so action can be taken the same day, depending on situation	Hard to pinpoint leaks, so one must inject resin or reassemble	
Maintenance	★★★★★	★★	★★
	Only periodic cleaning	In addition to periodic cleaning, seals must be maintained experts	
Initial cost Upper rows: Factory assembly Lower rows: Site assembly	★★★★★	—	—
	Low cost	Factory assembly not done, because of risk that bolts loosen during transport	
	★★★	★★★★★	★★★★★★
	High cost	High cost	Low cost
Total evaluation	★★★★★	★★★★	★★★★

Note: BELTECNO evaluated the above based on our experience and information in Japan.

Global Leader in Stainless Steel Tanks

BELTECNO is a comprehensive manufacturer of stainless steel tanks, and peripheral equipment such as heat exchangers. It is very famous in Japan as one of the top companies in stainless steel panel tanks and stainless steel storage tanks. It is one of the companies with the world's most advanced technology in this field. Since our establishment in Japan, in 1947, we have continued to satisfy our customers' trust, with the mission of protecting "Water and Life for people", through continuous technological innovation and high quality products.

BELTECNO built the Neemrana factory, our first integrated manufacturing company outside of Japan, in the state of Rajasthan in India. It began full-scale operation in 2015. We are now supplying our products to all parts of India and Asian countries.

Our panel tank received the prestigious Best Fabrication Product award in the product contest, at the India Stainless Steel Pipe Expo 2016, held in New Delhi, in July.



Locations and Business Units of BELTECNO Group

• **12 business offices** (1 in India) • **8 Factories** (1 in India)

BELTECNO Japan Headquarters

BELTECNO Co., Ltd.

9th Floor (Asahi Marunouchi Building) 3-21-20 Marunouchi, Naka-ku,
Nagoya-city, Aichi-prefecture 460-0002 Japan

WEB (Japanese): <http://www.beltecno.co.jp>

In INDIA

BELTECNO INDIA PVT. LTD.

President : Mr. Kiyokazu Tamura

Incorporated : 18th June 2009

Establishment Capital : 32 crore

Company Registration Number : U29292RJ2009FTC046189

Tax reference Number : AADCB8011C

VAT Number : 08400703340 ISO : 9001:2008



Sales & Marketing

524A, 5th Floor, Tower- B3, Spaze I Tech Park, Sector-49, Sohna Road,
Gurgaon, Haryana 122018

Factory

SP-2-23 New Industrial Complex (Majrakath), Japanese Zone, Neemrana,
Alwar, Rajasthan 301705

WEB (Global): <https://www.beltecno-global.com/>



For more information and quotation for BELTECNO stainless steel panel tanks, please enquire here.

Contact us >