

# Amid change, with a medium- to long-term perspective, we will proactively carry out measures that leverage Akebono's strengths.



## In an automotive industry undergoing change

The automotive industry, Akebono's main business field, is undergoing a major shakeup. The symbolic keyword is "CASE". This acronym of "Connected (progress of connectivity/connection)," "Autonomous (realization of automatic driving)," "Shared & Service (development of shared services)" and "Electrification (electrification of mechanisms)" represents the wide range of new value that automobiles can provide.

While a major trend is occurring in the electrification of automobiles, demand for internal combustion engines in emerging countries and other regions is expected to remain strong. Due to consumer preferences, the hot-selling vehicle model has shifted from Sedan to SUV. In urban areas, the automobile market has changed substantially, with the emergence of a sharing economy, as seen in the shift from ownership to shared ownership of vehicles.

With various changing factors related to technology and markets occurring simultaneously, for us suppliers to survive, we need to reaffirm our strength as "small, specialized, independent manufacturing company" and further reinforce our management foundation while producing creative value with a medium- to long-term perspective and achieving sustainable growth.

## Progress of Akebono New Frontier 30 - 2016 Midterm Business Plan

Akebono has finished the second year of its three-year midterm business plan, of which fiscal 2018, the current fiscal year, is the final year. In the plan, we are working on initiatives based on three basic policies under the theme of "sustainable growth."

- **Rebuilding the North American operations:** We have implemented four measures to rebuild from the manufacturing problems that occurred in our North American business, and business performance is gradually recovering. In "Fundamental organizational reforms," we seek to change key personnel and send experts in manufacturing and quality assurance from Japan to speed up the reforms. In "Productivity improvement," we improved yields and raised productivity by transferring production items, reviewing processes, and other measures. In "Manufacturing capacity increase," we introduced new production facilities, primarily at ABCS\* and ABG\*. In "Improvement of earnings structure," we have reduced purchasing costs and labor costs, and optimized inventory.

\* ABCS: Columbia Plant in Columbia, South Carolina, USA

\* ABG: Glasgow Plant in Glasgow, Kentucky, USA

- **Establishing global networks based on product-based business units:** In fiscal 2016, Akebono launched five product-based business units with marketing, research and development, purchasing, production and sales functions. In fiscal 2017, the Company standardized product specifications that vary according to customer and region by strengthening collaboration among business units. We will further strengthen collaboration among business units, functions and regions, and seek to further generate cash through the optimal allocation of business resources. We are now building a global database, which will form the foundation of this collaboration.
- **Expanding high performance brake business and recreating European operations:** In fiscal 2017, we completed the installation of the manufacturing line at the Slovakia Plant and the transfer of the high performance brake caliper business from ABCS. Furthermore, the number of customers are increasing, mainly in Europe. In fiscal 2018, we will work to improve production quality at the Slovakia Plant and develop the business in the US and Japan.

## Balancing Medium- to Long-Term Growth with Sustainability

As seen by the adoption of the United Nation's "Sustainable Development Goals (SDGs)" and the international "Paris Agreement" on the mitigation of climate change, companies are now being strongly encouraged to preserve the global environment. Given these circumstances, Akebono will seek sustainable

growth by actively responding to changes in the automotive industry. At the same time, it hopes to meet the needs of society by incorporating measures that contribute to solving global environmental and social issues in its business activities.

In November 2017, Akebono announced its "medium- to long-term vision" that lays out a direction for dealing with the global environment and seeking sustainable growth. Based on this medium- to long-term vision, Akebono will deepen its knowledge of "Friction and Vibration, their Control and Analysis," a company strength, and focus on the development of brake technologies that can be deployed not only in automobiles, but in a wide range of fields such as rolling stock including bullet trains and industrial machinery, while taking on new challenges caused by further changes in the business environment. We will also develop products that leverage our sensor technologies to improve the safety and security of social infrastructure and increase operational efficiency. At the same time, we will implement measures to reduce the environmental impact and improve the workplace safety of our production facilities.

- **Technological Development: Next-generation friction materials:** We are pursuing research on plant-derived materials from the viewpoint of utilizing sustainable resources for the raw material used in friction materials and changing over to substances with low environmental impact. We are pursuing wide-ranging research and development on brake dust, an expected future problem, including unharmed materials for friction materials and technology for measuring brake dust.
- **Technological Development: Next-generation electro-mechanical/high performance brakes:** Akebono researches the practical application of electro-mechanical service brakes that will replace hydraulic brakes in the future and the next-generation "MR fluid brakes" which does not rely on friction. Akebono also develops pneumatic brakes to be used in large European trucks.
- **Technological Development: Sensor technologies (Infrastructure & Mobility business):** Akebono develops sensor products for a wide range of fields including automotive, rolling stock, civil engineering, agriculture, and energy by utilizing its sensor technologies. In the future, Akebono intends to expand



its business by not only providing products, but also solutions such as information and services.

- **Manufacturing capacity increase/Productivity improvement:** In the improvement and renovation of facilities and development of new construction methods, we are committed to rigorous energy conservation and seek to eliminate CO<sub>2</sub> emissions during production in 2050. We are also improving production and logistics efficiency and safety. Iwatsuki Manufacturing, which introduced a new plating facility in May 2018, has made the process as compact as possible and has increased energy saving, production efficiency, and safety.

### A Company that Grows with Local Communities and its Associates

Since 1965, Akebono has operated a Vocational Scholarship Program that allows students to earn qualifications by attending junior colleges and vocational schools while working. More than 3,000 graduates have already made use of this program. In May 2018, "Akebono Nursery School" (commonly known as "Ai-Kids") was opened as a part of our "workstyle reforms" and to enrich our benefits program for associates. We solicited the advice of graduates when opening the nursery school. In addition, Akebono has promoted health management and was designated as a "Company with Excellent Health Management 2018 (White 500)" in recognition of its initiatives in this area. I hope to continue to implement various measures to maintain our growth with local communities and associates.

Since Akebono's founding, "providing safety and security" to customers has been the basis of all its corporate activities. Although we have caused our customers a great deal of concern due to production problems that occurred in the United States, we are now on track to recovery from last year thanks to the various measures we have taken. While it is said that the automotive industry enters a period of change once every one-hundred-years, I view this as an opportunity to change how we work and return to Akebono's Corporate Mission, forge ahead with Monozukuri (manufacturing excellence) and develop human resources with the aim of sustainable growth.

We ask our stakeholders for their continued support and for your frank opinions and comments on this report.

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