



About JATCO

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Corporate Information

Company Name	JATCO Ltd
Main Businesses Areas	Development, manufacture, and sale of electrified powertrains, parts, and automobile transmissions
Established	June 28, 1999
Headquarters Location	700-1, Imaizumi, Fuji City, Shizuoka, Japan
Number of Employees	12,500 (as of March 31, 2024, consolidated)
Representative	President and CEO Tomoyoshi Sato
Capitalization	¥29,935.3 million
Shareholders	Nissan Motor Co., Ltd. (75%) MITSUBISHI MOTORS CORPORATION (15%) SUZUKI MOTOR CORPORATION (10%)

Economic Aspects (consolidated)

	billion yen			
	FY 2020	FY 2021	FY 2022	FY 2023
Net revenues	542.8	561.3	540.0	621.7
Operating income	18.6	26.7	2.8	24.1
Net income	5.8	16.5	-4.8	15.8

(Reference)

Affiliated Companies in Japan

● JATCO Engineering Ltd

125-1, Yodabashi, Fuji City, Shizuoka 417-0002, Japan

● JATCO Tool Ltd

1-1, Yoshiwaratakara-cho, Fuji City, Shizuoka 417-0023, Japan

● JATCO Plant Tec Ltd

1-1, Yoshiwaratakara-cho, Fuji City, Shizuoka 417-0023, Japan

Affiliated Companies Overseas

● JATCO USA, Inc.

1974 Midway Lane, Smyrna, TN 37167, USA

● JATCO MEXICO S.A. DE C.V.

Carretera Panamericana Km 75, Col. Los Arellano, C.P. 20340.
Aguascalientes, AGS., Mexico

● JATCO Korea Engineering Corporation

Lotte IT Castle 2-4F, 98, Gasan digital 2-ro, Geumcheon-gu, Seoul
08506, Korea

● JATCO Korea Service Corporation

Lotte IT Castle 2-412, 98, Gasan digital 2-ro, Geumcheon-gu, Seoul
08506, Korea

● JATCO (Guangzhou) Automatic Transmission Ltd.

NO.8, Lihong 2 Road, Science City, Guangzhou Hi-Tech Industrial
Development Zone, Guangzhou, Guangdong, 510530, China

● JATCO (Suzhou) Automatic Transmission Ltd.

No.2 Tangqiao Road (M), Tangshi Community, Yangshe Town,
Zhangjiagang City, Jiangsu Province, 215600, China

● JATCO France SAS

ZAC des Godets - Batiment C, 1-4 Impasse de la noisette, 91370
Verrières le Buisson, France

● JATCO (Thailand) Co., Ltd.

700/999 Moo 3, Amata Nakorn Industrial Estate, Thumbon
Nongkakha, Amphur Phanthong, Chonburi 20160, Thailand

Corporate Philosophy

— Corporate Purpose —

Driving the possibilities of mobility with technology and passion

Mobility enables the movement of people and goods.
Yet this movement is not just about moving.
By moving in a limitless space, new experiences arise, and new worlds unfold.
Hence, should the possibilities of mobility extend,
allowing each and every person the movement they please,
the hearts of all will be stirred, filling their interactions with energy and excitement.
And thus, the world will become freer and more prosperous.
To realize such a world, JATCO drives the possibilities of mobility with technology and passion.

— Mission —

We, as a corporation trusted by society, will provide new value to a mobility by providing clean, safe, comfortable, yet exciting products and services.

— Values : T-E+-A-M —

Team leadership by everybody
Aspiration to win

Entrepreneurship
Monozukuri excellence

External mindset

Amidst a rapidly changing business environment, JATCO re-examined its reasons for existence in society.

Our corporate purpose, “Driving the possibilities of mobility with technology and passion,” signifies our direction in an unpredictable future. It also encapsulates our desire to leverage our strengths to contribute to a better society through mobility.

In April 2024, to promote achievement of our corporate purpose, we added to T-E-A-M, the shared values of our employees, the new item of entrepreneurship, with the meaning of challenging yourself to create new value without fear of failure, thereby defining T-E+-A-M as our new values.

Technology

Technology is JATCO’s most important asset and source of value. We recognize the value of the technology we have cultivated, further deepen it, and open up our future.

