

KYB Group Business Overview

KYB provides products to customers in various fields by combining electronic control and systems technologies that apply its two core technologies for vibration control and power control. KYB's business and product segments are divided into Automotive Components Operations, Hydraulic Components Operations, the Special-Purpose Vehicles Division, the Aircraft Components Division, and the System Products and Electronics Components Business.

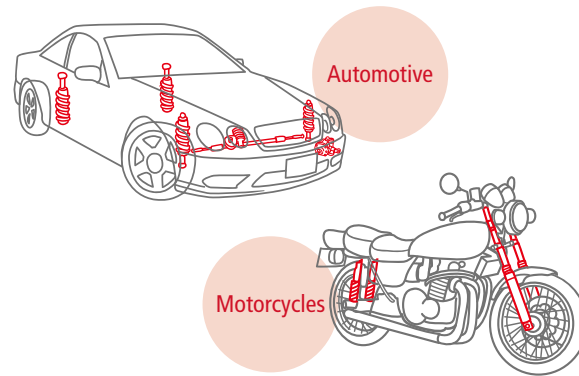
Main Businesses

Automotive Components Operations

This business primarily develops and supplies a wide variety of products for automobiles and motorcycles. Leveraging vibration control technology, it serves market requirements for comfort, safety and maneuverability in day-to-day driving and motorsports.

Major Products

- Shock absorbers for automobiles:** Shock absorbers (original equipment (OE), aftermarket)
- Shock absorbers for motorcycles:** Front forks, rear cushion units
- Hydraulic equipment for automobiles:** Vane pumps, vane pumps for continuously variable transmissions (CVT), hydraulic power steering systems, electric power steering (EPS)
- Others:** Stay dampers, shock absorbers for all-terrain vehicles, free locks

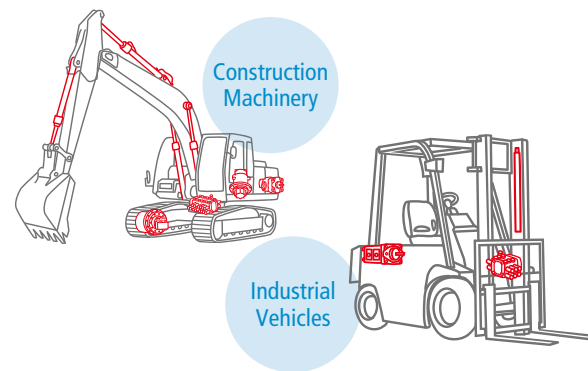


Hydraulic Components Operations

This business develops and supplies a variety of hydraulic equipment for construction machinery, industrial vehicles and railroad cars. It also leverages power control technology to meet the needs of on-site *monozukuri* and railroad infrastructure for precision miniaturization, digitalization and systemization.

Major Products

- Hydraulic equipment for industrial use:** Cylinders, valves, pumps, motors, mini-motion packages (MMP), hydrostatic transmissions (HST)
- Others:** Dampers for railroad cars, brakes for railroad cars, active suspension systems for railroad cars, seals



Other Businesses

Special-Purpose Vehicles Division

This business develops and manufactures special-purpose vehicles, focusing on a lineup of small to large concrete mixer trucks that have the largest market share in Japan. The excellent mixing, discharging, environmental performance and other features of our products boost work efficiency.

Aircraft Components Division

This business supplies flight control systems, landing systems, hydraulic and pneumatic systems and other hydraulic equipment for aircraft. In the aerospace technology market, which requires outstanding reliability, we leverage cutting-edge hydraulic technology to support flight safety and comfort.

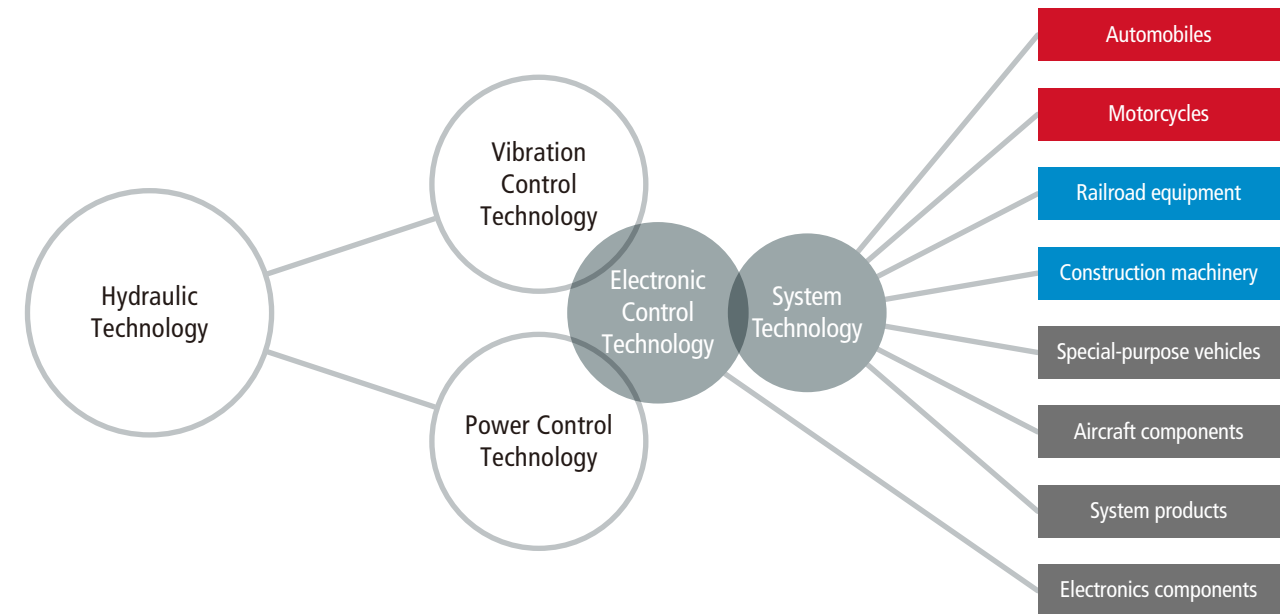
System Products and Electronics Components Business

