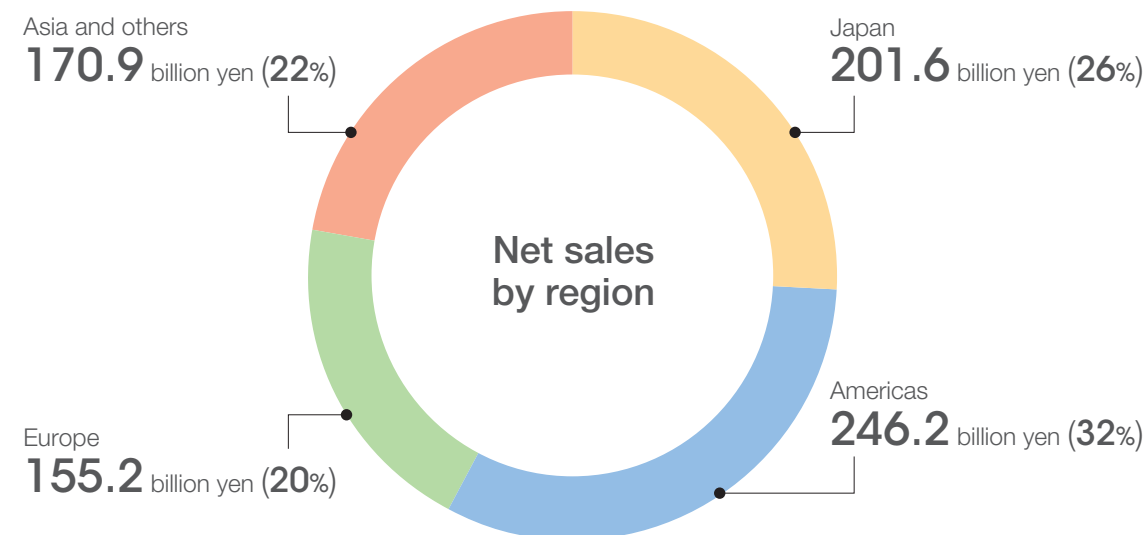


Net sales **774.0** billion yen Operating income **17.1** billion yen
Fiscal year ended March 31, 2023



		(billion yen)		
		Fiscal year ended March 31, 2022 Results	Fiscal year ended March 31, 2023 Results	Fiscal year ending March 31, 2024 Forecast
Net sales	Aftermarket	112.2	134.0	133.0
	Industrial machinery	126.1	139.5	133.0
	Automotive	403.7	500.4	544.0
	Total	642.0	774.0	810.0
Operating income (Operating margin)	Aftermarket	14.7 (13.1%)	22.3 (16.6%)	22.5 (16.9%)
	Industrial machinery	4.1 (3.2%)	7.3 (5.2%)	7.5 (5.7%)
	Automotive	-11.9 (-2.9%)	-12.4 (-2.5%)	0.0 (0.0%)
	Total	6.9 (1.1%)	17.1 (2.2%)	30.0 (3.7%)



Aftermarket applications

→ P.33

In our aftermarket applications business, we provide bearings for repair for general machineries and automotive aftermarket parts, maintenance tools, and devices to detect abnormality in bearings through our distributors. In this way, we help improve productivity and ensure stable equipment operation.

We also provide a wide range of technical services to resolve issues related to bearings, such as how to handle them. Our remote technical support services share information about the customer's manufacturing site with NTN's technical experts by means of cameras and other equipment so that we can provide quick assistance in resolving issues.

We also provide a reporting service in which NTN's technical experts diagnose and analyze bearings based on the data measured by the "NTN Portable Vibroscope" that customers can use to easily diagnose bearing conditions simply by installing it on equipment. We provide full support for our customers, from supply to after services, such as "NTN Aftermarket Academy" online to enable customers to acquire bearing knowledge.

