

Ascertaining what can't be changed and tackling the things that can be changed



#### Corporate philosophy

Tamada Industries, Inc. is a group of individuals of: Creating a better way of life Contributing to society to ensure customers' prosperity Challenging to the future.

By mean of serving as a total planner of petroleum and environment facilities.



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Tamada Industries, Inc.

Information

# Underground tank experts lead the way to new horizons.

TAMADA is a total planner in the design and production of underground tanks. The company holds the top market share in S/F Double Wall Tanks in Japan. TAMADA products are supported by many-year experience and achievement such as distinctive idea for combining FRP and other materials, and a passion for creation.



The company has been founded since 1950 by Zenji Tamada, who was also the first president. Over the next 50 years, the company has amassed many achievements as a total planner in the design and construction of facilities for hazardous materials.

Currently (2008), we hold the top share in the production of S/F Double Wall Tanks. Using this technology, we have continuously offered the top quality products in various fields, from industrial to home use, through our factories and offices established nationwide

Tamada will continue striving to improve our value as a manufacturer, with our core businesses of producing S/F double wall tanks, plant engineering facilities, and so on. It is said that "No one can stand in the way of progress; what you can do is try to lead it." On this account, we will exert ourselves even further as we concentrate on earning a place at the forefront of progress. We hope our business relationship with customers will continue well in the future. Thank you.

> Yoshiaki Tamada President / CEO Tamada Industries Inc.



## **Business domain**

## **Product making**

- · SF Double Wall Tank
- · Aqua Angel (Water Storage Tank)
- · Waste Water Treatment Tank
- Depot Angel (Basement for house storage)
- Tank of drinking water for emergency

## Plant design

Fuel supply systems

- Medical helicopter refueling systems
- Aviation fuel refueling systems
- Ship fuel refueling systems
- · Aboveground storage tank facilities

#### Liquid transfer plants

- · Chemical plants
- Petroleum plants

#### Service stations

- Design / construction
- · Dispensers-sales and repair
- · Car-washing machines-sales and repair
- Oil piping Installation

#### Hazardous materials facilities

Design / Construction / Utility work

#### Maintenance

Tank / Piping maintenance

### **Environmental conservation**

FRP lining for existing underground storage tank

# Always Advancing: TAMADA's S/F Doub le Wall Tank Production Technology

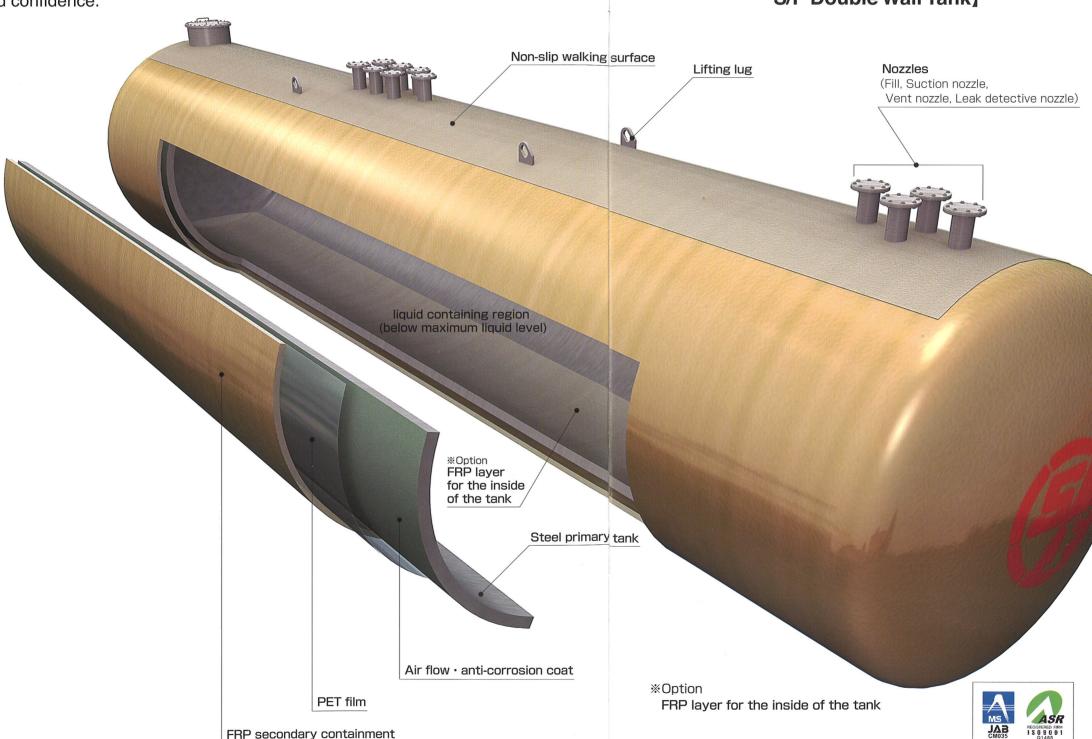
From S/F Double Wall Tanks to Super S/F Double Wall Tanks,

Tamada Industries' tank production technology continues to advance.

