

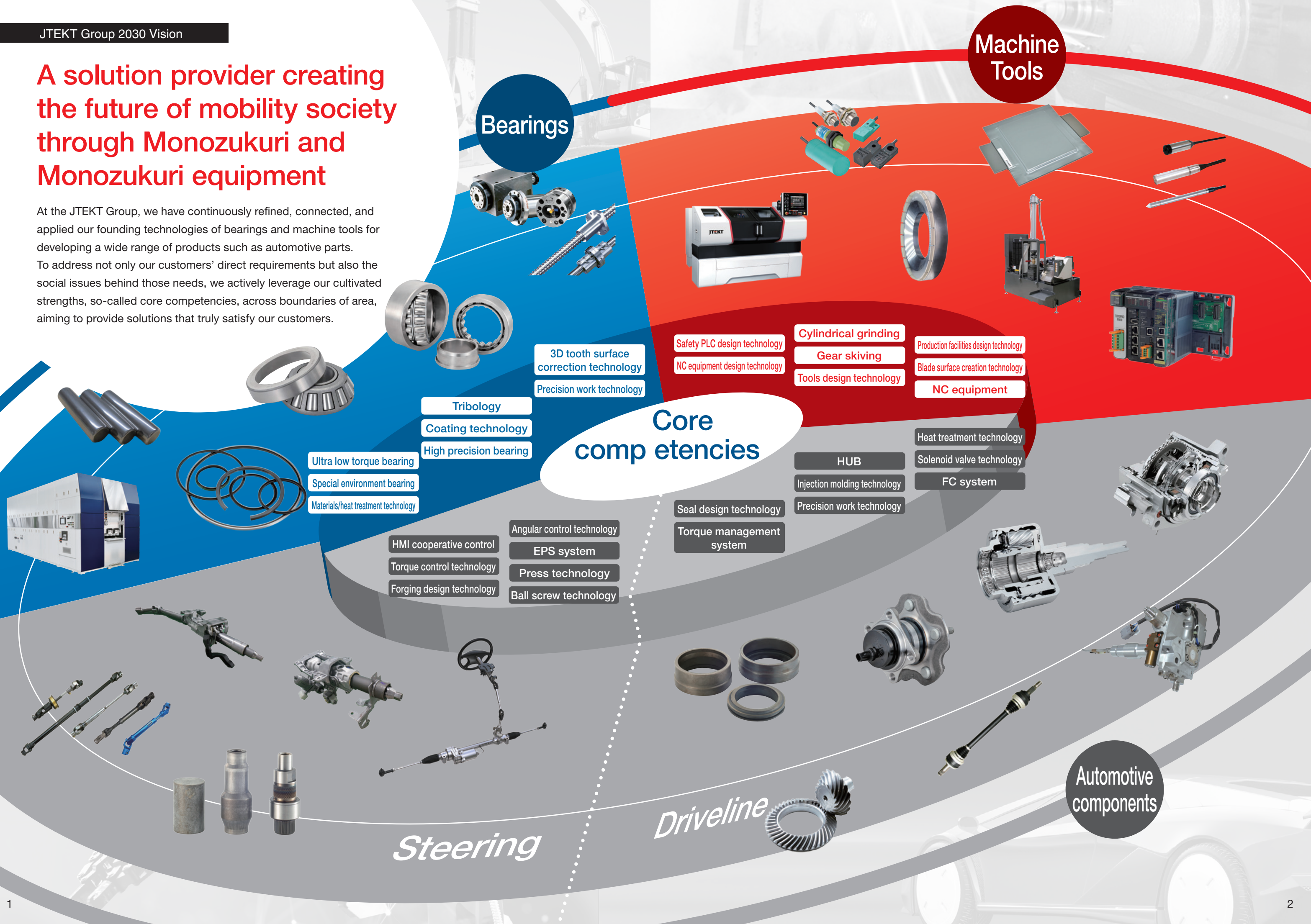
JTEKT

JTEKT Group Products Guide



A solution provider creating the future of mobility society through Monozukuri and Monozukuri equipment

At the JTEKT Group, we have continuously refined, connected, and applied our founding technologies of bearings and machine tools for developing a wide range of products such as automotive parts. To address not only our customers' direct requirements but also the social issues behind those needs, we actively leverage our cultivated strengths, so-called core competencies, across boundaries of area, aiming to provide solutions that truly satisfy our customers.