We are opening up new possibilities for hydraulic technology, such as auditorium and stage control systems that support theater performances. In addition to hydraulic technology, we are also focusing on electronic control technology to develop products such as electronic control units (ECU) for automobiles and other uses.

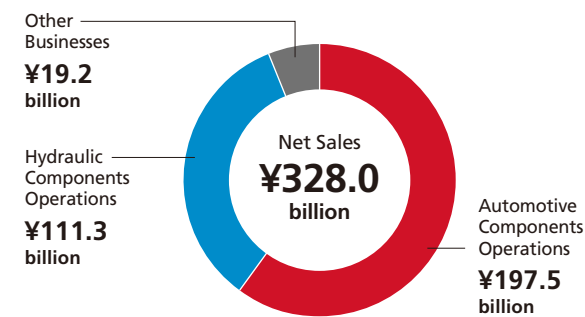
Major Products

- System products:** Equipment for military vessels, seismic isolation and vibration suppression devices, simulators, hydraulic systems, tunnel boring machines, environmental devices
- Special-purpose vehicles:** Concrete mixer trucks, granule carriers, special-function vehicles
- Aircraft components:** Steering components, control devices, emergency equipment
- Electronic components, etc.:** Electronic devices

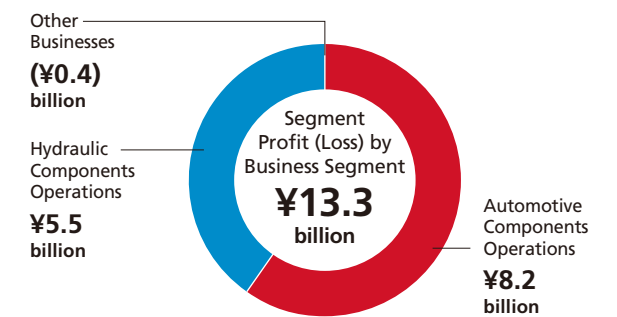
KYB's Core Technologies and Businesses



Net Sales by Business Segment (FY2020)

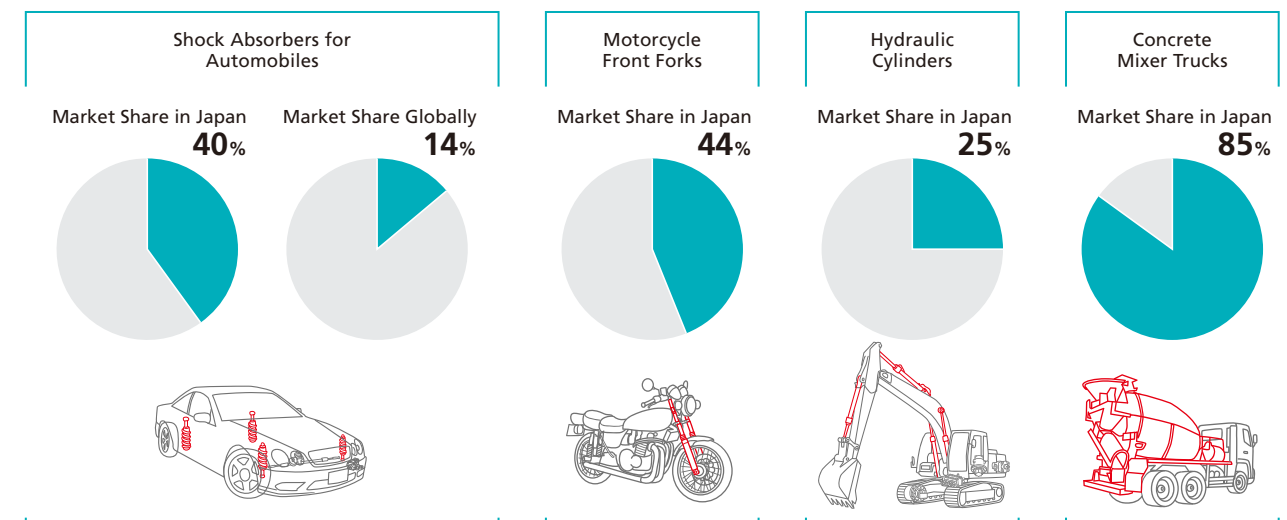


Segment Profit (Loss) by Business Segment* (FY2020)



* Segment profit corresponds to operating profit under JGAAP

Market Share of Major Products Source: KYB data (As of March 31, 2021)

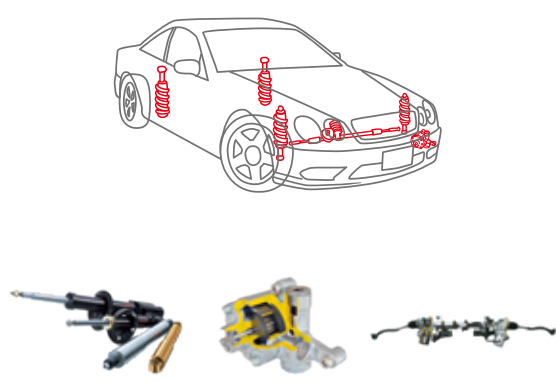


Product Lineup

We support daily life by providing safety and comfort. The products presented here are used in a broad range of fields.