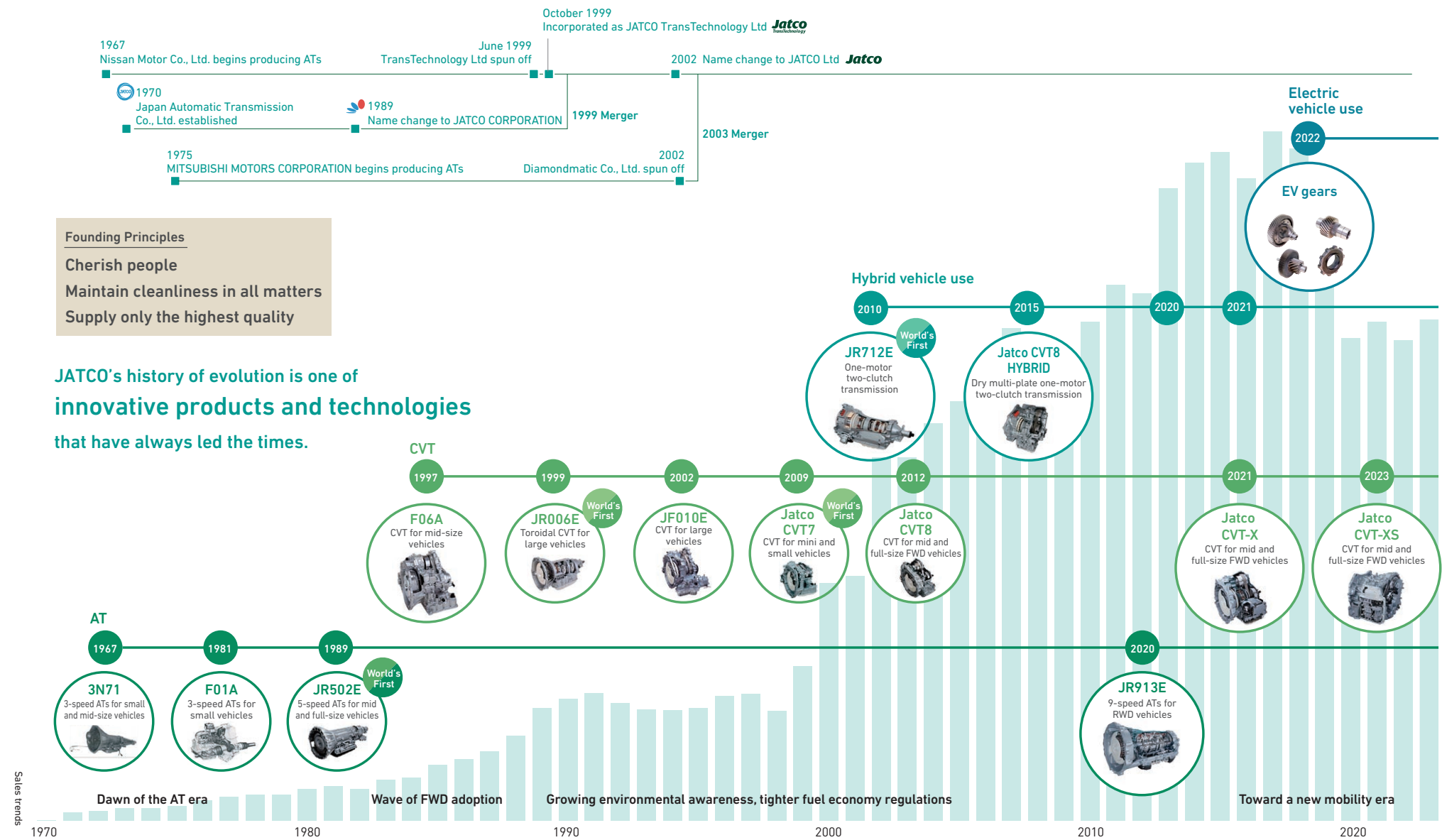
Passion

JATCO explores new possibilities with a passion for manufacturing, innovation, and our customers. Passion is the driving force behind our challenge mindset.

Mobility

Mobility is all about movement and the means of movement in social activities. The scope of mobility is expanding, beyond the surface of the Earth where cars drive, to the sea, the sky, and outer space. JATCO’s area of activities is also expanding steadily.

