

## Control Increase of Fixed Costs / Improve Asset Turnover

To revitalize our company, we urgently need to improve our cash flow through overall optimization of production. In production restructuring, we are concentrating management resources on products and processes in which we can demonstrate our strengths, and we are promoting the realization of streamlined production and increased throughput in production reform.

### Reorganization of production

Concentrate management resources in products/processes where NTN can leverage its strength

Reorganize domestic production bases of radial bearings

- Outsource production of standard type products to overseas bearing manufacturer (Break away from "self-efficiency")
- For special products, implement reorganization of production with a new Wakayama Works playing a central role

### Basic policy on production reorganization

The market environment surrounding NTN is rapidly changing against the backdrop of the transition to a decarbonized society, including the shift to electrification and EVs in the automotive market and the expansion of the renewable energy business in the industrial machinery market. Based on the growth strategy of each business headquarters, we will reorganize the production system in Japan from the viewpoint of product axis and base axis to

enhance profitability by optimizing the entire supply chain.

In the production reorganization, we will freeze investment in capacity expansion in principle, curb costs by utilizing management resources for withdrawn and downsized products, and shift to investment in natural disaster risk and safety measures, as well as in maintenance and renewal of facilities.

### Production reorganization plan and progress

In "DRIVE NTN100" Phase 2, we are promoting the reorganization of production of radial bearings, one of our core products. Competition in the market for standard radial bearing products is expected to increase further due to the rise of LCC products and increasing commoditization. In October 2022, we began to expand production outsourcing (approx. 5 million pcs/month) to our affiliated company, TUNG PEI INDUSTRIAL CO., LTD. Utilizing the production capacity and high efficiency production of the company, we will strengthen the supply capacity of products for the aftermarket and reduce investment in maintenance and renewal of production facilities, thereby enhancing profitability. The expansion of outsourcing to TUNG PEI INDUSTRIAL CO., LTD. is planned to be completed by October 2024, and we will continue to strengthen cooperation with this company as one of our main manufacturing bases for radial bearings.

On the other hand, the market for high-performance products with high-speed rotation, low vibration, and insulation performance is expected to expand due to the ongoing shift to electrification and EVs in automobiles against

the backdrop of the transition to a decarbonized society. We have positioned high-performance products such as "high-speed rotation and low torque" and "low noise and low vibration" as one of our priority products, and have started to consolidate high-performance products to Wakayama Works, Ball Bearing Plant of Iwata Works, and NTN Mie Corporation, which is the main manufacturing base for medium-sized radial bearings. We will differentiate ourselves from our competitors by introducing the latest production technology to ensure our competitive advantage in terms of technical responsiveness and price competitiveness.

The space and management resources created by the reorganization of radial bearing production will be used to establish a highly efficient production system by consolidating manufacturing bases for tapered roller bearings, needle roller bearings, and precision bearings, and to enhance profitability by redefining the product portfolio. In addition, we will establish a foundation for future manufacturing systems by locating bases in consideration of the risk of natural disasters such as earthquakes and tsunamis.



Wakayama Works to consolidate high-performance products



Delivering "speedy" "satisfaction" to customers through DX

### Production reform

Realize streamlined production and increase throughput

Promote overall optimization (rationalization of the entire SCM) instead of partial optimization (rationalization by process)

- Led by a dedicated promotion organization
- Horizontal expansion of lean production system
- Develop human resources to promote reform

### Results and progress in the fiscal year ended March 31, 2023

For about three years since the start of activities, we have promoted activities mainly at domestic business sites, expanding the number of locations to 24.

The model numbers and lines targeted at each location have reduced lead times, and some locations have seen an improvement in inventory turnover, a management indicator. At the Large Bearing Plant of Kuwana Works, throughput increased 12.5% and inventory turnover increased 5% (both compared to the previous year), and at the NTN Kamiina Corp., inventory reductions due to process streamlining and associated reductions in external warehouse costs resulted in improved profits.

However, on a company-wide basis, the company has not completely broken away from a structure that is susceptible to demand fluctuations and other external environmental influences, and its indicators have been sluggish. Therefore, we have been accelerating "surface" activities that fill the two axes of "expansion from model numbers to others" and "development of activities that connect the entire supply chain."

In particular, during the last fiscal year, we have been fully

engaged in activities covering the entire supply chain from our manufacturing sites to each other and from suppliers to sales. In ball bearing supply chain optimization activities, we have launched initiatives to shorten lead times in cooperation with suppliers.

In addition, we have also started activities in the global supply chain, and for export semi-finished products at the Iwata CVJ Plant, we are working to establish a system for back-sailing based on actual demand in North America, leading to a reduction in work-in-process inventory at the plant in North America. In the case of bearings for rolling stock in China, the change of transportation routes and the use of a new warehouse have produced significant results: transportation lead time -39%, transportation cost -78%, and inventory at local sales companies -33%.



Ball bearing supply chain optimization activity kickoff

### Strengthening tripartite activities

In order to accelerate the speed of production reform, which is "management reform," it is essential to have a tripartite system of management, promoters, and practitioners.

A video message from the President is posted on the company website to communicate throughout the company the roles played by each level and the president's strong desire for the activities.

The management level (general managers of each production site, presidents of affiliated companies etc.), having made progress in fostering a general mindset, is working to strengthen specific "behavioral" management for reform.

For promoters and practitioners, we provide group training sessions where they can interact with other promoters to

obtain hints for solving problems and promoting activities, strengthen ties with their peers, and build a relationship of mutual learning.

We also hold study sessions for sales divisions to learn the importance of collaboration between production and sales. After the study session, there were cases where information was shared with the manufacturing division from a different angle, leading to activities to build the entire supply chain across related divisions.



Internal website: message from the President

### Issues and priority measures for the fiscal year ending March 31, 2024

This fiscal year is a key year toward the new medium-term management plan, and we will promote reform activities focused on numerical values and the harvesting of results in order to improve the cash conversion cycle.

In Japan, we will create scenarios for KPI achievement at each production site and strengthen follow-up on the "surface" side in order to make reform activities at production sites more self-reliant (rules, system development, and human resource development).

We will also expand the aim from data analysis to multiple targets that maximize effectiveness, and accelerate the development of the entire supply chain activities from procurement to sales for popular products with long lead times across suppliers and production sites.

As for activities linking Japan and overseas, we will accelerate PSI (production, sales, and inventory) visualization targeting the reduction of overseas semi-finished product inventory, and develop a system that is resistant to demand fluctuations. Particularly, for small-lot aftermarket products, we will design and manage strategic inventories on a global basis to reduce lost sales opportunities and achieve high profit margins.

In anticipation of full-scale global reform activities starting in the next fiscal year, we have already started production reform activities in each region, starting with China and ASEAN countries. We will establish a promotion system for each region, utilizing local consultants.