Automotive Components Operations Hydraulic Components Operations Other Businesses

Automotive



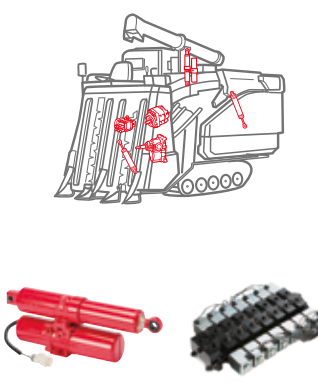
Through the pursuit of technology, KYB is able to offer automotive components that offer users advanced maneuverability and drivability. We support comfort, security and excitement in any driving situation, from a family outing to a challenging motorsports event.

Motorcycles



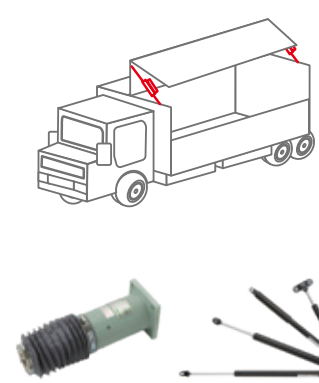
KYB makes motorcycle components for the highest level of riding stability by using world-class race-proven technology designed for extreme speed and safety. We support comfortable driving and superior maneuverability. Our shock absorbers for snowmobiles and chairs skis are specially designed to operate in the snow.

Agricultural Machinery



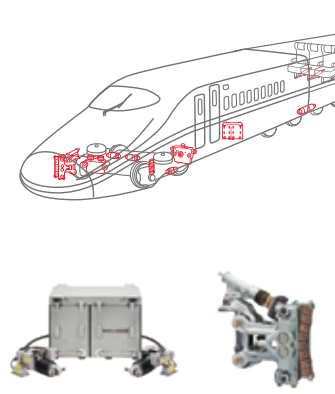
KYB agricultural machinery components save space and energy for easier farming.

Industrial Machinery



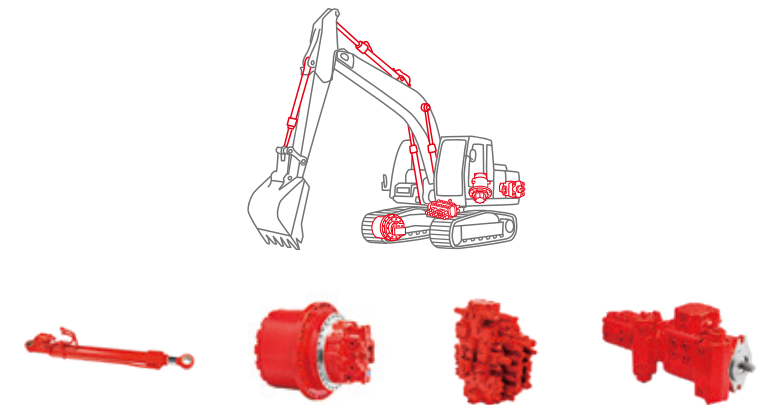
KYB supplies components for industrial machinery from elevators to factory equipment to help accelerate production.

Railroad Equipment



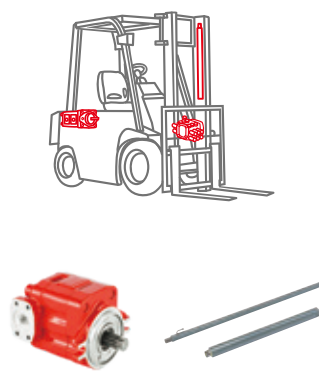
KYB railroad equipment helps achieve comfortable high-speed travel by buffering rolls from air pressure when cornering, passing oncoming trains or entering tunnels.

Construction Machinery




For many years, KYB has worked to meet the needs of construction sites for machinery that does not break even when used for long periods of time, day and night, and under harsh conditions ranging from extreme colds of -30°C to scorching deserts. We support construction sites with the world's highest level of reliability. We develop and manufacture all of our drivetrain components (control valves, piston pumps, travel motors, swing motors, cylinders, etc.) in-house, and are also involved in system proposals for construction machinery.

Industrial Vehicles



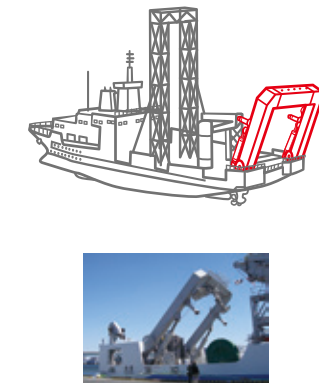
KYB puts its components to work in forklifts and other industrial vehicles to provide powerful support for improved operational efficiency.

