## **Business Overview**

# **MOBILE CRANES**

A Complete Product Lineup to Meet Global Lifting Needs

TADANO

# Product **Features**

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Large mobile cranes make it easy to lift heavy loads weighing tens or even hundreds of tons and to move them safely and smoothly. Safety and reliability are essential for mobile cranes operating under the challenging conditions found in mines, oil fields and other natural resource and energy processing facilities, as well as those of large-scale urban development

projects, including office building and bridge construction sites. Beyond accidents, even minor issues that result in downtime can negatively impact the customer's bottom line. Tadano equipment is renowned for its reliability under the harshest operating conditions, ranging from the frigid cold of northern Canada to the blistering heat of the Middle East.

**GR-600FX** 

Net Sales

Sales in Japan stood at 38,179 million yen (84.8% of the figure for the previous year) due in part to a decrease in demand and the types of models sold, although the company sought to expand sales.

the figure for the previous year) due to a decline in demand for rough terrain cranes, our mainstay products. As a result, the net sales of mobile cranes amounted to 99,022 million yen (90.3% of the figure for the previous year).



## Topics

### On August 24, 2017, Tadano launched the GR-1200XL/1100EX, the company's largest two-axle rough terrain crane for markets outside of Japan.

Tadano's GR-1200XL/1100EX meets the market demands of gas, oil, and other energy development projects outside of Japan, particularly in North America. These projects require larger-capacity, higher-reaching rough terrain cranes with outstanding maneuverability in confined spaces for the construction and maintenance of large-scale plants and other

facilities on site. Despite its compact size, the new model offers the largest lifting capacity and the longest boom among Tadano's 2-axle carriers, and generated great interest during CONEXPO-CON/AGG held in April 2017 in Las Vegas.

# LINEUP

## **Rough Terrain Cranes**

One of our leading product lines, these cranes represent the peak of Tadano's technical prowess, and they are often used in the construction and maintenance of the world's large-scale processing plants. They have a strong





For markets outside of Japan:

Production site: Shido Plant (Japan)



## **Truck Cranes**

These cranes are mounted on standard or special-purpose truck carriers. In Japan, these models meet the national requirements for driving on highways, and can even serve as tow trucks in emergency situations. In





other countries, they are frequently deployed for jobs requiring large-scale crane capacity, as well as high-speed travel. Their low maintenance costs make them especially popular in developing countries.

For the Japanese market: 3 models with a lifting capacity of 13 to 35 tons For markets outside of Japan: 6 models with a lifting capacity of  $30\ {\rm to}\ 75\ {\rm tons}$ Some products for markets outside anufactured in Germany.)

including muddy grounds. The crawler restrictions.

## **All Terrain Cranes**

These large-capacity cranes play a crucial role in urban and infrastructure development projects, including highway and bridge construction. In addition to the capacity for long-distance driving, their special steering features offer superb maneuverability. They can easily lift loads weighing up to hundreds of tons, and their sophisticated drive concept makes them economical when traveling at highway speeds, while being mobile when navigating off-road job sites. Tadano's All Terrain Cranes account for 6% of the total demand in Japan, and 87% of that in Europe.



For the Japanese market:



Production site: Tadano Faun GmbH (Germany





# **Telescopic Boom Crawler Cranes**

These cranes were developed to enable efficient use in various environments in vast lands of the United States,

carrier's low center of gravity allows the strong crane to move while carrying heavy loads. These models are widely used at construction sites for tunnels, processing plants, oil tanks, and other facilities with challenging height



Production site: Tadano Mantis Corp. (United States

## **Business Overview**

# TRUCK LOADER CR

Ease of Use and High Performance

### Product **Features**

commonly used crane models, with applications across a wide range of industries, including shipping, landscaping, and construction. The key advantage of truck loader cranes is that their operability ensures safe, simple cargo loading, transportation, and unloading, with minimal labor. Tadano was among the earliest manufacturers to adopt LCD digital remote controls, which improve safety and efficiency by making it possible for the operator to monitor crane status during operation. We were the first in the crane industry to introduce a start/stop system to reduce

