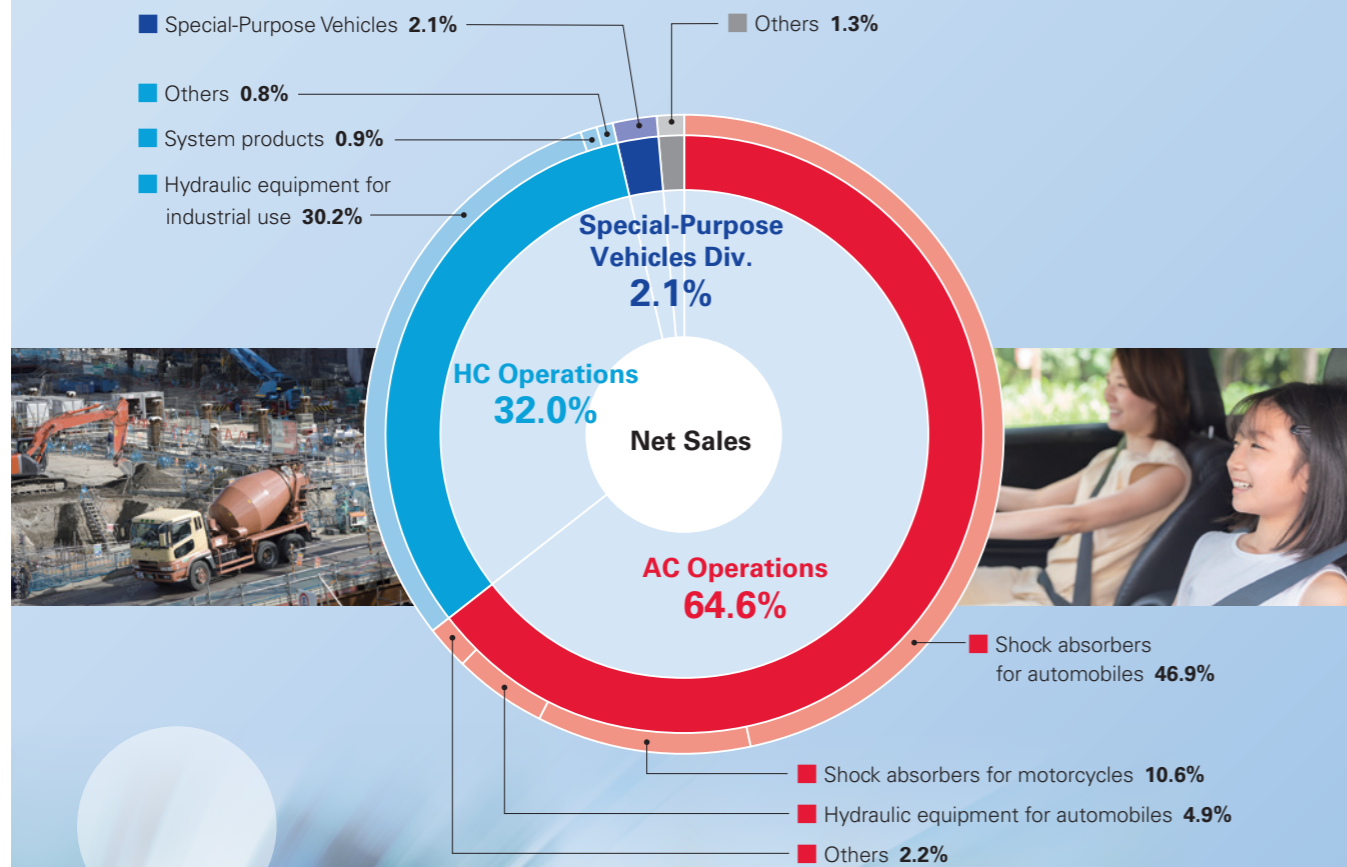


Our Three Mainstay Business Units

KAYABA Provides Value for the Future Through its Business Activities

KAYABA works to create value through concentrating its management resources on the three Business Units of Automotive Components (AC) Operations, Hydraulic Components (HC) Operations, and the Special-Purpose Vehicles Division.



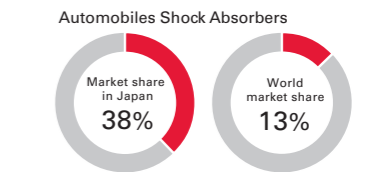
Our Inherited DNA

AC Operations

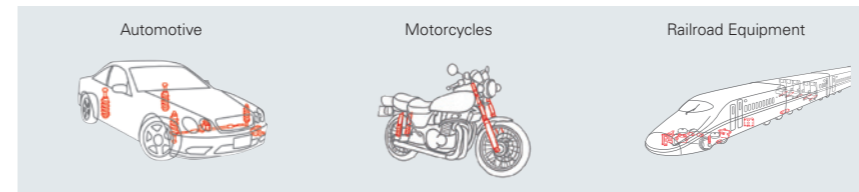


With vibration control technology at the core, this business unit develops and offers a wide range of products primarily for automobiles, motorcycles, and railway cars. AC Operations' products are at use in many situations where comfort, safety and maneuverability are required, from secure, comfortable drives with the family to withstanding the harsh conditions of motorsports.