Together as one group, we will co-create with our customers a bright filled with smiles.

Not limited to providing products, we propose solutions that resolve issues through the goods and services we deliver.

◆ Lineup by Industry

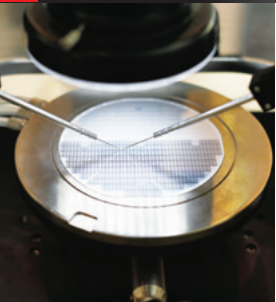
We present our wide range of products and services, categorized by industry, that contribute to solving issues across many fields.

Electric Vehicles and Automobiles



- Electric Power Steering Systems P.05
- Bearings for eAxeles P.05
- Driveshafts P.05
- Hub Units P.05
- High-Pressure Hydrogen Pressure-Reducing Valves P.05
- Intermediate Shafts P.06
- Surface Treatment (DLC and PVD Coating) P.08
- TZN Type Rolling Machines P.12
- Electric Tilt and Telescopic Steering Columns P.15
- Hypoid Gears P.16

Semiconductors and Sensors



- Bearings for Special Environments ... P.05
- Hard and Brittle Wafers Grinders P.06
- Vertical Heat Treatment Systems P.09
- Proximity Sensors P.10
- Vitrified Diamond Wheels P.13

Machines and Robots



- Bearings for Industrial Robots P.05
- Centerless Grinders P.06
- Defoaming Machine “BABUKESU II” P.07
- Ultra-High-Precision Bearings “PRECILENCE” P.11
- Coolant Systems P.12

Energy and Resource Saving



- High Heat-resistant Lithium-ion Capacitor “Libuddy” P.05
- Hydraulic Equipment “TOYOPAC ECO II Plus” P.07
- Superheated Steam-Compatible Oven .. P.09
- Grinder Rebuilds P.12
- Perfect Resource Equity Creating Sstem .. P.12

Construction, Agriculture, and Industrial Equipment



- Bearings for Agricultural and Construction Machinery P.05
- Horizontal Spindle Machining Centers FH5000 Series P.05
- Various Oil Seals P.08
- High-Precision Rollers P.11
- Various Gears P.16

Dies and Precision Parts



- Cylindrical Grinders G Series P.05
- Spindles, Ball Screws, and Indexing Chucks P.06
- Carburizing Furnace “Smart FLEC” .. P.09
- Positioning Pins P.11
- Die Design P.18

Sports



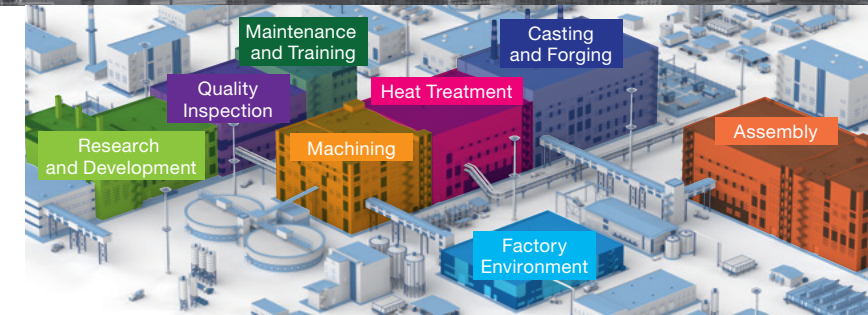
- ONI BEARINGS for Road Bike Wheels For details, please see the special website.