History of Value Creation



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Society	Human Capital	Business Foundation	Environmental Data for Each Production Base	Social Data	GRI Standards Reference Table

Our Vision

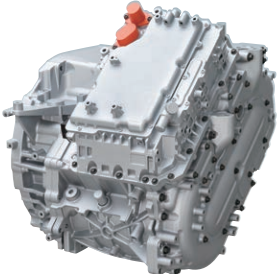
Guided by our corporate purpose, “Driving the possibilities of mobility with technology and passion,” JATCO seeks to leverage technology cultivated over many years as an automotive transmission manufacturer to contribute to developing a better society enabled by mobility. Amidst accelerating electrification, we will also contribute to the achievement of a future of more abundant electric vehicles by supplying competitive products that capitalize on our proprietary technologies as an

electric powertrain maker. Additionally, we will expand our technologies to new types of mobility beyond automobiles, exploring possibilities to provide drive units for all kinds of mobility. Making full use of JATCO’s unique technical capabilities and expertise, we aim to balance sustainable societal growth with our own growth while keeping the resolution of environmental and social issues in view, by providing valuable new products and services to our customers and society.

Providing Drive Units for All Kinds of Mobility



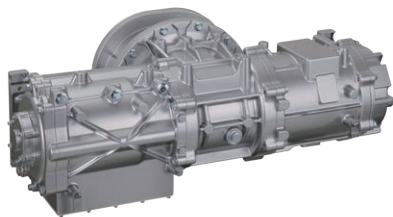
X-in-1 (3-in-1)



X-in-1 (5-in-1)



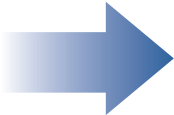
Ultra-compact e-Axle



e-Axle (with multi-speed transmission)

Rising interest in sustainability

- Carbon neutrality
- Circular economy
- Shift in value from cars to mobility



Realizing safe, comfortable mobility



Contributing to a sustainable society



Wheelchair with transfer mechanism



Drive unit for e-bikes



2-speed in-wheel motor drive unit for electric motorcycles

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Core Technologies

JATCO's core competency

We have delivered over 129 million automotive automatic transmissions since the founding of one of JATCO's predecessors, Japan Automatic Transmission Co., Ltd. Our strengths lie in development capabilities and production technologies for power transmission mechanisms, honed through R&D and production of CVTs and ATs.

In development, in addition to designing and manufacturing units and components, we have always been involved in developing vehicle systems in collaboration with automakers. This allows us to handle aspects

spanning vehicle control and communication to power performance, quietness, and thermal management. Our production strengths include precision design/machining technologies and the capability to mass-produce top-quality products at global sites, enabling stable supply.

Leveraging these core competencies to the fullest, we will pursue the provision of new value, including through electric powertrains and contributions to new types of mobility.

Delivering value across vehicles, units, and components

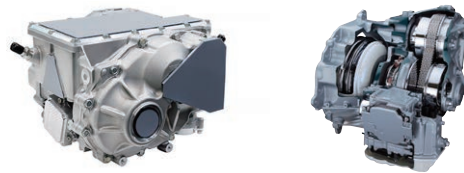
Vehicle system development

- Power performance
- Quietness
- Thermal management system



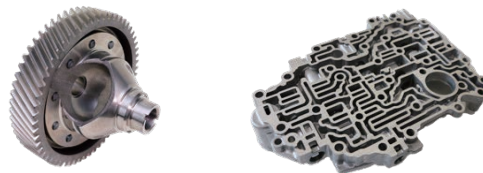
Unit development

- Electrified unit systems
- e-Axles, etc.

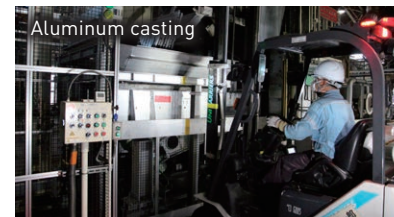


Component development

- Core parts
- Gears, motors, raw materials, etc.