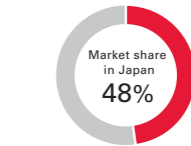
Market Share
Source: KAYABA data (As of March 31, 2023)



Main machines that use KAYABA products



Motorcycle Front Forks



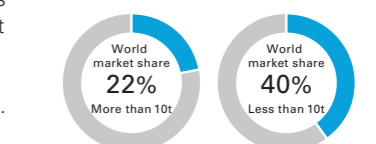
HC Operations



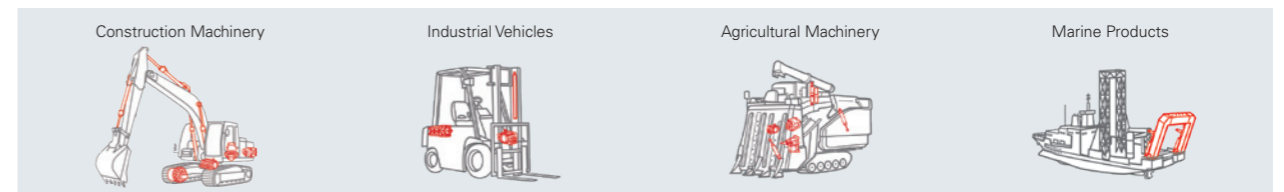
With power control technology at the core, this business unit develops and offers various kinds of hydraulic equipment for construction machinery and industrial vehicles. In addition, it expands the potential of hydraulics to new areas, such as for stage mechanisms that support theater productions. It deals in compact precision, digitization, and the creation of systems, thereby providing support at the sites where manufacturing takes place.

Market Share
Source: KAYABA data (As of March 31, 2023)

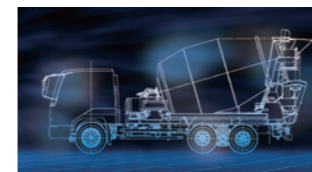
Hydraulic cylinders for construction machinery (by excavator machine mass)



Main machines that use KAYABA products



Special-Purpose Vehicles Div.



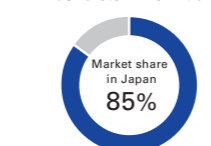
This business unit develops and manufactures specially equipped vehicles, mainly the concrete mixer trucks for which it enjoys the top domestic share. The products have a lineup that ranges from small to large sizes, and they increase work efficiency on construction sites with high kneading, discharge, and environmental performance.

Main machines that use KAYABA products



Market Share
Source: KAYABA data (As of March 31, 2023)

Concrete Mixer Truck



Application of Technology

Sports and social welfare products

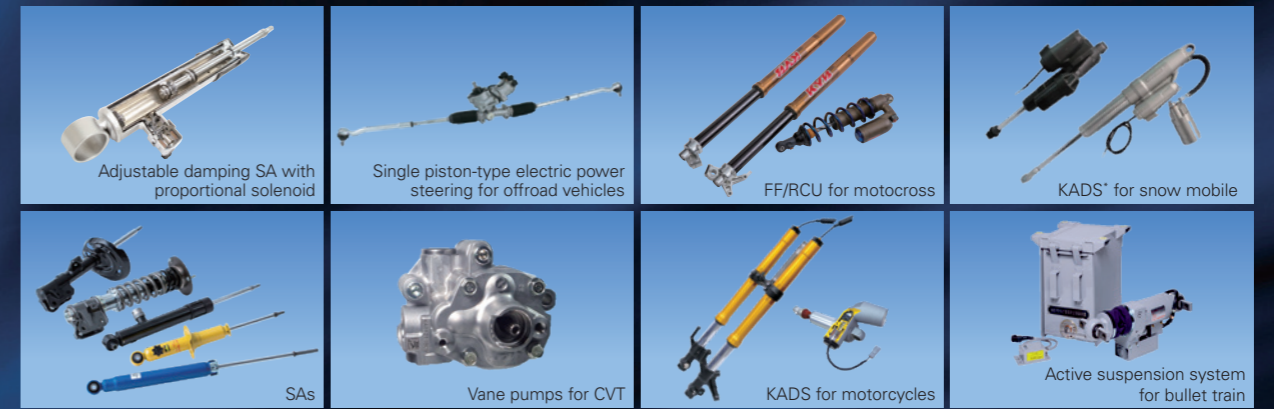
We use our core technology to develop products used for sports and social welfare.



Note: KAYABA has been involved in the business of hydraulic equipment for aircraft since our establishment. However, as a result of a comprehensive reexamination of our business portfolio and in order to strengthen corporate competitiveness through the selection and concentration of management resources, we decided to withdraw from the aircraft components business in February 2022. We are in the process of phasing out all operations of the Aircraft Components Division, including repairs.

Automotive Components (AC) Operations

Delivering Environmental Compatibility, Ride Comfort, and Excitement With Original Development Capabilities



As an independent manufacturer, we take pride in our strength of conducting unique development together with our customers.

We promptly conduct driving trials and test prototype models with the latest testing equipment at the test course in our Developmental Center, which expands the potential of our ideas. Another strength is the synergistic effect generated through the accumulation of know-how that includes knowledge from our global development system and other Business Units (HC Operations and the Special-Purpose Vehicles Division). We get involved in world-class motorsports races, where we can further increase our technological capabilities through conducting developments that play a part in winning the championship.

*KADS: KYB Actimatic Damper System™

Main Products	SA for automobiles	SA for motorcycles	Hydraulic equipments for automobiles	Others
	Shock absorbers (original equipment, aftermarket), suspension systems	Front forks (FF), rear cushion units (RCU)	Vane pumps, vane pumps for continuously variable transmissions (CVT), hydraulic power steering systems, electric power steering (EPS)	Stay damper, SA for all-terrain vehicles, free locks, railroad equipments (dampers, brakes, suspension systems)

Looking Back on FY2022

In the final year of the 2020 mid-term plan, we focused our efforts on the following four points in AC Operations.