ONI BEARINGS website
<https://koyo.jtekt.co.jp/en/products/onibearing/>



◆ Lineup by Process

We present our various products and services by manufacturing process, which are contributing to solving challenges in production sites.



Casting and Forging

- Driveshafts P.06
- Surface Treatment (DLC and PVD) .. P.08

Heat Treatment

- Carburizing, Quenching, and Tempering P.08
- Gas Soft Nitriding and High-Hardness Nitriding ... P.08
- Induction Hardening and Tempering P.08
- Vacuum Hardening and Tempering P.08
- Metal and Industrial Heating Equipment P.09
- Semiconductor Heat Treatment Equipment P.09
- Heat Treatment Equipment for Electronic Components ... P.09

Machining

- Horizontal Spindle Machining Centers P.05
- Vertical Spindle Machining Centers P.05
- Cylindrical Grinders G Series .. P.05
- Wide Cylindrical Grinders .. P.06
- Vertical Multi-Head Grinders .. P.06
- Hard and Brittle Wafers Grinders .. P.06
- Surface Grinders P.06
- Centerless Grinders P.06
- Spindles P.06
- Indexing Chucks P.06
- Ball Screws P.06
- Hydraulic Equipment P.07
- Pneumatic Equipment P.07
- Defoaming Machine “BABUKESU II” P.07
- Surface Treatment (DLC and PVD) P.08
- PLC and HMI P.10
- Sensors P.10
- Ultra-High-Precision Bearings .. P.11
- Precision Press Technology .. P.11
- Hydraulic Cylindrical Grinders .. P.12
- Grinder Rebuilds P.12
- Rolling Machines P.12
- Transfer Equipment P.12
- Coolant Systems P.12
- Magnetic Separators P.12
- Cyclone Separator P.12
- Vitrified CBN Wheels P.13
- Vitrified Diamond Wheels .. P.13
- Diamond Rotary Dressers .. P.13
- Tool Grinders P.13
- Hypoid Gear Cutting Machines .. P.16
- Hypoid Gear Grinding Machines .. P.16
- Turning Processes P.17
- Grinding Processes P.17

Assembly

- Bearings for Industrial Robots .. P.05
- Pinion Gear Needle Assembly Machines P.06
- Hydraulic Equipment P.07
- Pneumatic Equipment P.07
- Various Oil Seals P.08
- PLC and HMI P.10
- Sensors P.10
- AC Servo Systems P.10
- Ultra-High-Precision Bearings .. P.11
- High-Precision Rollers P.11
- Positioning Pins P.11
- Gear Parts and Ring-Processed Products .. P.14
- Various Steering Parts P.14
- Tilt and Telescopic Steering Columns P.15
- Intermediate Shafts for Trucks and Buses P.15
- Various Gears P.16

Quality Inspection

- Sliding Resistance Inspection Machines P.06
- Inspection and Testing Machines P.07
- Surface Treatment (DLC) .. P.08

Research and Development

- Heat Treatment Equipment for Experimental Development .. P.09
- Virtual DR P.18
- Control Motion Verification .. P.18
- Parametric Design P.18
- Die Design P.18
- Various Mechanical and Electrical Control Designs .. P.18

Maintenance and Training

- e-KYT System P.10
- e-Work Guide P.10
- Grinder Overhauls P.12
- Digital Manuals P.18
- XR Manuals P.18

Factory Environment

- High Heat-Resistant Lithium-Ion Capacitors P.05
- Water Level Meters P.05
- Coolant Systems P.12
- Magnetic Separators P.12
- Cyclone Separator P.12
- Oil Belt Skimmer P.12



We provide bearings and machine tools that contribute to the development of all industries. Koyo Seiko and Toyoda Machine Works, both having roots in these businesses, merged in 2006 to establish JTEKT. With its founding businesses of bearings and machine tools, along with addition of automotive parts as the third pillar, JTEKT leverages these technologies and expertise to create a wide range of products that meet the needs of society.