The outstanding strength of steel tanks plus their high recyclability of product makes them ideal for a recycling-oriented society.

The underground tanks that meet the requirements demanded by the upcoming era are our S/F Double Wall Tanks and Super S/F Double Wall Tanks. Tamada Industries offer them with our commitment and confidence.

# [Structure of the S/F Double Wall Tank]



#### S/F Double Wall Tanks for the 21st Century

In July 1993, in accordance with the amendments to the Fire Defense Law, S/F double wall tanks were newly approved. Tamada's S/F Double Wall Tank, which replaced the outer shell of traditional steel double wall tanks with FRP, and is able to incorporate a leak detection unit inside, broke new ground in the field. Tamada concentrated its technologies to develop the spray-up method to realize a seamless monolithic FPR layer by robotization. Tamada Industries' S/F Double Wall Tanks have three features.

#### **Cost Efficiency**

The robotization and mass production process allow us to set low prices. The SF tank does not require a concrete vault, both construction costs and time are reduced.

#### Safety

Through our unique method of multiple FRP layers process to the secondary containment, we can cover the shortcomings of FRP and produce a strong underground tank. This can also be used for the storage of alcohol-blend fuels. The leak monitor (leak detection unit) can detects minute leaks from the tank and instantly sounds a buzzer. The unit can be installed very easily, involving only wiring work.

#### **Quality Control**

The tanks are manufactured under the strict quality control standards, which include numerous tests of the inner steel tank, inspection of the FRP layer thickness, and tightness tests by pressurizing and depressurizing.

# Further advanced Super S/F Double Wall Tank

It is the Super S/F Double Wall Tank that was delivered from developed from conventional S/F Double Wall Tanks.

# Corrosion-resistance treatment for the inside of the tank

In the Super S/F Double Wall Tanks, a special anti-corrosion primer, containing the TK-D Powder (patented) developed by our company, is applied to the bottom of the inner tank after a shot blast process. Following this, an FRP layer is formed to a minimum thickness of 1.5 mm. This method eliminates worries about internal corrosion due to residual water at the tank bottom.

#### Airflow in the double wall layer

Super S/F Double Wall Tanks has countless tiny particles (less than 500m in diameter) between outer FRP and inner steel tank that allows sufficient airflow even after the tank is installed underground, when backfill gives external load to the tanks. This makes easy inspections liquid leakage occurs. (Patent pending)

#### Non-slip walking surface for improved safety

Super S/F Double Wall Tanks has countless small plastic particles (less than 500m in diameter) embedded in the FRP surface of the tank's top (patented). This prevents slipping, and improves safety when walking or working on tank top.



Tamada Industries: Experts in the art of craftsmanship

All of the tanks we produce, including the S/F Double Wall Tanks, have received high praise from all quarters for their provision of the safety and cost effectiveness. Because of our desire to be an expert group, trusted by our clients, we have been constantly honing our skills in all areas of product making, from the design and manufacture of tanks to their sale, installation, and maintenance.

Tamada Industries hopes to continue to increase our technology and know-how backed by experience, and contribute to the society through creativity and craftsmanship, with individual characteristics of the employees

#### **Main Products**

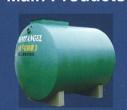


SF Double Wall Tank





**Agua Angel** (fire cisterns-horizontal)



**Depot Angel** (Basement for House Storage)



**Aqua Angel** (fire cisterns-cylindrical)



**Waste Water Treatment Tank** 



**AQUA in PIT** (storage tank for drinking water)



◀ Steel sheet bending process





▼ Submerged arc welding









Anti-rust treatment





▲100 kilo liters capacity SF tank

# Storage and supply systems born from unique know-how



Tamada Industries' technology and know-how have spread to various fields.

We are involved in the design, construction and system building of a wide variety of fueling facilities, including service stations, and fuel systems for medical helicopters for emergency patients transportation. In addition, we are also involved in various ranges such as water storage in case of fire.

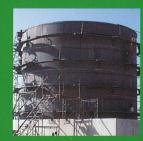
Tamada also provides a series of after-sales services, including plant inspections and maintenance, as well as environmentally conscious processes, such as underground tank lining and pipe coating.