Special-Purpose Vehicles




KYB special-purpose vehicles support comfort in all environments. KYB concrete mixer trucks have the highest market share in Japan.

Marine Products



KYB hydraulic and tension control technologies make work at sea easier, including for ships operating remote devices for deep sea exploration, as well as for transport ships, supply ships and rescue ships.

Sports and Welfare



KYB uses its core technologies to develop products for sports and welfare.

Strategy by Business

Automotive Components Operations

Business Strategy

Realizing true value: Strengthen, evolution and new initiatives

In Automotive Components Operations, our goal for FY2022 is to “establish a position as a core supplier by further strengthening existing projects and core technologies.” To achieve this goal, our basic strategies are “stabilization of our revenue base,” “innovative *monozukuri*” and “creation of high-value-added products.”

To stabilize our revenue base, we are consolidating and reorganizing our main bases to maximize profits by leveraging optimal production locations in line with customer demand. In the commercial market, we are implementing structural reforms in which production, sales and technologies are integrated and promoting local production for local consumption, including making flexible adjustments and localizing production systems.

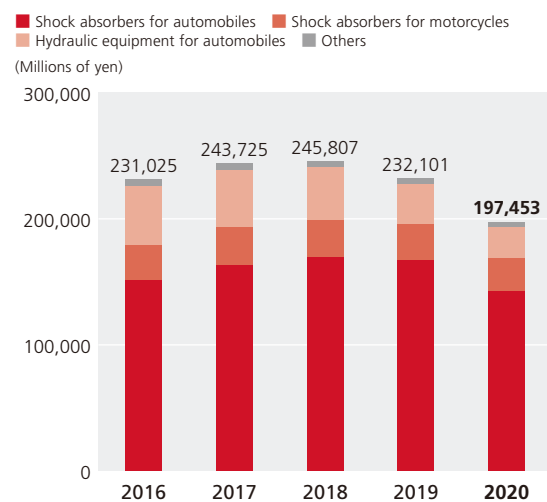
For production, we will improve the level of automation and reduce manufacturing costs by introducing labor-saving operations. We will then successively introduce these measures at domestic and overseas bases, aiming to become the No. 1 manufacturer in terms of low costs through our innovative *monozukuri*.

Regarding technology, in order to address changes in the social environment and customer needs, we will respond to new markets and new products through EV, CASE¹ and MaaS,² develop new customers and create high-value-added products by strengthening our proprietary technologies.

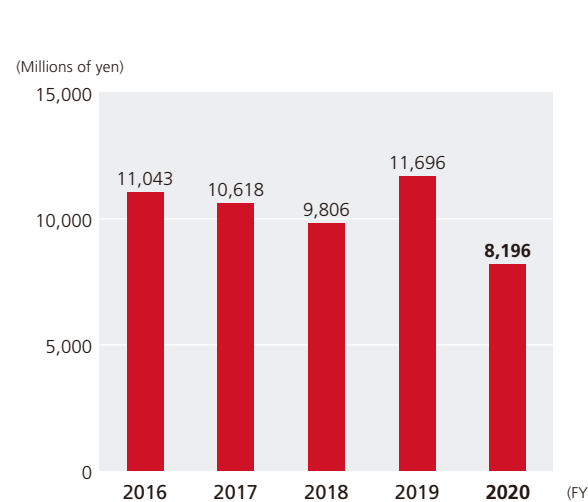
1. Connected cars, autonomous driving, sharing and electrification. This keyword indicates the trend in the automobile industry.
2. Mobility as a Service. A new concept in the transportation service industry for integrating various means of transportation into a single service.



Net Sales¹



Segment Profit²



Notes: 1. As of FY2017, “Royalty income” and “Revenue related to mold compensation,” which were previously recorded in “Other income” in the Consolidated Statements of Income, are included in “Net sales.”
2. Segment profit is calculated by deducting cost of sales and selling, general and administrative expenses from net sales.

Technological Strategy

1. Suspension and steering for next-generation vehicles

Automobiles are equipped with suspensions, which improve comfort and steering stability, and the shock absorber is the part that absorbs vehicle chassis vibration.

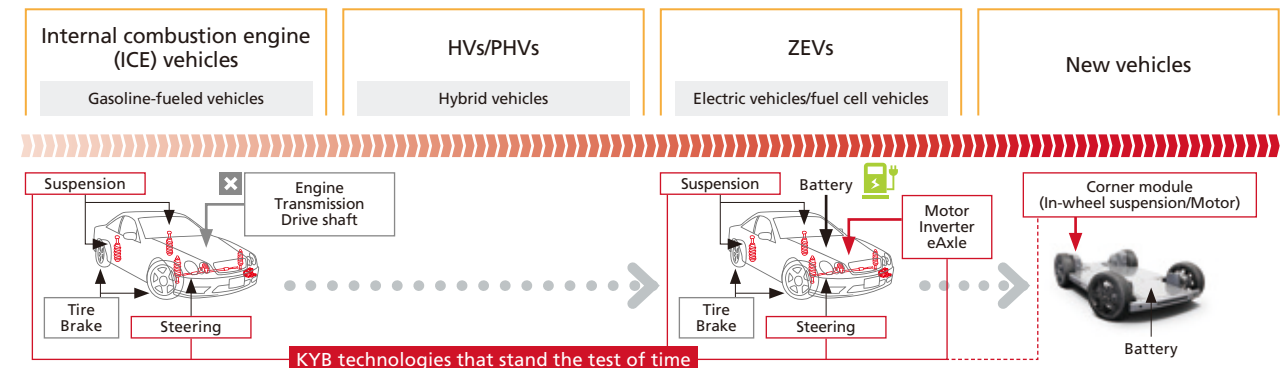
Featuring superior technology, KYB shock absorbers are the preferred choice of many automobile manufacturers worldwide, and we have achieved high market share. In addition, we recommend replacement within five years of initial registration or at 70,000 kilometers (43,495 miles) as deterioration will occur due to mileage and aging. This commercial demand for replacements is a major business opportunity for KYB.