Business Activities : Manufacturing and sales of steering systems, bearings, driveline components, machine tools, and electronic control devices

Head Office : 1-1 Asahi-machi, Kariya, Aichi Pref., 448-8652 Japan

Contact Us : <https://www.jtekt.co.jp/e/support/contact.html>



Automotive Components



■ Electric Power Steering Systems

Global share No. 1 product, available for everything from compact cars to large commercial vehicles.



■ Bearings for eAxes

A bearing series developed for EVs, designed for compact size, lightweight, high efficiency, and quiet operation.



■ Driveshafts

Achieve compact size and weight reduction through optimal shape design using advanced analysis technology.



■ Hub Units

Contribute to improved fuel efficiency through weight reduction via structural optimization and lower torque through the development of low-contact seals.

Various Bearings



■ Bearings for Agricultural and Construction Machinery

Bearings that withstand heavy load, shocks, mud, and other harsh conditions in the construction and agricultural machinery fields.



■ Bearings for Steelmaking Equipment

Products suited for heavy load, high temperature conditions, including roll-support bearings and driveshafts.



■ Bearings for Industrial Robots

A lineup of bearings developed for compact size, lightweight, high efficiency, and quiet operation, meeting various customer needs.



■ Bearings for Special Environments (EXSEV Series)

A high-performance bearing series that supports special requirements such as clean, vacuum, and high temperature environments as well as non-magnetic and insulating properties.

Machine Tools and FA Systems



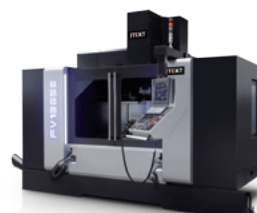
■ Cylindrical Grinders G Series

We offer five types optimized for various customer production forms, from high-mix low-volume to mass production.



■ Horizontal Spindle Machining Centers FH5000 Series

With the class-leading work capacity and a large TOYOPUC-touch HMI, this series features both high productivity and excellent operability.



■ Vertical Spindle Machining Centers FV Series

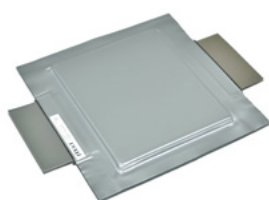
A high-torque spindle, box-type slideways, and wide machining area are combined to deliver one rank above higher level of machining performance.



■ High-Speed PLC TOYOPUC-Nano 10GX and IoT Solutions

The TOYOPUC-Nano 10GX realizes equipment and line visualization. In addition, we provide IoT solutions that connect equipment, people, and information.

Energy Storage Devices



■ High Heat-Resistant Lithium-Ion Capacitor "Libuddy"

Achieves an operating temperature range of -40°C to $+85^{\circ}\text{C}$, surpassing conventional capacitors (industry-leading).

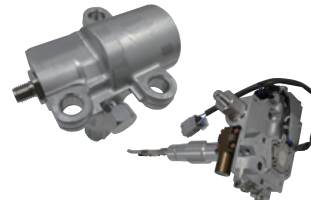
Sensors



■ Water Level Meters

Contribute to disaster prevention, mitigation, and national resilience projects in applications such as water supply and sewer systems, rivers, and reservoirs.

Hydrogen Environmental Products



■ High-Pressure Hydrogen Pressure-Reducing Valves

Contribute to improving fuel efficiency and durability of FCEV by improving performance as well as reducing size and weight.

"EXSEV", "TOYOPUC", and "Libuddy" are registered trademarks or trademarks of JTEKT CORPORATION.



In the field of machine tools, we are a leading company with a large market share in Japan, particularly with products such as centerless grinders and surface grinders. In the automotive sector, we also boast the world-class quality and market share in the manufacture of intermediate shafts, which are important safety components.