Design and machining technologies for gears and other parts that transmit power in CVTs and ATs



Aluminum casting



Casting



Gear machining



Machining

Technologies to stably supply high-quality products globally



Global mass production



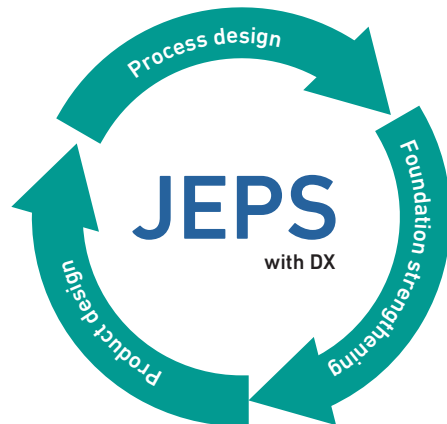
Quality assurance

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Our Approach to Monozukuri

Aiming from a customer's perspective to be the world's no. 1 in monozukuri

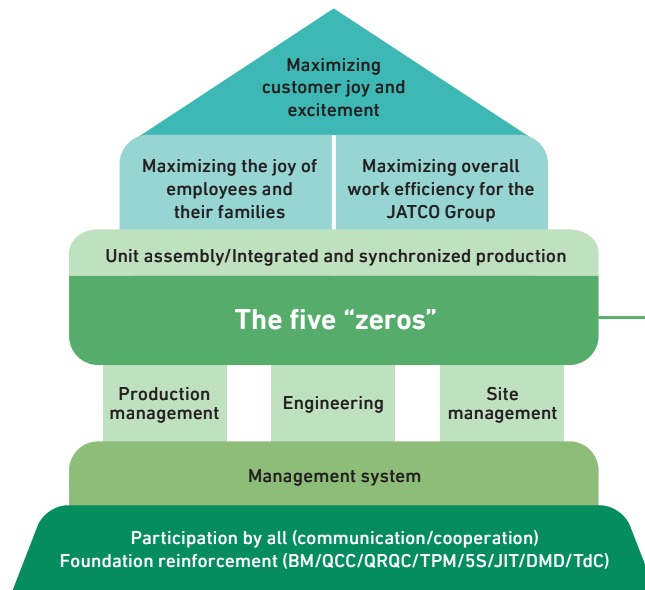
JATCO aims to respond swiftly to changing customers and to be the world's no. 1 in monozukuri in the aspects of quality, time, and cost. To that end, we have established, and are utilizing, a unique production system known as the JATCO Excellent Production System (JEPS). JEPS eliminates all waste by operating the entire series of processes, from assembly to shipping, at the same speed and in the same order as if they were on a single line, and carrying out production and transportation in a timely manner. Through JEPS, we bring about the realization of two "unlimiteds" across our whole supply chain—unlimited synchronization with our customers, and unlimited innovation and realization of challenges.



Promoting JEPS innovation

The basic concept of JEPS can be summed up in the following two points: unlimited synchronization with our customers, and unlimited innovation and realization of challenges. To pursue these two "unlimiteds," JATCO has established clear metrics in the form of the five "zeros." Toward the achievement of these metrics, JATCO continuously improves JEPS and promotes energy and resource conservation.

JEPS overview



JEPS activities

Pursuing higher competitiveness in all SQTCE*¹ aspects

Achieving good monozukuri from the start (MP*² cycle)

We practice quality design that leaves no residual "quality risks" after mass production commencement and process design that produces as-planned results.

Contributing to greater efficiency by developing and utilizing DX tools

We foresee, prevent, and quickly act on various downtime loss issues (inspections, measurements, adjustments, etc.)

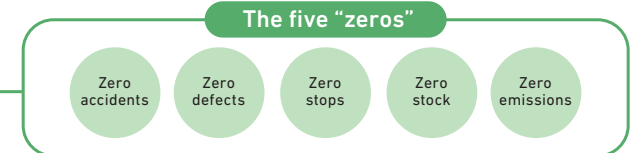
Strengthening foundations via all-hands TPM to produce results

We continually execute improvements and develop personnel (manufacturing, maintenance, engineering, quality assurance, etc.) who are proficient with equipment.