Driving, turning and stopping are the basic functions of an automobile, and the steering system handles turning. Hydraulic power steering (PS), which uses hydraulic force to

reduce the effort needed to turn the wheels, is indispensable for safe driving as it enables a quick response to danger. Electric power steering (EPS), which is powered by a battery, can improve fuel efficiency compared with PS, which is powered by the engine.

Even if the shift from conventional gasoline-fueled vehicles to hybrid vehicles with two or more power sources or to ZEVs continues, there will still be a need for suspension systems and steering. As KYB’s proprietary technologies evolve further, business opportunities will expand as well. In addition, we will collaborate and form alliances with companies for technologies that we do not possess to become an even stronger supplier.

KYB Technologies Capable of Responding to the Evolution of Automobiles

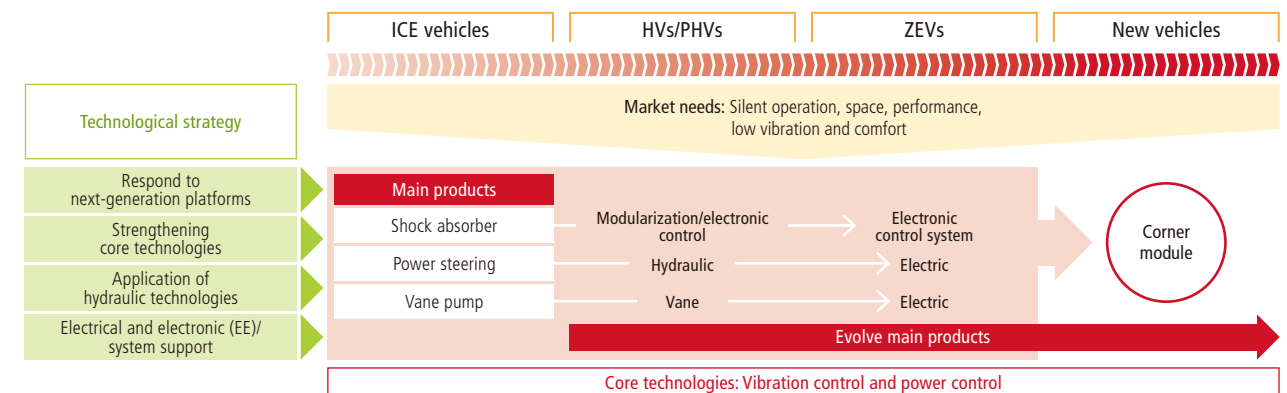


2. Response to automotive market needs

In the automotive market, needs for features such as silent operation, space, performance, low vibration and comfort will grow even more in the future, and parts manufacturers are improving their technologies to meet these needs. KYB is working to support next-generation platforms as part of its technology strategy. In addition, KYB will further

strengthen its core technologies such as vibration control and power control. We will also promote modularization, electronic control and system support for main products while applying our hydraulic technologies in various ways.

Meeting Market Needs by Strengthening Core Technologies



Hydraulic Components Operations

Business Strategy

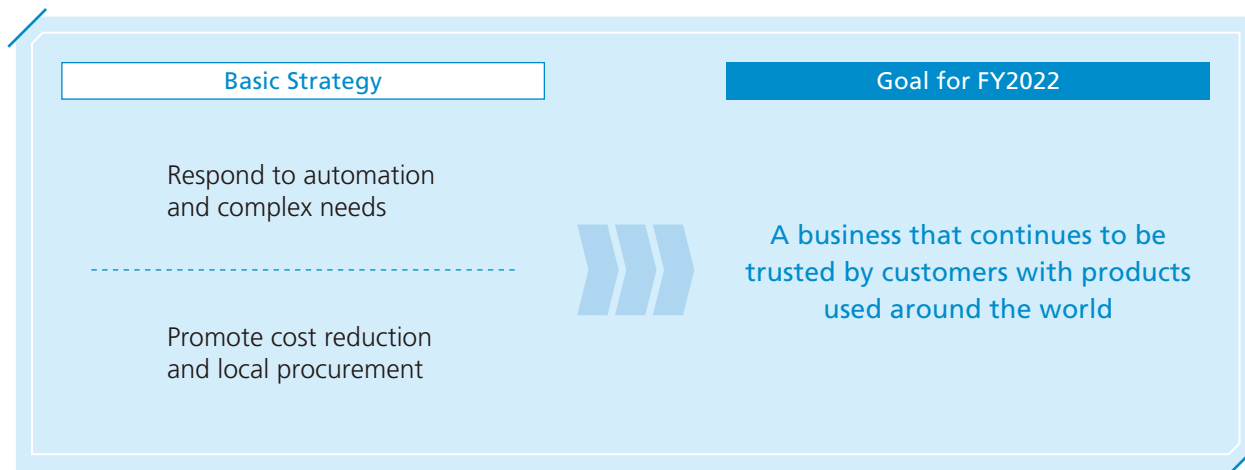
Securing a competitive advantage through system proposals

In Hydraulic Components Operations, our goal for FY2022 is to be a “business that continues to be trusted by customers with products used around the world.” To achieve this goal, our basic strategy is to “respond to automation and complex needs” through the development of electronic control and load-sensing products and medium and large pumps. As a measure to strengthen our competitiveness, our strategy is to “promote cost reduction and local procurement.”