Mining machinery	Metal industry equipment	Paper-making machinery	Food processing machinery	Cement equipment
ULTAGE spherical roller bearings with high-strength cage EMA Type	ULTAGE sealed four-row tapered roller bearings CROU.LL	ULTAGE spherical roller bearings Type EA, Type EM	PolyLube sealed bearings for food processing machinery	Plummer blocks

Remote technical support services

NTN Portable Vibroscope

Auto parts

Part kits with combinations of several bearings









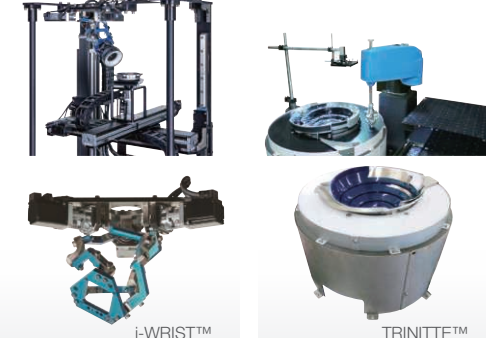
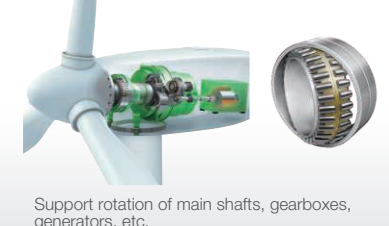
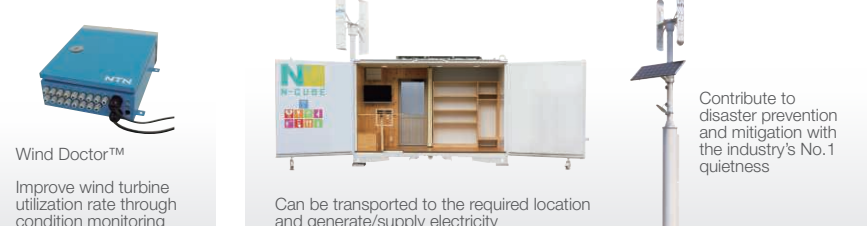
Technical training / maintenance tools

- Induction heater
- Self-centering hydraulic puller with arms
- Technical service units

Industrial machinery applications

→ P.35

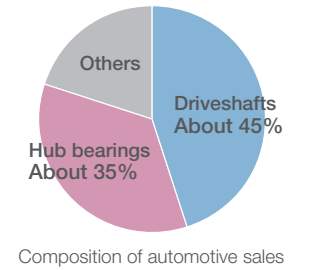
NTN supplies a wide range of bearings for various industrial machinery such as construction machinery, agricultural machinery, robots, aircrafts, wind turbines, machine tools, railway rolling stocks, and electronic equipment to reduce the environmental impact. NTN contributes to the development of industry and the creation of a sustainable society by providing products and services that meet the needs for automation and labor saving at manufacturing sites including detection of abnormality in bearings through sensing.

Construction machinery  Applications for resource mining and civil engineering	Agricultural machinery  Helping ensure stable food production	Gearboxes  Helping ensure high robot productivity	Aerospace  Used for worldwide jet engine applications	Machine tools  Helping ensure high machining precision
Rolling stock  Helping ensure safety of worldwide high-speed railways	Office equipment  Helping ensure precision operation of copier/multifunctional printer	Electronic devices  Used for hard disc drive and thin fan motor applications	Robots  i-WRIST™: Realizing high-speed, high-performance visual inspection and space saving TRINITE™: Realizing continuous and stable parts picking	
Wind turbine  Support rotation of main shafts, gearboxes, generators, etc.	Green energy products  Wind Doctor™: Improve wind turbine utilization rate through condition monitoring Can be transported to the required location and generate/supply electricity Contribute to disaster prevention and mitigation with the industry's No.1 quietness			

Automotive applications

→ P.37

NTN provides a wide range of products for automobiles as a specialist in the power/drive train system, contributing to fuel efficiency and reducing CO2 emissions. In addition to core products of hub bearings, driveshafts, and various bearings, NTN provides module products with high functions by combining our products with peripheral components and fusing our core technologies to contribute to the creation of safe, secure, and comfortable future automobiles.



Steering components
Mechanical Clutch Unit for Next-generation Steering

Seats
Clutches for seat lifters

Brakes
Ball Screw Drive Module for Electric Hydraulic Brake

Axle/Drivetrain
Needle Roller and Cage Assemblies for Planetary Gear

Motor
Combined Controller Module Electric Oil Pump

High Speed Deep Groove Ball Bearings for EVs and HEVs

Hub bearings
Ra-sHUB, sHUB, eHUB

Driveshafts
Compact Lightweight Rear Driveshaft R Series

Hub Bearings with High Resolution Rotational Sensors

Low Friction Hub Bearing III

GEN4 Hub Joint

High Efficiency Fixed Type CWJ "CFJ"

Bearing with Insulating Coating

CreepLess Bearing