*1 Safety, Quality, Time, Cost, Environment

*2 Maintenance Prevention

The five "zeros"



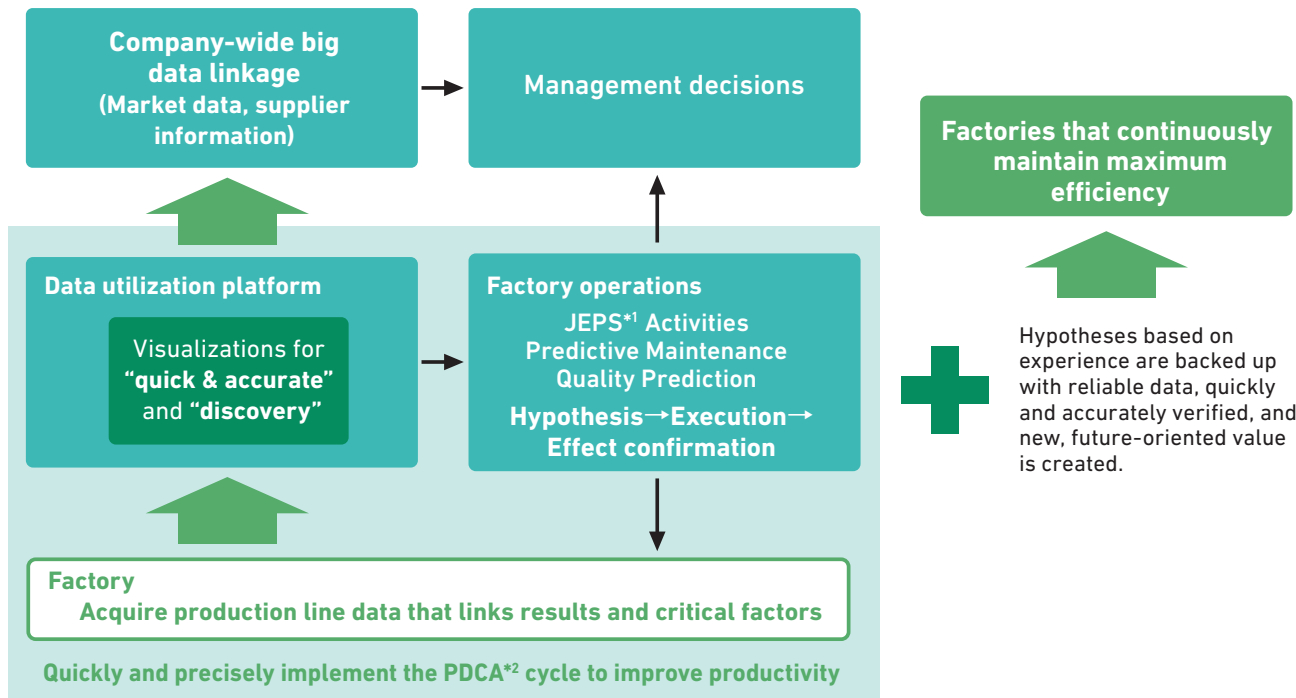
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Our Approach to Monozukuri

Achievement of conversion into smart factories

JATCO is promoting the conversion of its factories into smart factories. Led by our Digital Solution Department, we are advancing DX (digital transformation) in manufacturing and promoting productivity improvements and energy conservation.

JATCO Smart Factory Concept



*1 JATCO Excellent Production System

*2 Plan-Do-Check-Act

Visualizing equipment operational status

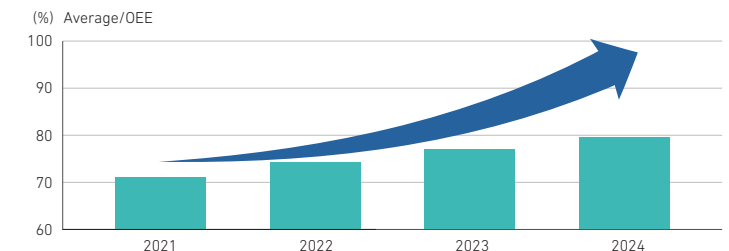
JATCO's plants have a system that eliminates any waste by synchronizing the series of processes from material procurement, processing, assembly, inspection, and shipping as if they were a single line. If production stops due to an error, it will affect the next process and then the one after that. In order to eliminate these effects, we aim to create "factories that never stop" by making the state of equipment in the production process visible at all times. Based on QRQC*, which quickly solves quality problems that occur in the workplace, we have created an in-house operation management software that allows us to see our operational status at a glance. This has made it possible to reduce production losses by quickly identifying phenomena such as short stoppages and breakdowns and implementing countermeasures. The introduction of the operational status monitor has improved the



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efficiency of our production lines by approximately 10% (compared to 2021). JATCO is aiming for the ultimate in efficiency and quality, and is expanding the scope of its digital technology to create smart factories. Moreover, we will also contribute to the realization of carbon neutrality by minimizing the energy per unit used to manufacture our products.