Truck loader cranes are among the most versatile and

engine idling, a feature that dramatically improves energy efficiency for a more environmentally friendly performance. In addition to truck loader cranes, Tadano also manufactures special-purpose products catered to a diverse range of customer needs. Our unique product line includes road-rail cranes, which are capable of traveling on both roads and railway tracks. Tadano is expanding its business fields in the lifting equipment industry by developing various special-purpose products that enhance operational safety and efficiency and offer solutions to society and customers.

### **Net Sales**

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Although demand for trucks fell in the second half of the fiscal year in reaction to stricter exhaust gas regulations, Tadano recorded 17,970 million yen in sales in the Japanese market (98.8% of the figure for the previous year) as a result of the company's efforts to expand its sales.

Sales in markets outside of Japan increased to 1,706



million yen (118.5% of the figure for the previous year) due to the company's efforts to develop sales networks in Southeast Asia and the Middle East.

As a result, the company's net sales of truck loader cranes amounted to 19,677 million yen (100.2% of the figure for the previous year).



## Topics

## In May 2017, Tadano established a joint venture in Thailand to strengthen sales of truck loader cranes.

Tadano established a joint venture with Italthai Industrial Co., Ltd. (ITI), our distributor operating in Thailand, to strengthen sales of truck loader cranes in the country. Founded with a paid-in capital of 50 million THB, the joint venture company will engage in sales and maintenance of crane products.

long-time distributor of mainly large-capacity cranes-is contributing to the Group-wide efforts to expand sales of truck loader cranes outside of Japan and has allowed us to integrate Tadano's manufacturing expertise with the sales know-how of ITI. Through this joint venture we aim to respond more closely to market needs and further Establishing a local joint venture with ITI-Tadano's accelerate sales of truck loader cranes in Thailand.

# LINEUP

## Truck Loader Cranes

#### Manufacturing in Japan

Tadano's truck loader cranes have gained strong popularity in Japan since the launch of the TM series in 1963. All our truck loader cranes are manufactured at the Tadotsu Plant in Kagawa, which opened in 2007.

As part of its commitment to the environment, Tadano introduced the start/ stop system to reduce engine idling for the first time in its ZE600 series. Starting in March 2019, all of Tadano's cranes will include a safety device as required by the amended law.



Boasts the highest lifting capacity among the truck loader cranes fo markets outside of Japan

#### Manufacturing outside of Japan

Tadano opened its first plant for truck loader cranes in Thailand in 2012. Our main target markets for the truck loader cranes manufactured at this plant are Southeast Asia and the Middle East.

Currently, three models with a lifting capacity of 10 tons, 8 tons, and 5 tons are produced at the plant, and production models will be gradually expanded in line with market conditions. We also have a second plant in our sights depending on future shifts in demand.



Net sales in markets outside of Japan 1.68 billion 1.70 billion yen 1.44 billion yen

FY 2015 FY 2016 FY 2017

## **Other Special-Purpose Products**

In addition to truck loader cranes, Tadano develops products that meet a broad range of lifting needs. Tadano's road-rail cranes serve as railway construction vehicles that can quickly and smoothly travel to a work site by switching from tires to train wheels at a level crossing nearby. We also offer other equipment that can provide solutions to a

#### **Road-Rail Cranes**

#### **Industrial-Use Vehicle Carriers** (Self Loaders)







7X1500/H



ZT1000 Series

wide range of challenges encountered by our customers. Among them are industrial-use vehicle carriers (self loaders), which are designed to transport heavy construction machinery, and hydraulic cranes for shipboard use (marine cranes), an essential part of marine operations.





# **AERIAL WORK PLATFORMS**

Safety, Convenience, and Operator Comfort



Safety, convenience, and operator comfort are key features of our aerial work platforms.