#### **Fuel plants**



Service station

#### Oil storage plants



Aboveground tank

#### Other liquids



Helicopter fueling system



Heliport fueling facility design / construction

Underground piping installation▼









◆ FRP lining for existing Underground Tanks

Aviation fuel fueling system design / construction



▲ Inner pipe coating



▲ After-sales service



# The TAMADA Network: Covering Japan and the entire Asian region

## History

April 1950 Tamada Seisakusho established for selling and repairing gasoline dispensers and oil tank work

April 1974 Company built a new building at Nu 78 Sainennmachi, Kanazawa as head office. The company name was changed to Tamada Industries, Inc.

April 1992 Factory was expanded and automatic welding machines were employed. Manufacturing of double wall tanks begins

March 1993 Tokyo office was established in Nishi-Shimbashi, Minato-ku, Tokyo

April 1994 Osaka office was established in Minami-Morimachi, Kita-ku, Osaka

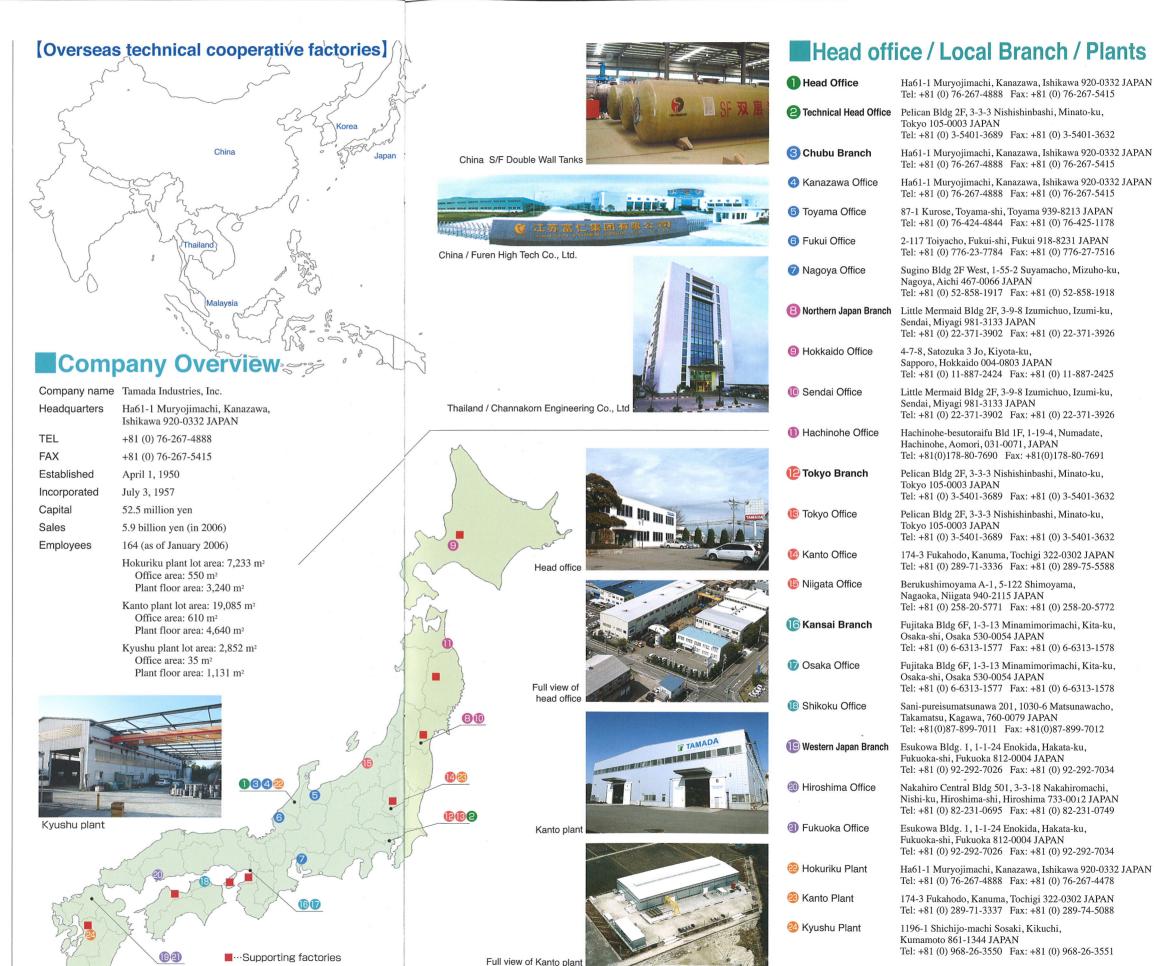
September 1994 FRP processing plant built for S/F double wall tanks production; shipping nationwide begins

February 1996 Capital increased to 52.5 million yen

May 2002 Kyushu plant was established

July 2002 Kanto plant was established in Kanuma, Tochigi

March 2005 Acquired ISO9001:2000 accreditation Design and production of water storage tanks Production of S/F Double Wall Tanks



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