

# Manufactured Capital



**28** production  
bases in  
**12** countries

Overseas  
production ratio  
**44%**

\*Excluding System Engineering segment  
FY2017 unit basis



No. of factories  
established  
in FY2018

**4**

# Production Capacity Expansion

With four new factories in three countries established in 2018, we will respond to the future demand increase.

As initiatives for automation, labor saving and improving productivity are being progressed on a global scale on the back of a shortage of workers and rising labor costs in China, boosted demand is being seen for mechatronics products like AC servos and robotics. The use of the IoT and AI is also expanding in aiming toward Industrie 4.0, which is further pushing up this demand.

To respond to demand which is anticipated to further expand, Yaskawa is building new factories in four global locations.

## Establishment of a Robot Factory in Slovenia

In order to respond to customer needs in the European market, where major market potential exists, and to create a new supply chain and to supply to the local market in a prompt manner, Yaskawa is planning to establish a robot factory in Slovenia in September 2018.

While Yaskawa has been engaging in robot systems for about two decades in Slovenia, the new robot factory will serve to complete its local capabilities for development, manufacturing, and sales to further bolster its relationship with customers in Europe.

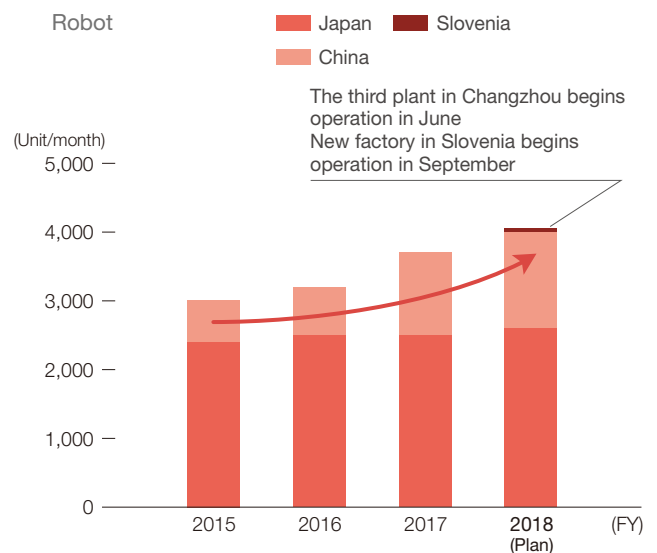
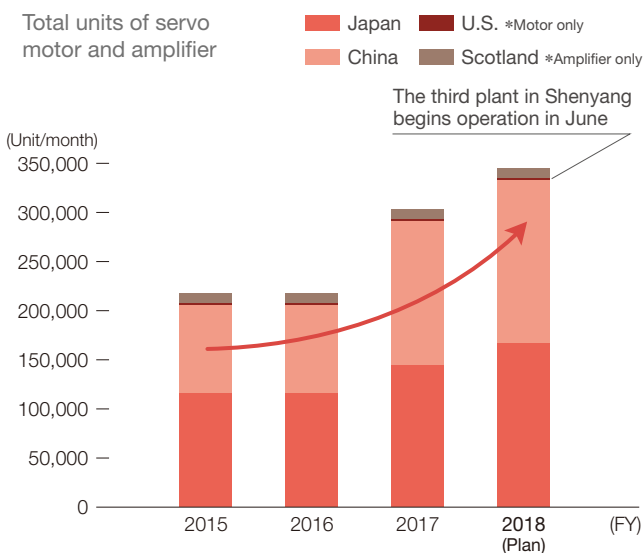
## Enhancement of Manufacturing Capability in China

In China, a place where the mass production of goods such as smartphones and household appliances are concentrated, factors such as decreases in the working population and soaring labor costs are resulting in accelerated large-scale investment in automation and robots. As such, demand is increasing for items such as machine tools and industrial robots. For that reason, the third plant in Shenyang (AC servo production) and the third plant in Changzhou (robot production) just started operations in June, 2018.

## Establishment of the Next-Generation Factory in Japan

The next-generation factory utilizing IoT and AI is established in Iruma, Japan to produce "Σ-7 series," a flagship model for AC servo drive. The factory will verify the new solution concept "i<sup>3</sup>-Mechatronics" to enable flexible operations for the varying models and production quantities. We will realize overwhelming improvement in productivity by establishing a system with which Yaskawa can efficiently supply the products with specifications that customers want.