Tadano employs advanced control technologies for automated operation and improved usability. Our products are designed with environmentally friendly features that reduce engine noise, energy consumption, and CO<sub>2</sub> emissions. Our revolutionary Super Deck series aerial work platforms are the world's first to be equipped with our Four-Motion Control (for fore-aft, left-right, up-down, and diagonal movement) that smoothly carries the operator directly from one point to another in any direction. Going forward, we will serve to needs of even larger population of customers by developing our lineup of products, which we have cultivated in Japan, in markets outside of Japan.

Net Sales

Report 2018



Topics

Tadano achieved record-high sales of aerial work platforms at 24,678 million yen (106.4% of the figure for the previous year), as a result of the expansion of

19,432

0.63

First half 8,796

FY 2015

capital investment in the telecommunications industry, along with sales to the rental industry to meet the needs for infrastructure maintenance.



#### Tadano Bridge Checker (BT) series surpassed 1,500 units in total cumulative sales this summer

Since Tadano launched its BT-100 in 1995, the company has BT series. Tadano achieved record-high sales of aerial work shaped the market for bridge inspection vehicles primarily used platforms in fiscal year 2017, with the BT series accounting for the construction of noise barriers on highways and the for approximately 24% of the sales. installation and dismantling of scaffolding. As the aging of Tadano currently offers a broad lineup ranging from infrastructure constructed during the high-growth period in the compact to large-scale models, including the BT-110, 1960s turned into a major social issue, the Ministry of Land, which primarily specializes in the construction/maintenance Infrastructure, Transport and Tourism established the Project works of guard fences on highways, the BT-200, which is for the Development of Repair Plans for Extending Bridge mainly for bridge inspection on public roads, and the BT-Service Life in 2007. The project prompted the enactment of a 400, which is designed for large-scale bridges. Tadano law in 2014 requiring periodic bridge inspections and triggered a boasts some 85% share of the market for bridge inspection surge in demand, resulting in a significant rise in sales of Tadano's vehicles in Japan.

# LINEUP

## Skyboy

Tadano's Skyboy is a standard aerial work platform series with a platform capacity of two workers. The truck-mounted type features outstanding maneuverability and easy site-to-site transportation. Equipped with rubber tires that prevent road surface damage, the self-propelled type can perform continuous on-site operations and demonstrates power especially for construction works such as shipbuilding.





(truck-mounted type)

## Super Deck

Featuring a large deck area with a maximum loading capacity of 1,000 kg, our Super Deck series is highly effective for loading equipment and materials. Its unique Four-Motion Control (for fore-aft, left-right, updown, and diagonal movement) delivers superb operability and enables efficient operations at a broad range of work sites.



# **Other Special-Purpose Products**

Tadano's aerial work platforms meet a diverse range of customer needs. Its lineup includes bridge inspection vehicles (Bridge Checkers); floodlight vehicles (Mega Lux) for use during recovery work, nighttime construction, and nighttime events; digger derricks (Pole Setters) designed for utility pole setting, and many more. Tadano is expanding its business fields in the lifting equipment industry by developing various products that enhance operational safety and efficiency and offer solutions to society and customers.



**Digger Derricks** (Pole Setters)



# (self-propelled type)

# Hyper Deck

Tadano's Hyper Deck series allows operators to reach as high as 40 meters above the ground. A unique control system delivers outstanding operability, enabling smooth approach to the target point. Our Hyper Deck series offers effective support for a variety of operations at very high places over extensive areas.





# Net Sales

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Sales of customer support (CS) (eg., product repairs and parts sales), used equipment and others rose to a record high 30,324 million yen (111.4% of the figure

> Other sales (used cranes, other products)

	0 1 1 7	11,122
8,795	9,117	Second half
Second half 4.153	Second half 4.912	5,595
First half 4,642	First half 4,205	First half 5,527
FY 2015	FY 2016	FY 2017

(Millions of ven)

19.201 19,288 18.095

Other sales

(Parts repairs etc.)