1. Raise each person's awareness of norms and work style reforms
2. Engage in quality assurance aimed at Own-Process Completion
3. Unceasingly raise productivity on the foundation of KPS/Ship'30
4. Technological development that makes customers choose KAYABA

Due to a lagging market recovery in some sectors of our product fields and sharp rises in raw material prices, we were pressed to deal with increases in fixed and variable costs. However, there were signs of positive changes, and we had a year-on-year increase in sales and profits.

Risks and Business Opportunities in the New Medium-Term Management Plan

There is a range of risk factors in the environment around us, including climate change, energy, human resources, and geopolitics. In the automobile industry, emerging forces are growing rapidly with the acceleration of the trend towards electric vehicles, and it is highly likely that this will redraw the lines of the conventional power structure.

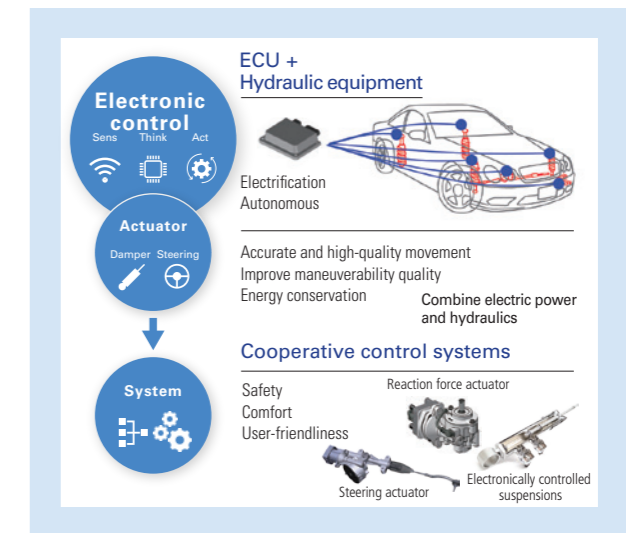
As we face sharp rises in inflation, raw material costs, energy costs and labor expenses amidst an increasingly unstable international situation, we are seeking to be a company that customers choose regardless of which unforeseen circumstances occur. In the 2023 mid-term plan, we will provide basic education on TQM to all employees and further its application by each individual on the business level, which will lead to the improved performance of the organization. And we are working on the stability and increase of quality at the product and processing level, the elimination of user complaints, and intensive improvements at plants dealing with quality

issues while taking on the challenge of achieving *monozukuri* that ends defect losses and reduces waste.

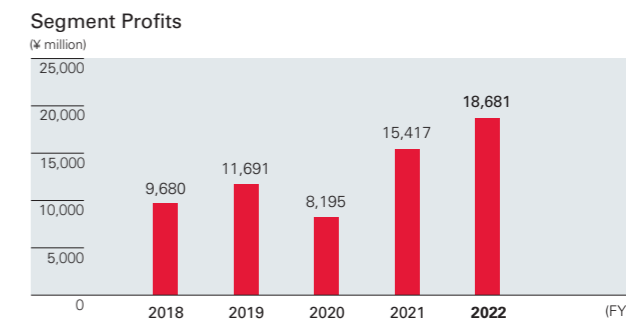
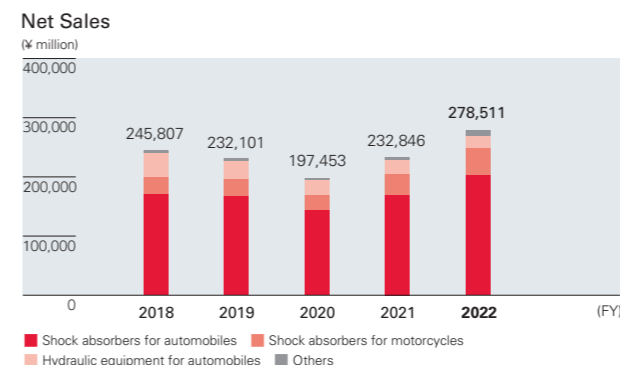
We are striving for wide-ranging productivity improvements through Ship'30 and AI/DX. Some of our production lines are already producing productivity improvement results through the installation of image inspection AI and robot transportation, and we are aiming to expand installation of this technology globally in 2025. We will increase our human resources with automation-related production technology skills and post-installation equipment management skills.

Furthermore, in addition to conducting regional sales promotions and acquiring new customers, including local companies in anticipation of future growth, we aim to quickly complete development of high-value-added products such as electronically controlled suspensions, SBW*1 systems, and electric pumps for e-Axle*2 and then move into the mass production phase.

Providing systems for all electric / hydraulic mechanisms



*1 Steer-by-wire (SBW): A steering system for the era of automatic driving that connects an automobile's tires and steering wheel with an electrical signal in a constant exchange of steering information and reaction force from the road surface.
*2 e-Axle: A unit that integrates the travel motor, inverter, and transaxle (speed reduction mechanism).



Notes: 1. As a result of the review of segment management classification, railroad equipment that was previously categorized under the "HC Operation" is disclosed as part of the "AC Operations" from FY2022.
2. Segment profit is calculated by deducting cost of sales and selling, general and administrative expenses from net sales.



"From environmental responsibility to the excitement of motorsports, we will continue our initiatives and efforts to remain both a pioneer and a specialist in our fields."

Minoru Ishikawa
General Manager,
Automotive Components Operations,
Senior Managing Executive Officer

The Value AC Operations Offers

Evolving Core Technologies to Offer New Value

In order to respond to a greatly changing marketplace with the shift toward EVs, CASE^{*1}, and MaaS^{*2}, we are developing high-added-value products—such as semi active, fully active, and height adjustment suspensions—based on our company’s core technologies.