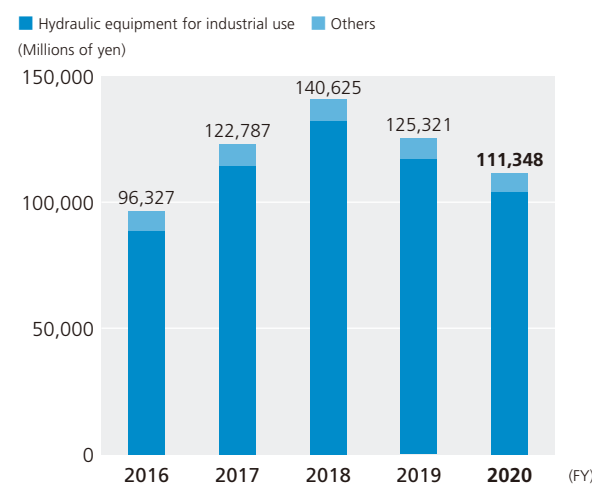
In our Hydraulic Components Operations, we handle hydraulic equipment for industrial use, mainly for construction machinery, as well as other hydraulic equipment. The

drivetrain system of construction machinery, such as excavators, consists of parts including control valves, piston pumps, travel motors, swing motors, and cylinders, and KYB is one of the few manufacturers that produces all of these products. The fact that we can make systems proposals to construction machinery manufacturers is a major competitive advantage.

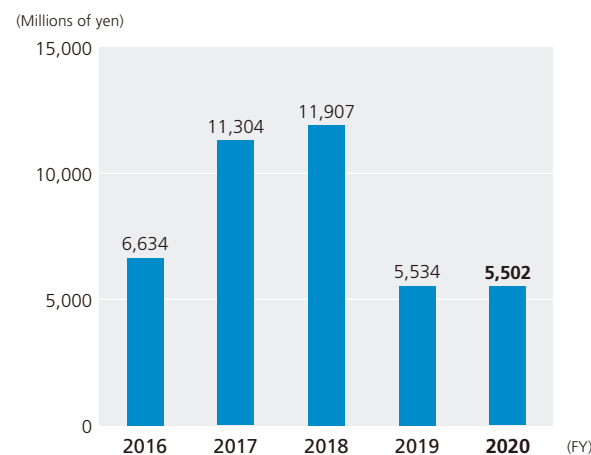
In addition, the overall trend in the markets we serve is expansion in growth areas, so we will promote strategies for each region according to its development stage and develop low-cost models.