Overall Equipment Efficiency (OEE) Results



*Quick Response Quality Control

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Our Approach to Monozukuri

In JATCO's product development and production preparation processes, it is promoting "front-loading" to build in performance, by carrying out high-precision and detailed design studies from the earliest stage possible.

In this way, JATCO is reducing post-process corrections and trial and error iterations on actual equipment, enhancing energy efficiency in its development and production, and helping reduce society's environmental impact.

Development through the V-model of systems engineering

We have adopted the concept of the V-model of systems engineering (SE) to meet the performance demands with respect to increasingly diverse and sophisticated products and to reduce design and testing iterations.

We utilize MBD (model-based development) methodologies for the design and verification of each system hierarchy in the V-model. This involves computer simulation to predict the phenomena that occur in each functional component when a car is actually driven, and then conducting a virtual evaluation.

Through the MBSE (model-based systems engineering) approach

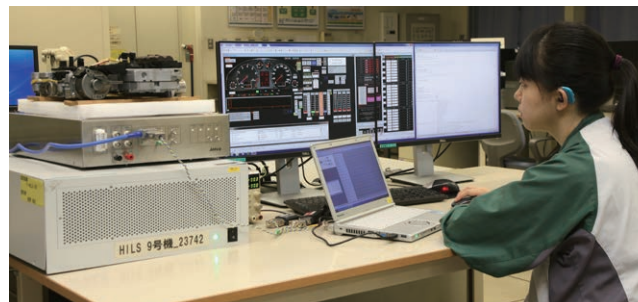
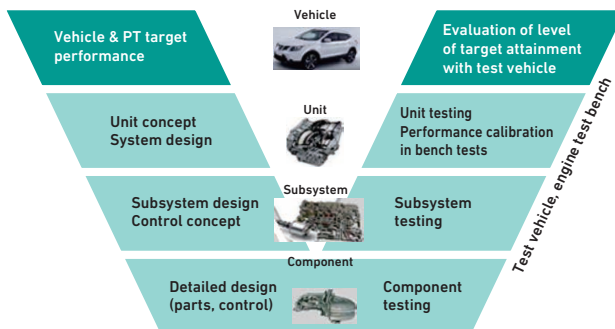
combining SE and MBD, we are promoting front-loading and working to reduce environmental impacts.

Using virtual evaluations to reduce environmental load

In our V-model experimental process, we are replacing what had previously been our real-world vehicle tests with virtual experiments (HILS,* etc.). In addition, by checking the new control system virtually, it has become possible to develop it without having to rework it when it is installed in an actual vehicle. By proceeding with these virtual evaluations, not only is the development period shortened, but also the number of experiments using actual vehicles are reduced, leading to positive environmental effects such as reduced prototyping and reduced use of fuel for experiments.

In addition, by applying the systems engineering methodology to our existing and next-generation products and expanding it globally, it is expected that our rework rate will be improved by 50%, which will not only shorten the development period but also reduce the amount of gasoline used by reducing the number of physical experiments.

*Hardware In The Loop Simulation

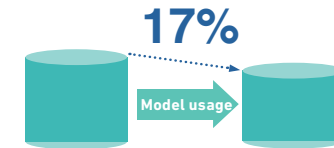


Virtual evaluation using HILS

Example results of virtual evaluations



Using HILS and other tools, simulate results from a running vehicle state and extract the real-world conditions for operating the vehicle



Vehicle running time reduced, fuel consumption reduced by 17%

Aiming for world-leading development efficiency and participating in external organizations such as JAMBE

JATCO participates in JAMBE (Japan Automotive Model-Based Engineering center), comprising Japanese automakers and parts manufacturers, to expand the manufacturing sphere and contribute to developing Japan's automotive industry. JAMBE aims to avoid rework and achieve world-leading development efficiency for the automobile industry overall by aligning models created by universities with those used by automobile and parts manufacturers, using the same models in development. JATCO's participation in JAMBE contributes to automobile technology innovations, including in carbon neutrality and more.