Our vibration control technology supports transport machinery such as automobiles and railways, and is required to provide a high degree of safety and comfort. With the progress of electrification and automation, the focus is switching from drivers to passengers. There is emphasis on the need for “having fun while travelling,” and greater comfort than ever before is required.

Therefore, we are collecting and analyzing road surface and vehicle movement data, and developing semi active and fully active suspensions that make control in real time a reality. Steering systems restrain horizontal motion, while suspensions restrain vertical motion, and being able to coordinate them is growing in importance.

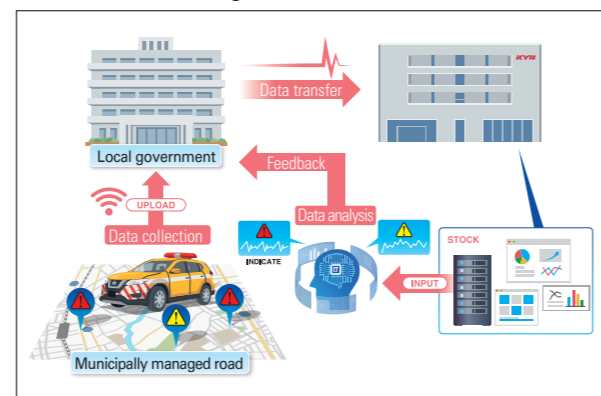
Electric pumps for e-Axle are required to have cost performance, variations by function and output, small size, high efficiency and optimized balance. In order to achieve these, we will reduce electricity and fuel consumption in EVs by expanding our line-up of products by function and output and developing next-generation MCUs (motor and ECU).



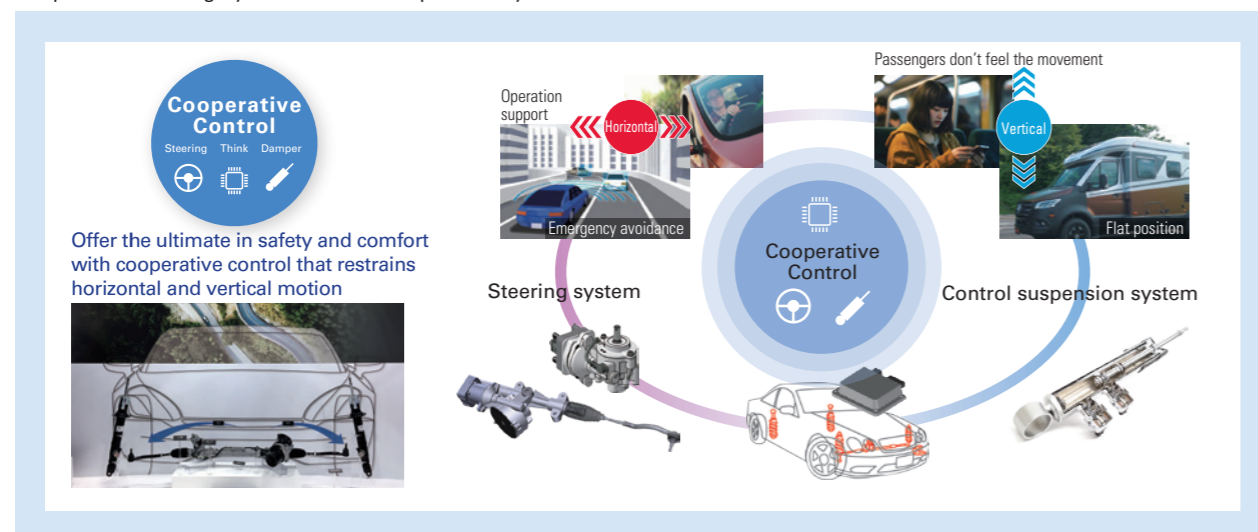
Also, we are fusing our vehicle measurement technology and analysis technology with AI and IoT to provide “Smart Road Monitoring.” This service will support road maintenance management work by using dedicated devices installed on vehicles to automatically collect information on road conditions and detect abnormalities. The Basic Technology R&D Center is leading the adjustment of the functionality of this service to prepare it for release.

To secure a position as a supplier in the EV shift with a background in high technology, we will provide high-value-added products that meet customer needs such as quiet operation, spaciousness, maneuverability, low vibration, and ride comfort.

Smart Road Monitoring



Cooperative Steering System / Control Suspension System



^{*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.

COLUMN

Developing an Environmentally Friendly Next-Generation Hydraulic Fluid

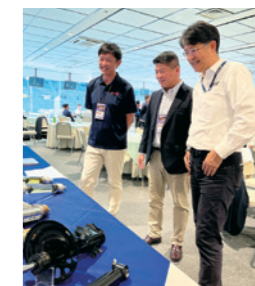
The major ingredient in the composition of the hydraulic fluid used in shock absorbers is petroleum-derived base oil. In the event of a leak, there are concerns over the environmental impact as oil does not easily break down in nature. Also, there are cases in which it is burned as an auxiliary combustion agent after disposal, causing CO₂ emissions.

KAYABA has eliminated the use of oil derivatives though conducting technological development on hydraulic fluid for many years, developing a fluid that has a low environmental load by using



naturally derived base oil.

We provide shock absorbers containing this hydraulic fluid for Toyota Motors’ carbon neutrality initiative of the hydrogen engine-equipped Corolla, working as a company that cooperates in their carbon neutrality activities. We held exhibitions on the technology behind this hydraulic fluid in Toyota’s lounges located at super endurance racing venues.