Business Activities : Manufacturing and sales of machine tools, FA systems, precision equipment, driveshafts, and intermediate shafts
Head Office : 34, Minamiuematsu-cho 2-chome, Yao, Osaka, 581-0091 Japan
Contact Us : <https://www.machine.jtekt.co.jp/english/contact1/>



Machine Tools



■ Wide Cylindrical Grinder C6040E

Simultaneous grinding of a 450 mm workpiece length in one pass.



■ Vertical Multi-Head Grinder G3VU86

Equipped with a high-rigidity spindle and ATC. Capable of grinding workpieces up to 600 mm in height with a single chuck.



■ Hard and Brittle Wafers Grinder DDT832

A dual-head grinder that performs high-accuracy machining of wafer surfaces such as SiC and GaN.



■ Vertical Double-Disc Surface Grinder KVD Series

Simultaneous grinding of the upper and lower surfaces of a workpiece. Our best-selling model.



■ Centerless Grinder KCL50

Push-through grinding enables ultra-fine, multi-step forming into desired shapes.



■ Centerless Grinder Series

A diverse lineup supporting a wide range of workpiece sizes and shapes.



■ Horizontal Double-Disc Surface Grinder HD Series

Simultaneous grinding of both sides of workpieces such as bearing end faces.



■ Special-Purpose Grinders

A wide variety of lineups are available to suit your workpieces. (Internal, external, and vertical grinders etc.).

FA Systems



■ Pinion Gear Needle Assembly Machines

Automatically assemble and measure components such as bearings and power steering parts. Provide systems that reduce labor requirements in the manufacturing process.



■ Sliding Resistance Inspection Machine

Inspection equipment that measures sliding resistance. The lineup also includes appearance and sound inspection machines.

Automotive Parts



■ Intermediate Shafts

Important safety parts for automobiles that ensure safe turning. Continue to evolve with the growth of the global automobile industry.

Steel and Industrial Equipment Parts



■ Driveshafts

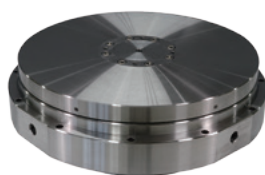
Deliver highest quality by withstanding massive impact torque while providing the precision to maintain ultra-fine clearances.

Precision Mechanical Equipment



■ Spindles

Support ultra-fine machining through precise positioning and rotation.



■ Air Tables

Non-contact support using aerostatic bearings. Ideal for clean environments.



■ Ball Screws

Support high speed, high rigidity, and precise positioning.



■ Indexing Chucks

Automatic indexing chucks enables multi-process machining with a single chuck.



We are a manufacturer specializing in hydraulic and pneumatic equipment. With hydraulic / pneumatic equipment, inspection / testing machines, and automotive parts as our three core businesses, we create fluid power systems that support people's daily life and work. We supply a wide range of products, from energy-saving hydraulic units to defoaming devices.

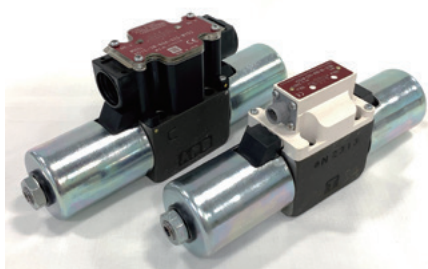
Business Activities : Manufacture and sale of hydraulic and pneumatic devices, test devices and automotive components

Head Office : 45, Aza Kaizan, Hatsuchi-cho, Okazaki, Aichi Pref., 444-3592 Japan

Contact Us : <https://www.jtekt-fluid.co.jp/en/support/2017041017561791.html>



Hydraulic Equipment and Devices



■ Ultra Low-Power Solenoid Directional Control Valve [Energy-Saving Product]

Reduced power consumption by 30%.
From 4.8 W in previous models to 3.4 W.



■ TOYOPAC ECO II

The most energy-efficient hydraulic unit when focusing on energy savings performance.*
The lineup also includes models compatible with overseas standards. *According to our own research



■ TOYOPAC ECO II Plus [Energy-Saving Product]

Delivers even greater energy savings through inverter drive—adding extra value for our customers.