(Millions of ven)

Tadano aims to be a manufacturer with four synergistic strengths consisting of product competitiveness, product quality, service capability (including parts), and used crane value. In addition to enhancing the competitiveness and quality of our new products, we are working to ensure the long service life of our products by strengthening our service capability (including parts) and maintaining and enhancing used crane value.

In October 2017, Tadano established its Life Cycle Value (LCV) Promotion Department to integrate the Tadano Group's used crane business, develop strategies for the business, and enhance the life cycle value of Tadano's products. One of the initiatives aimed at enhancing LCV is the supply of maintenance parts. The Tadano Global Parts Center in Kobe, the Group's parts supply hub, stocks over 70,000 items and some 1 million component pieces.

Leveraging its proximity to an international port and an international airport, the Global Parts Center achieves a drastic reduction in delivery time for both domestic and international destinations. The six parts centers located across Japan achieve the fastest possible parts shipment in collaboration with the Global Parts Center and play a key role in minimizing product downtime by stocking products that are in high demand in each service area based on our many years of experience.

for the previous year), as a result of the company's

Sales ratio by product

Sales of customer service, used equipment and others

Sales of other products

enhanced efforts in the stock business.

Tadano is also committed to the recycling business. By offering upgrades for our special-purpose products, adjustments and repairs for components, repairs of structures including crane frame cracks, and replacements for production discontinued parts, we minimize downtime and keep repair costs down for our customers

while maximizing product life and maintaining value. These efforts are gradually yielding results and are contributing to the outstanding reputation of our used equipment.



# **Delivering Outstanding Customer Service**

Crane downtime leads directly to business losses for customers. That's why Tadano delivers outstanding service that meets and exceeds customer expectations. Tadano's Customer Support (CS) Division makes it its mission to deliver outstanding service to ensure operational safety for our customers and to maximize our product value. To this end, we focus on three areas: before-sales services, after-sales services, and safety training.

We aim to minimize product downtime and accidents arising from inadequate maintenance by promoting our before-sales services, including the Tadano Maintenance Package, which allows our customers, service contractors, and Tadano to share information on maintenance status and repair history using Hello-Net, and the Tadano Engine Care Package, which specializes in the maintenance of advanced engines (Currently available in Japan only).





# Hello-Net Keeps Our Customers and Our CS Division **Connected to Cranes in the Field**



# Other **Products**



Hydraulic Gantry (TB-1000)

cranes

Our after-sales services are built on a service network of 352 authorized service contractors and 939 authorized service personnel across Japan, in addition to 10 branches and 23 sales offices. Our global service network spans the entire world and includes direct service as well as service provided by over 100 distributors. Along with our efforts to enhance this network, we are working to improve service quality. By holding on-site technical seminars outside of Japan and also implementing systematic training at the state-of-the-art training center on the premises of our head office, we are fostering service personnel in and outside Japan.

Furthermore, Tadano devotes its efforts to preventing accidents at jobsites through initiatives such as the safety training conducted in February 2018 using virtual reality.

Using communication satellites and mobile devices, Hello-Net makes it easy to ascertain the operating status of a crane in real time. This enables a proactive approach to service through which we can identify early signs of trouble and provide advance maintenance. We are making progress in installing Hello-Net as standard equipment, chiefly on cranes designed for use on rough terrain crane. Hello-Net is currently used with approximately 7,500 cranes in Japan and 4,500 cranes outside of Japan. We are also expanding this system for use with all terrain cranes and aerial work platforms.

Tadano's lifters enable the safe and efficient transportation and installation of heavy machinery in special worksites such as indoor facilities, cleanrooms and tunnels not accessible for mobile cranes and overhead



All Terrain Crane Mounting / Removal Lifter (Example of boom removal from ATF400G-6)