At the Toyota lounge

Fully Active Suspension System

Fully active suspension systems provide the ultimate in ride comfort—so much so that you might forget that you are riding in a vehicle.

This ultimate high-performance product allows the user to freely control its characteristics as it employs electronic control over the pressure generated by an electric pump. However, it has conventionally only been installed in some premium class vehicles.

We installed this technology in a mobile home for the first time anywhere. It was announced as a

concept car for the future at the Tokyo Camping Car Show held in July of 2023, and was featured in various media outlets.



Actuator installed in the front of the vehicle



A panel that was exhibited at the Tokyo Camping Car Show

Taking on the JRCA Japanese Rally Championship

In April 2022, we launched the KAYABA Rally Team as a project activity. The team competed in the JRCA Japanese Rally Championship that got underway in February 2023. The team members were assembled through open in-house recruiting. They are gaining experience with the races while developing their skills as engineers and mechanics and building their awareness of product development that wins championships.



Hydraulic Components (HC) Operations

A History of Setting Industry Standards
Seeking New Possibilities with Hydraulics



KAYABA has been a pioneer in devices that have led Japan's hydraulics technology since hydraulic excavators first entered Japan in the 1960s. We believe a major strength for the Company lies in how it continues to evolve while passing on vast amounts of data and know-how.

In construction machinery, our product quality and efficient manufacturing processes have been fine-tuned with feedback from many years of market performance. Also, we contribute to shorting lead time and energy conservation in the machines that incorporate our products through proposing optimal systems made possible from our development, design, and manufacture of all hydraulic devices, such as pumps, control valves, motors, and cylinders.

Main Products	Hydraulic equipment for industrial use	Cylinders, valves, pumps, motors, mini-motion packages (MMP), hydrostatic transmissions (HST), seal
	Others	Auditorium and stage control systems, tunnel boring machines

Looking Back on FY2022

Segment profits were ¥7.5 billion, or a ¥4.3 billion decline compared to the level recorded in the previous consolidated fiscal year, due to the impact of factors including a decline in manufacturing caused by downward revisions to customers' production schedules in response to falling demand in China and tightness in the supply of semiconductors, as well as increases in variable costs related to manufacturing caused by sharp rises in raw material and energy costs.

While the business environment was challenging, we began to see positive signs, such as expanding our lineup of load sensing products, particularly electronic control valves for mini excavators, and the start of trial manufacturing for a hydraulics monitoring system that can detect signs of a breakdown in hydraulic components and the machine in which they are installed, leading to breakdown prevention.

Risks and Business Opportunities in the New Medium-Term Management Plan

The risks identified include the impact of rising interest rates in the United States, declining demand in the largest construction machinery market of China, the drawing out of the Russia-Ukraine conflict, the impact of sudden fluctuations in the exchange rate on performance, growing inflation, the shortage of human resources becoming more serious, and the expansion of costs for responding to environmental concerns.

The unstable market environment is not forecasted to change in the medium term of 2023. However, we will continue to secure sales and profits by maintaining the earnings structure in our existing businesses while safeguarding our market share. Additionally, we will strive to gain our customers' understanding regarding the necessity of passing on the increased costs, stemming from factors such as the notably sharp rise in steel prices and energy expenses for lighting and heating in FY2022.

There is a growing societal demand for decarbonization and energy conservation, and we will respond by focusing on creating new added value, centered around automation and electrification compatibility, as well as the development of leading products in the next term.

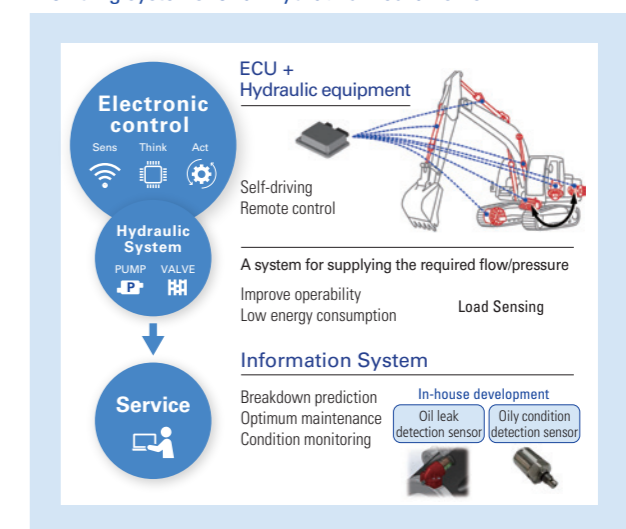
The long-term forecast in demand for mini excavators in the U.S. market remains firm, so we are working on the production capacity to meet that demand while conducting sales promotions in the forestry industry. Also, we plan to enter the Indian market, which is forecast to see expanding need for agricultural machinery products.

Flexibly evolving our production system so that it can respond to the demand fluctuations of the times is important. It is also critical to build production systems and reform ways of working through the visualization of production information using IoT, AI and DX. In particular, we are aiming to achieve tremendous productivity improvements and safe manufacturing workplaces through the automation of transport, assembly and component processing in material handling.