Net Sales¹



Segment Profit²



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Technological Strategy

Proprietary technologies enable advanced control

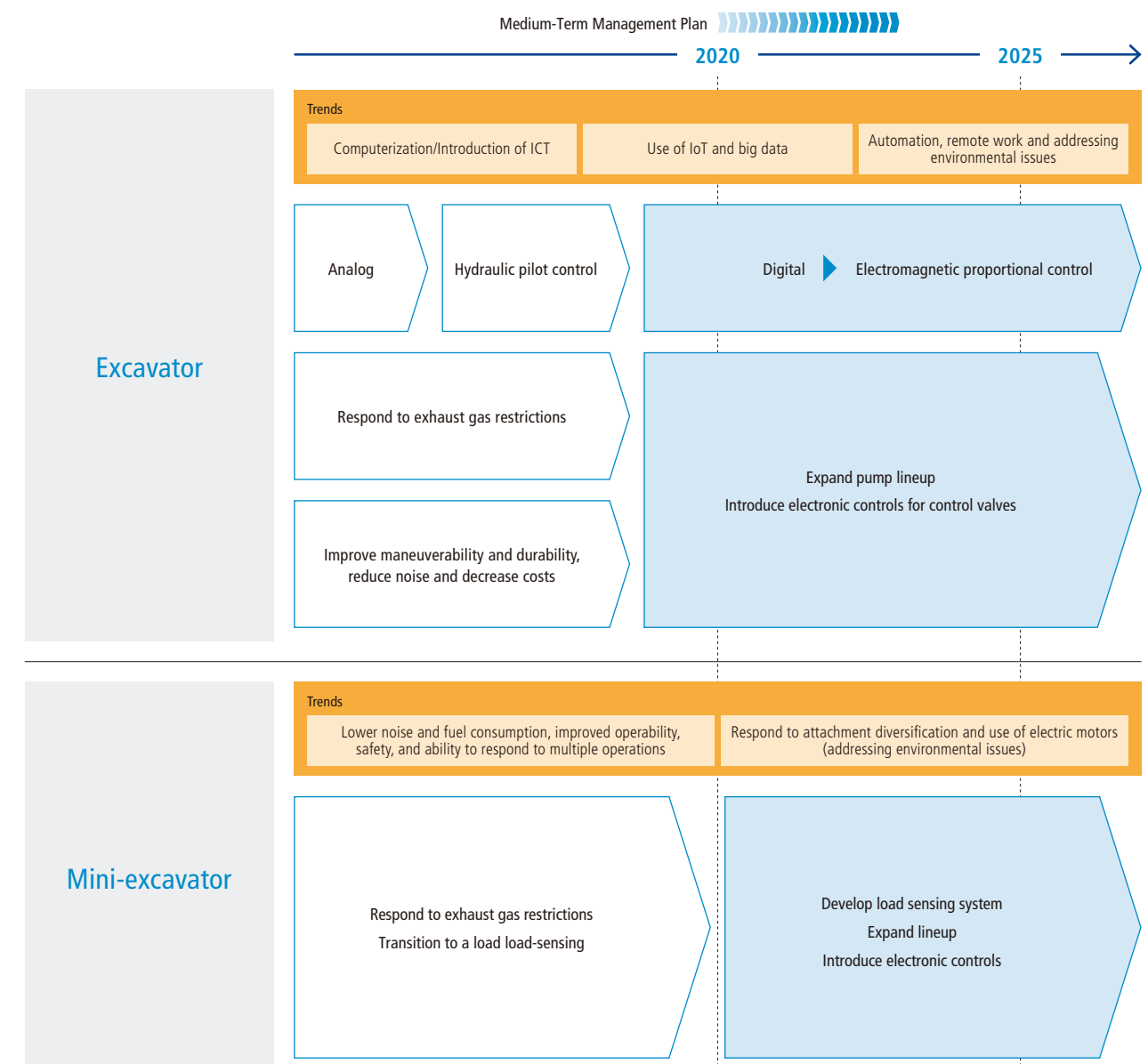
To respond to automation and complex needs, we are continuing to develop electronically controlled models for hydraulic equipment and adding them to our lineup.

The “brain” of construction machinery is the control valve, which regulates various actuators (drive devices that convert energy into translational or rotational motion via hydraulic or electric motors) and enables smooth operations such as traveling, turning, and the flexing and stretching of mechanical arms. Combining electronic controls with KYB’s specialty hydraulic technologies and fusing them with the pump, which is the “heart,” enables advanced control and creates new added value.

As for mini excavators, we are working on load-sensing* pumps to meet market needs for lower noise and fuel consumption, improved operability, and diversification of attachments. We will also address the growing need for responding to environmental issues. The advantages of a load-sensing system include simultaneous or combined operation, which previously relied on operator experience as well as energy savings, and digitalization and automation that is able to handle a variety of loads without issue.

* Load sensing: A system in which the load sensed by the valve is sent to the pump. The system is able to adapt the flow rate to the pressure required for operation.

Market Trends and KYB Technologies



Other Businesses (System Products, Special-Purpose Vehicles, Aircraft Components Division)

Strategy by Business

System Products and Electronics Components Businesses

In July 2021, Kayaba System Machinery Co., Ltd., a subsidiary, was absorbed into KYB Corporation. Under the slogan "Let's become a trusted company once again," we will focus on promptly bringing seismic isolation/mitigation oil dampers into conformity. We will also strengthen governance and build a system that will be recognized by third parties as appropriate.

Special-Purpose Vehicles Division

In Japan, we are working to strengthen our profit structure by developing high-value-added products that are friendly to the environment and to people and that meet market needs. Overseas, we will establish the foundation for a global network for special-purpose vehicles by formulating and implementing new business plans.

Aircraft Components Division

We aim to improve profitability by strengthening compliance, putting safety first and promoting quality management. We will work to reduce losses associated with disruptions in production, review our production system and costs, and reorganize the business.



e-Mixer Computer Controlled Concrete Mixer Truck

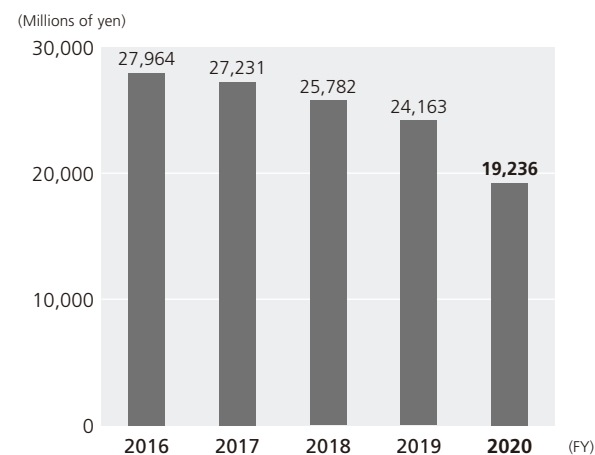
The e-Mixer is an environmentally friendly concrete mixer that achieves lower noise, exhaust and fuel consumption through application of our unique hydraulic technology and ECU. Using sensors to detect the level of the load, computer control optimizes the flow rate of the hydraulic equipment, thereby reducing engine revolutions to about half those needed by a conventional manual mixer. We have significantly enhanced operability by continuously making improvements, and the e-Mixer's functions meet the needs of users.

