Publication of Special Issue on Industry-Related Products*

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Allow me first of all to express my deep gratitude to the many customers utilizing the products of JTEKT.

JTEKT provides a wide variety of products to customers in the automotive industry as well as non-automotive general industries, but this time we have decided to publish a special issue of the JTEKT Engineering Journal featuring articles on products for general industry, including machine tools, mechatronics products, and bearings for industrial machinery. Taking this opportunity, I would like to outline the concepts underlying our development efforts related to such products.

In 2007 we adopted a corporate policy of "shifting from quantity to quality" and are pursuing the goal of being "a company that delivers supreme satisfaction to customers through providing high-quality products and excellent service."

In regard to the field of machine tools and mechatronics product, we have established the following two objectives: "Consistently lead the industry in quality and technology and contribute to manufacturing innovation" and "Consistently provide manufacturing systems with the latest technology and best quality and aim to be a system supplier with unrivaled technological expertise."

In the current machine tools market, demands for "simple, streamlined and compact" equipment are increasing.

To meet such demands, JTEKT has striven through development efforts over the past few years to create products from which the following seven types of waste have been eradicated:

① Over-production waste
② Waiting waste
③ Conveyance waste
④ Processing waste
⑤ Inventory waste
⑥ Movement waste
⑦ Part nonconformity waste

Furthermore, we have been pursuing product "modularization," "cross referencing" and "standardization" with the aim of creating machines that are highly reliable and easy for customers to use as well as easy for JTEKT to manufacture and that will lead to manufacturing innovation.

In addition, we have striven to deliver products that customers can use with a sense of comfort by incorporating various technologies we have developed over the years related to product safety, reliability and environmental friendliness (such as ecological coolant supply technology, safety PLCs, VMS technology with easy visual management).

Based on the above concepts, our Machine Tools & Mechatronics Division Headquarters in 2005 implemented a three-year plan to incorporate cutting-edge technology in grinding machines, specialized machines, machining centers and mechatronics products in the development stage or at model changes to create a strengthened lineup of products.

This year various efforts to develop new products are under way, and we plan to hold a JTEKT Technical Fair 2007 (JTF 2007) in December at the Customer Center of our Kariya Plant. This Customer Center provides our customers with the opportunity to gain an understanding of our products firsthand through seeing and touching them directly, and we invite our customers to visit JTF 2007 and provide us with feedback on our products and development efforts.

In regard to the field of rolling bearings, our bearings are used in an extremely wide variety of applications and environments. In this product field we have pursued development based on the three themes "environmental friendliness," "productivity improvement" and "safety/maintainability improvement."

In the area of environmental friendliness, JTEKT has dedicated many years of engineering efforts to improving the efficiency of bearings and is pursuing the development of bearings having the world's lowest level of rotational torque. In addition, JTEKT has supplied many bearings for windmill power generators, which utilize natural energy and contribute to the prevention of

global warming, and is working to reduce the size of these extra-large bearings in order to improve power generation efficiency.

In regard to productivity improvement, customers are requiring equipment that operates with greater speed, efficiency and precision than before, and we have been pursuing the development of bearings to enable such improved equipment performance. In particular, our High Ability bearings, which feature both high stiffness and high rotational speed, have been adopted for the spindles of machining centers, which must carry out both heavy cutting at low speeds and light-cutting at high speeds, contributing to improvement in machine tool cutting efficiency.

Finally, in the area of safety and maintainability improvement, we are pursuing the development of products that can contribute to making production equipment maintenance-free. Concerning steelmaking equipment, in regard to which production is particularly affected when maintenance work is required, we are working to develop highly reliable products better able to withstand severe operating conditions and environments as well as products with a self-diagnosis function.

In addition, JTEKT is continuing efforts to cultivate new technology related to the tribological fields of friction, wear and lubrication and to develop new EXSEV bearings with various specifications that are suitable for use in vacuums, clean rooms, corrosive atmospheres and at high temperatures, contributing strongly various fields of advanced technology.

More than a year and a half have passed since the inauguration of JTEKT, but our intention is to continue active efforts to achieve synergy between product divisions and with related companies, to utilize the fruits of that synergy in new product development, and to create products that are pleasing and impressive to customers.

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