Also, we are focusing on the human resources aspect with education by position and continuous human

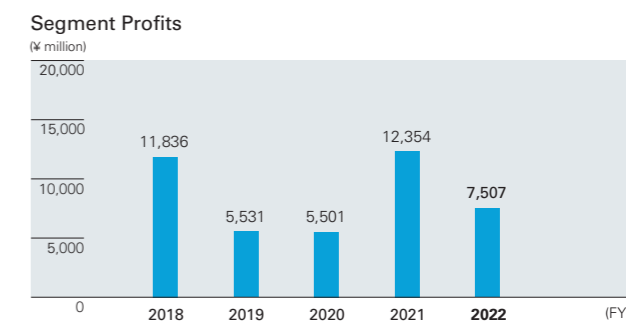
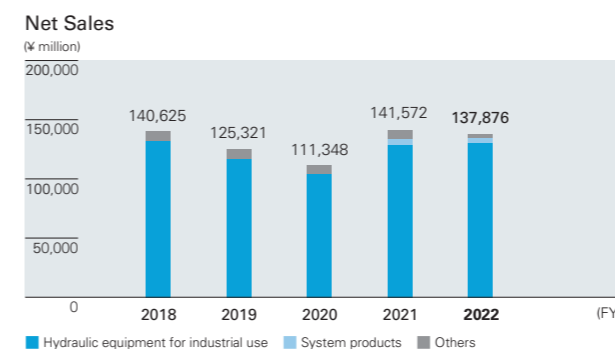
resources training through the Small Group Activity, making efforts to improve the quality of products through improving the quality of work, and making TQM take root a second time.

Providing systems for all hydraulic mechanisms



"Using the vast amount of industry data and know-how that has been passed down to us, we will create new added value with a focus on automation."

Ichio Nemoto
General Manager,
Hydraulic Components Operations,
Senior Managing Executive Officer



Notes: 1. As a result of the review of segment management classification, systems products that was previously categorized under the "Special-Purpose Vehicles Division" is disclosed as part of the "HC Operations" from FY2021.
2. As a result of the review of segment management classification, railroad equipment that was previously categorized under the "HC Operation" is disclosed as part of the "AC Operations" from FY2022.
3. Segment profit is calculated by deducting cost of sales and selling, general and administrative expenses from net sales.

The Value HC Operations Offers

Our unique technology makes possible systems proposals and high-level control

KAYABA is one of the few manufacturers of all components in the power train mechanisms of construction machinery, such as control valves, piston pumps, travel motors, swing motors, and cylinders. This affords us the great competitive advantage of being able to propose systems to construction machinery manufacturers. And we're engaging in the latest technological trends of remote control, automation, and unmanned operations through developing an electronic control system with all types of actuators*1 that minimize energy consumption by moving efficiently and smoothly at the will of operators from a combination of electronic controls for hydraulic pumps and control valves with sensing technology.

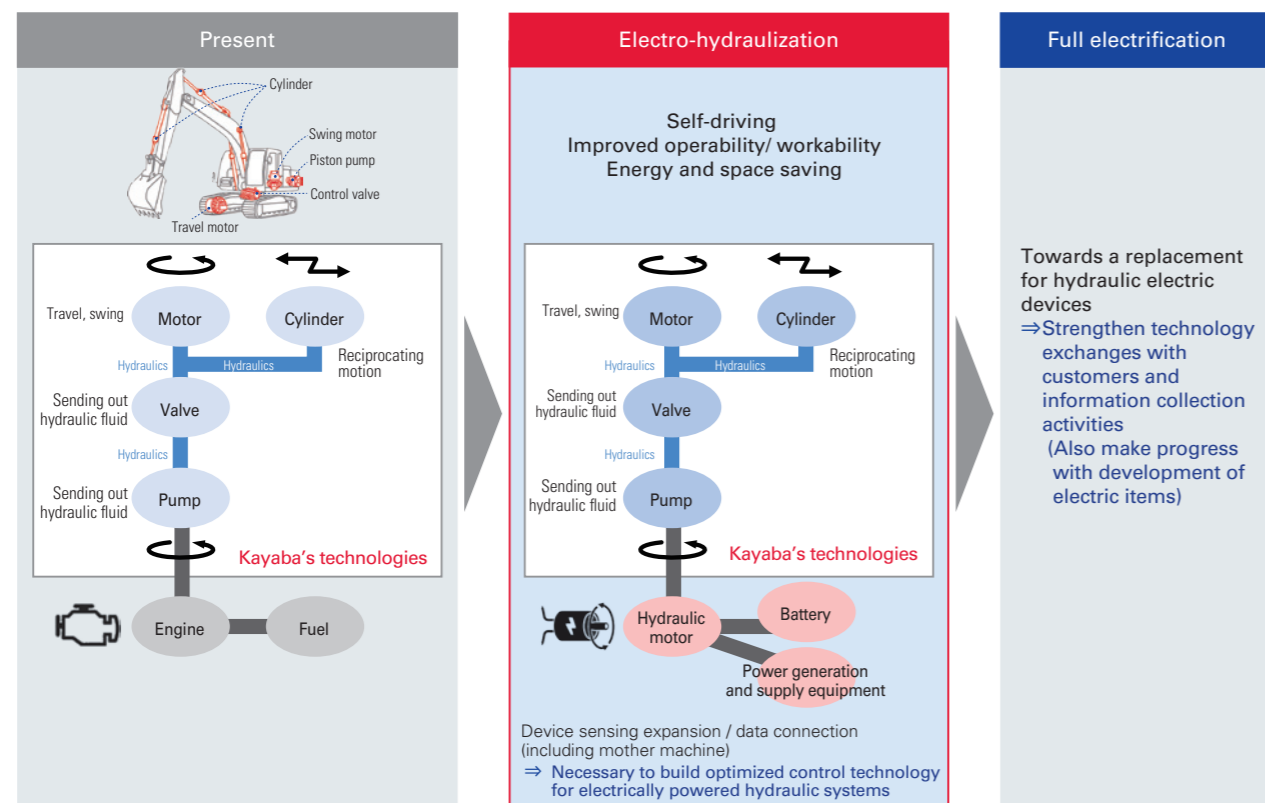
We are expanding our product lineup of pumps and load sensing devices*2 to match various sizes of construction machinery and offering them to customers around the world.