The initial model e-Mixer that was launched in 2004 was upgraded to the e-Mixer II in 2011. We are currently incorporating further advances to develop the e-Mixer III, which will be easier to use and offer enhanced safety features.



Remote control operation near the discharge chute

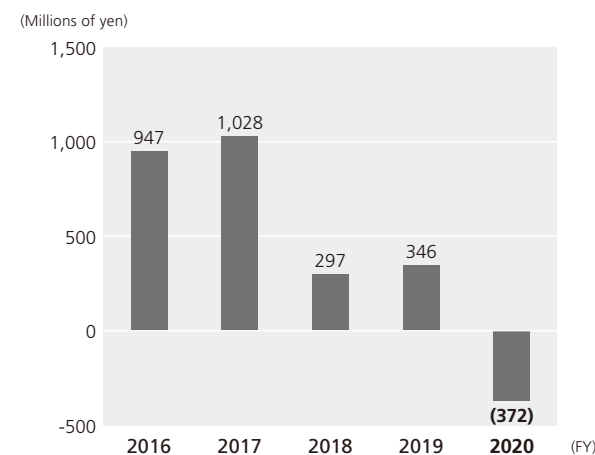
Net Sales¹



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Segment Profit (Loss)



Contributing to Social Issues through Our Business

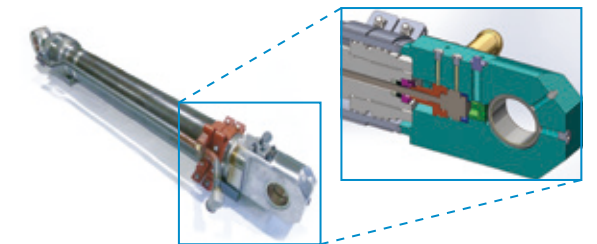
Approaches to ICT and IoT in Hydraulic Equipment

Support for ICT and IoT in Hydraulic Equipment

In recent years, computerized operation using ICT and monitoring functions using IoT have increased in the construction industry. Combining traditional hydraulic equipment with advanced electronic equipment requires overcoming challenges in terms of cost, durability and systemization, but we are continuing our development initiatives, mainly in sensing technology.

Launch of Hydraulic Cylinder Compatible with ICT (Stroke Sensing Cylinders for ICT Construction Equipment Machinery)

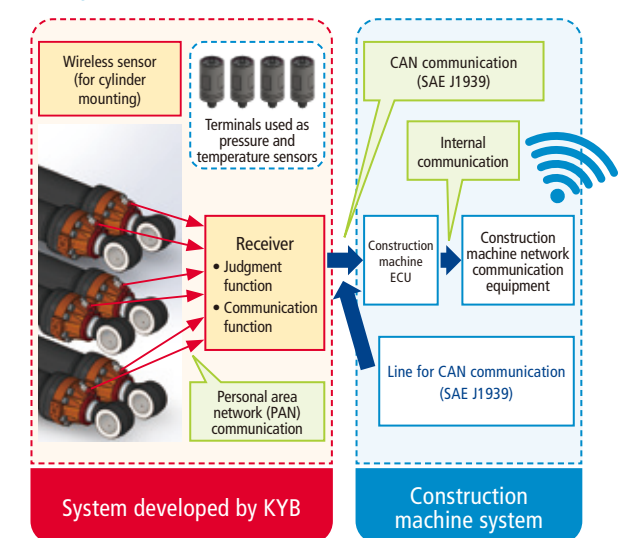
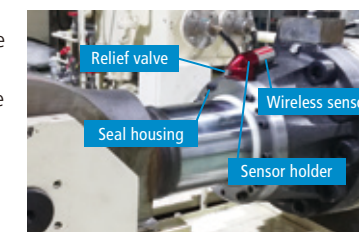
We have launched a cylinder with a stroke sensing function as a product for computerized construction equipment. In the case of an external sensor, there is a risk of damage due to contact with soil or other substances. However, a built-in sensor that is interchangeable with standard cylinders can prevent damage. For ease of use and high accuracy, the stroke sensing cylinders support controller area network (CAN) communication and utilize absolute output (absolute position detection).



Development of Monitoring System for Hydraulic Cylinders and Other Equipment

We are developing a cylinder failure detection system as a product for monitoring systems utilizing IoT. A fully wireless sensor mounted on the cylinder monitors the inside of the cylinder and reports malfunctions. KYB has continued to make advances in its hydraulic cylinders to improve their durability. Moreover, by providing advance notice of the inevitable deterioration of consumable items or accidental failures, this system minimizes the suspension of operations and reduces parts replacement costs, thus contributing to the maintenance operations of construction machinery manufacturers.

The product is in the evaluation stage as a subsystem that provides data to the hydraulic cylinders of construction machines.



Joint Development of a Next-Generation Modular EV Platform

KYB has entered into a strategic partnership with REE Automotive of Israel, a company with advanced EV platform technologies, to develop suspension capabilities for future EV platforms. Our suspension technologies will contribute significantly to improving the performance of REE Automotive's next-generation EV platform, providing cost-effective, scalable solutions in e-mobility.

The new platform features a high degree of design freedom and is expected to enable innovations in EV design, with all drivetrain components, including steering, braking, suspension and electric motor, integrated into the wheel. Through this partnership, we will promote the development of a suspension

subsystem that supports the needs of tomorrow's mobility ecosystem to revolutionize methods of transporting people, goods and services.