## Global Production Capacity

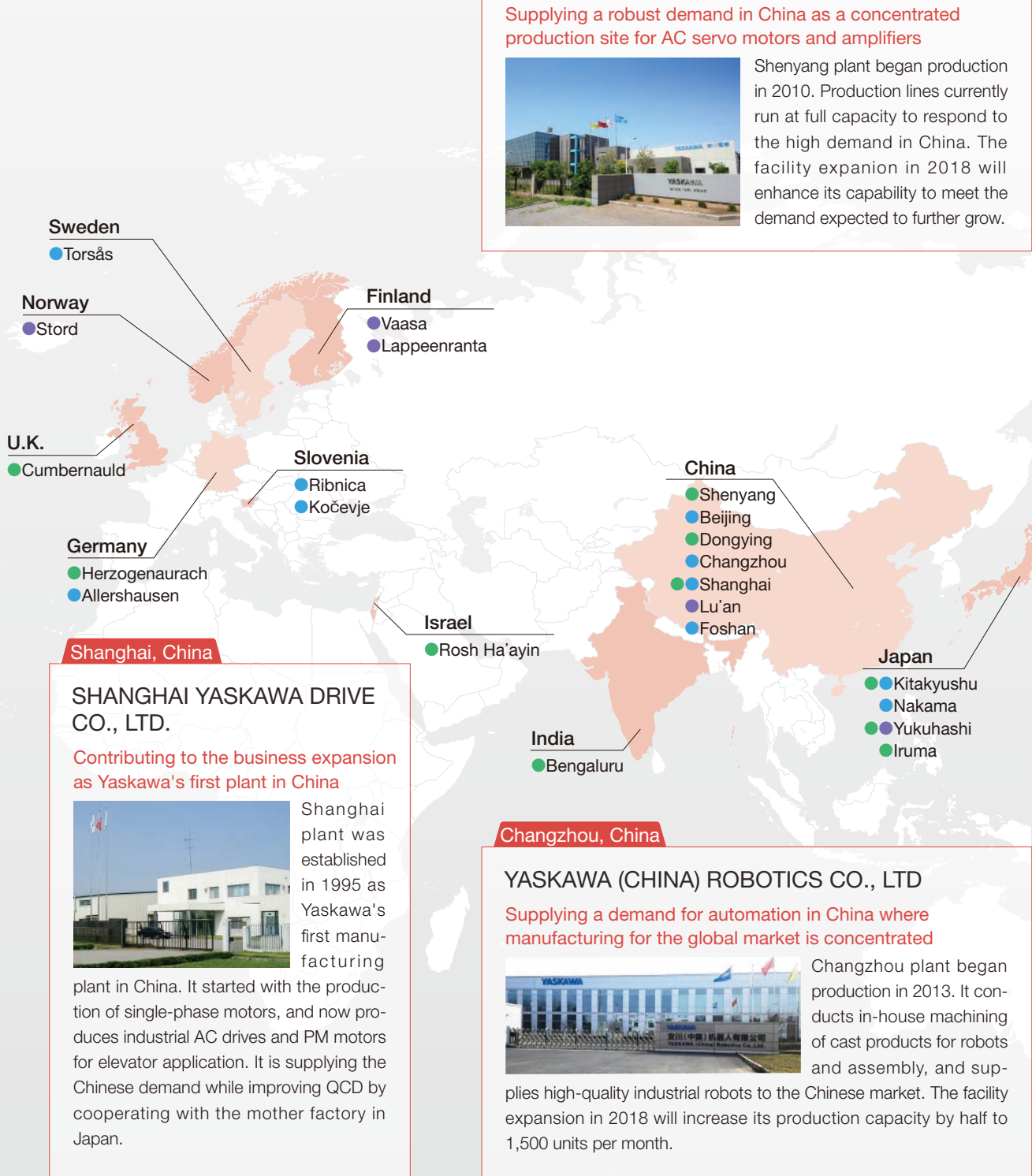


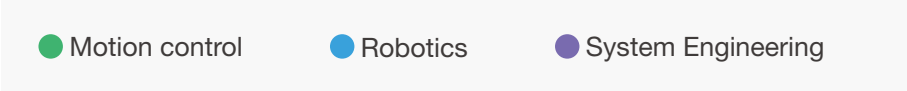
# Global Production Locations

Yaskawa group conducts optimum production at 28 locations in 12 countries for its businesses of Motion Control, Robotics and System Engineering with the policies to produce in the areas where the demand is and concentrated production.

We benefit from producing close to our customers in aspects of delivery time and building relations, as well as reduced risks related to forex rates, disasters and geopolitics.

\*Production locations for robotics include system factories.





**Kitakyushu, Japan**

**Yaskawa Electric Corp. Headquarters (Robot Village)**  
 Supplying globally as the mother factory for Robotics business



Current headquarters in Kitakyushu is where Yaskawa Electric Manufacturing Co., the predecessor of Yaskawa Electric Corp. was established in 1915. In the startup period, it produced motors for use in coal mining. Now the headquarter building and robot factories are located, and together with Yaskawa Innovation Center, the Robot Village welcome many visitors every day.

**Nakama, Japan**

**Yaskawa Electric Corp. Nakama plant**  
 Built on the concept of being "environmentally and human-friendly, fast, and efficient" site, producing mid to large sized robots.



Nakama plant conducts in-house parts processing and assembly for mid to large sized robots. With the third plant completed in August 2015, this facility has not only reduced production lead time by 30%, but also achieved a 70% reduction of VOCs\* emissions.

\*: VOCs (Volatile Organic Compounds) are organic solvents that are also a major source of photochemical smog. VOC emissions from industries that handle large volumes of paint are regarded as a significant issue.

**Yukuhashi, Japan**

**Yaskawa Electric Corp. Yukuhashi plant**  
 Contributing to the global energy saving with two mother factories for Drives business and System Engineering business



Two mother factories for the Drives business and System Engineering business are located in Yukuhashi plant. The plant produces AC drives and medium voltage drives, and the headquarters for photovoltaic and wind generation-related businesses are located, contributing to the global energy saving.

**Iruma, Japan**

**Yaskawa Electric Corp. Iruma plant**  
 Supplying a global demand as the mother factory for AC servo motors and amplifiers



The plant was established as Tokyo plant in 1964. Now the plant supplies globally as the concentrated production site for AC servo motors and amplifiers. A new factory was completed in the first half of 2018, and cutting-edge production technologies such as IoT and AI utilization, as well as i<sup>3</sup>-Mechatronics concept are verified.