In sensor development, we are working to combine sensors that detect leaks and monitor the condition of the fluid in hydraulic devices with DX technology,

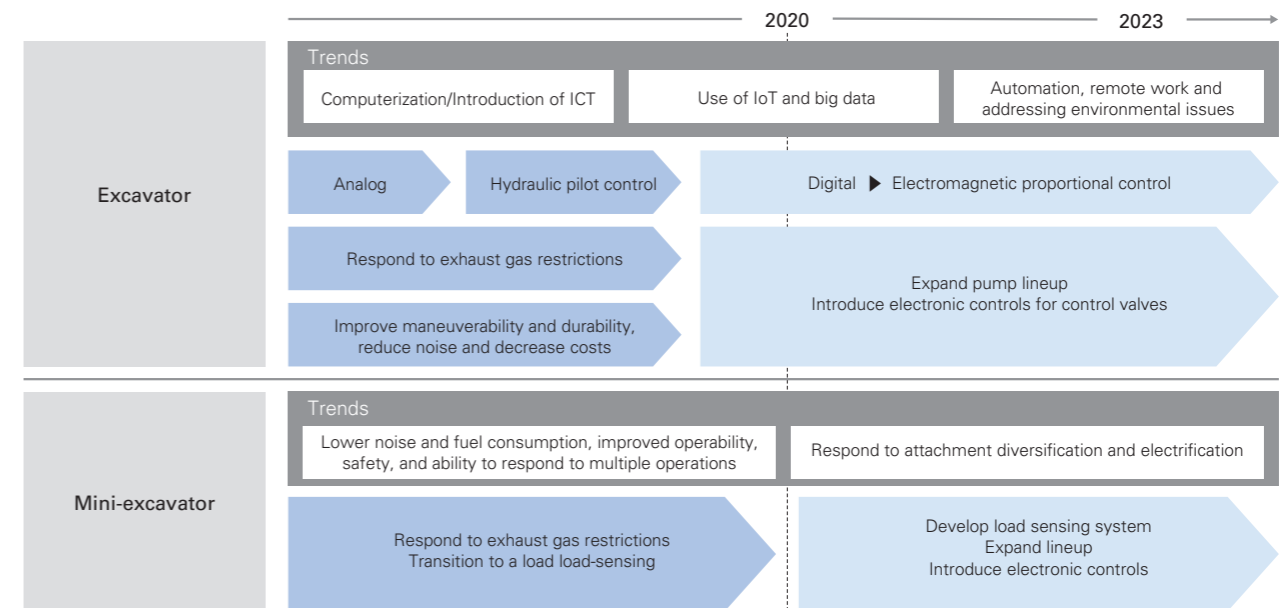
offering optimal maintenance. And we are responding to market needs such as low fuel consumption, low noise, improved maneuverability, and the diversification of attachments to ensure that construction machinery equipped with KAYABA products can be used for a longer time. Also, by endeavoring to lower CO₂ emissions through conserving energy in the production process, we are contributing to a sustainable society.

In leading edge technologies such as electronic controls and electrification technology, we can apply the knowledge and technology of products for the automobile market to HC Operations, which gives KAYABA an advantage that no other company has. Going forward, we will work to create new added value on the basis of our electronics and hydraulic technologies, such as environmental compatibility, performance improvements, information collection features, failure detection, optimization of the maintenance cycle, and condition monitoring systems, and respond to social demands such as engaging in the SDGs and efforts for carbon neutrality.

*1 Actuators: A drive device that converts energy in a linear or a rotary motion by means of a hydraulic or electric motor.
 *2 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.



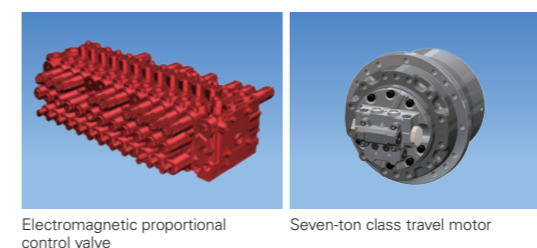
Market Trends and KAYABA Technologies



New Products in FY2022

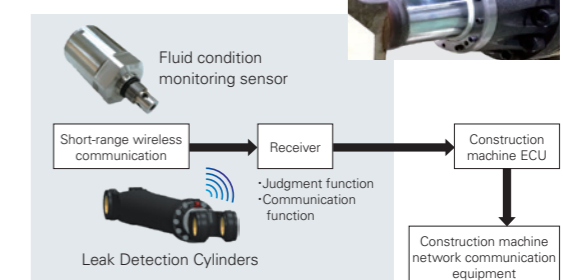
Against a backdrop of market trends toward automation and unmanned operations, in products for hydraulic excavators, we completed development on an electromagnetic proportional control valve for mini excavators (three-ton to six-ton class). It is KAYABA's first electronic control product, and we have launched its mass production. The fluid path is the same as the current model, and we have achieved compatibility with electronic controls using proportional solenoid.

Also, we launched mass production of improved models of travel motors for seven- to eight-ton class mini excavators as part of the lineup of our mainstay MAG series (travel motors equipped with reduction gears). With this low-cost model, we are responding to requests for price reductions in the market by reducing the number of components while ensuring maneuverability and durability.



Leak Detection System that Uses IoT to Monitor the Condition of Hydraulic Fluid

We transferred the conventional systems that detect leaks in hydraulic cylinders with sensors and systems that monitor the condition of the fluid to the product development stage. They monitor cylinder leaks and the condition of the fluid within the system, and predict and provide warnings on the deterioration of consumable goods and the occurrence of breakdowns in hydraulic equipment. This product contributes to effective maintenance work for construction machines and equipment manufacturers and users by defending against unexpected operation suspensions in construction machines or equipment and minimizing lost time spent exchanging components and the impact of the costs for replacements.



Special-Purpose Vehicles Division

A History of Creating Products that Meet Customer Needs with Hydraulic and Customization Technology



■ Main Products Special-purpose Vehicles Concrete mixer trucks, granule carriers, pruned tree shredder trucks, specialfunction vehicles

We offer new added value by visiting customers and creating products that respond to their various needs. KAYABA's concrete mixer trucks are equipped with specialized hydraulic equipment that we make, which contributes to the stable operation of the product. By making it possible to provide a stable supply of the fresh concrete that is critical to construction work, they support urban development and infrastructure construction. Also, they play an important role that impacts repair work in times of disaster, and we are proud that our product contributes to the safe and comfortable lives of people.

Looking Back on FY2022

The business environment for the year saw a range of negative factors, with truck manufacturers' chassis supply stagnating due to the impact of the semiconductor shortage, and production schedules needing to be changed as necessary. However, we worked on a flexible production system so that we could send even one more concrete mixer truck to our many customers. Sales increased as a result, but segment profits declined due to increases in raw material prices.

Risks and Business Opportunities in the New Medium-Term Management Plan

We have identified a drop in demand due to a tapering off of demand for fresh concrete and cement and the termination of business by our partners in the supply chain as causes of potential risks.

The use of EV trucks is a matter that we must engage in going forward. In order to advance technology development and human resource training, we newly established the Electric Drive Development Sect.

During FY2022, we were able to take steps toward medium-term growth. We completed development on our e-Mixer III, which latest model with a reduced environmental burden and that features low noise and low fuel consumption, and made sales. Also, we announced the concept model of a mobile home developed with the cooperation of AC and HC Operations. Seeking future growth, we will commercialize the mobile home and conduct sales promotions for existing products, such as our tilting drum mixing machines and Wood Chip Transporter with Shredder, which respond to social demands such as the SGDs and carbon neutrality



A concept model of a mobile home

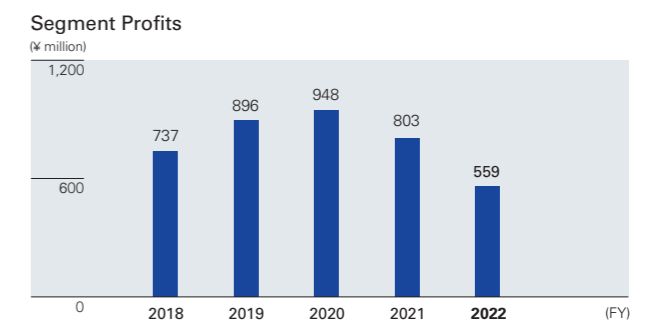
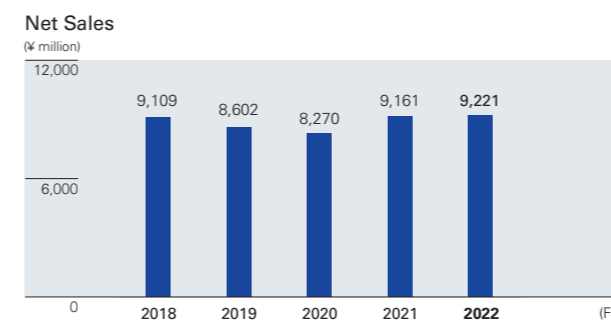


"We are aiming to be the leading mixer manufacturer by strengthening after service and launching high-value-added products."

Ichio Nemoto
General Manager,
Special Purpose Vehicles Division,
Senior Managing Executive Officer



Jun Katsuki
Deputy General Manager,
Special Purpose Vehicles
Division



Notes: 1. As a result of the review of segment management classification, systems products that was previously categorized under the "Special-Purpose Vehicles Division" is disclosed as part of the "HC Operations" from FY2021.
2. Segment profit is calculated by deducting cost of sales and selling, general and administrative expenses from net sales.

COLUMN

Using Wood Chips

The Wood Chip Transporter with Shredder has conventionally been used for the maintenance of roadside trees. However, recent calls to respond to environmental issues have increased the value of its use, because its mobility means it can process wood from mountain forest thinning, while the generated wood chips can be used to condition soil.

Further, it is possible to promote composting by using the generated chips as secondary material for organic compost and mixing with the tilting drum mixing machines, and their use as woody biofuel by creating pellets is attracting attention. We are actively expanding so that KAYABA's technology can be applied in the field of environmental business.



Thinned wood

Using wood chips for conditioning soil and biofuel

e-Mixer, an environmentally friendly concrete mixer truck

In response to demands for environmental consideration that have been rising over the years, we create our e-mixer electronically controlled concrete mixer truck in 2004. The drum that stirs fresh concrete is conventionally turned by the engine, but the e-mixer uses a dedicated electronically controlled hydraulic pump and motor that automatic controls the optimum engine speed. Keeping fuel consumption low contributes to reducing CO₂ emissions. Also, the electronic controls reduce noise by half when it is operating (hearing comparison).

We have continued to make improvements after the truck went on sale, and in 2023 we released the latest model, e-Mixer III. In addition to being installed with a new type of ECU, it has a touch panel monitor near the driver's seat that makes it easy for the operator to be aware of the conditions of the mixer truck, further increasing convenience.