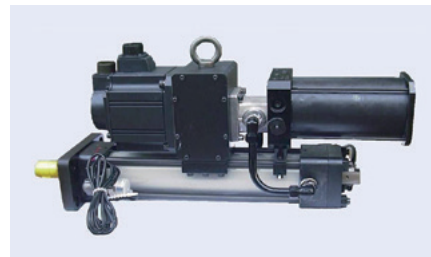
■ TOYOPAC N II

We offer a wide range of optional features to meet diverse customer needs. It also supports condition monitoring.



■ SMALLPAC

Reduces power consumption through intermittent motor operation.



■ TOYOPAC MOTION

An electro-hydraulic servo system that combines electronics and hydraulics, achieving both high precision and energy savings.

Pneumatic Equipment



■ Dual Solenoid Valve

This valve enhances press machine safety and achieves high reliability.



■ Multi-Dry Filter

This filter supports cleaning compressed air. Features three filters to remove moisture, oil, and solid particles.



■ BABUKESU II

This machine resolves foam-related issues without the use of defoaming chemicals. Fully mechanical design ensures no impact on liquid quality.

Inspection and Testing Machines



■ Inspection and Testing Machine

We provide the entire process, from design, manufacturing, adjustment, and delivery.



■ High-Performance Straightening Machine

A machine that corrects distortion caused by forming, quenching, and other processes. Increased correction capability, energy savings, and space efficiency.



JTEKT SEALING TECHNO CORPORATION supports every industrial and social foundation through oil seals and functional rubber components.

Going forward, as a comprehensive rubber manufacturer, we will continue to drive technological innovation based on advanced sealing technologies, while pursuing harmony with resources and the environment.

Business Activities : Design and manufacturing of oil seals, O-rings, and rubber products
Head Office : No.39, Nishino, Kasagi, Aizumi-cho, Itano-gun, Tokushima Pref., 771-1295 Japan
Contact Us : <https://sealing.jtekt.co.jp/contact/index.html>



Oil Seals



■ Various Oil Seals

Oil seals used for sealing various types of media. Provide high sealing performance with low torque.



■ Large-size Oil Seals for Steel Production Equipment

Oil seals used in steel rolling mill equipment and industrial machinery. Support a wide range of sealing media and sizes.

Functional Products for Automobiles



■ Bonded Piston Seals

Used in automotive automatic transmissions (AT). Contribute to smaller, higher-performance systems through lightweight design and high responsiveness.



■ Friction Dampers

Used in automotive transfer cases and transmissions. Serve to suppress vibration and mitigate shocks during operation.

JTEKT COATING CORPORATION

<https://coating.jtekt.co.jp/>


Founded in 1958 with a focus on heat treatment, JTEKT COATING now operates its three businesses of heat treatment, coating, and parts processing in Japan and Thailand. With more than 600 processing conditions, we carry out surface modification to support a wide variety of manufacturing processes. Going forward, we will continue to develop, manufacture, and supply “No. 1 & Only One” products and services for the Earth, society, and our customers.

Business Activities : Heat Treatment, Coating, and Parts Processing
Head Office : No.28, Bawari, Noda-cho, Kariya, Aichi Pref., 448-0803 Japan
Contact Us : <https://coating.jtekt.co.jp/contact/>



Surface Treatment (Coating)



■ DLC Coating

Applies a carbon-based thin film to the surface of steel and other metals. Contributes to low friction, prevention of material adhesion, and improved wear resistance.



■ PVD Coating

Applies a thin metallic film to the surface of steel and other metals. Enhances wear resistance and extends the service life of cutting tools.

Heat Treatment



■ Carburizing, Quenching, and Tempering

Forms a hardened layer several millimeters thick on the product surface, hardening the steel itself. Applied to a wide range of parts such as automobiles, tools, dies, and construction machinery.



■ Gas Soft Nitriding and High-Hardness Nitriding

Forms a hardened layer several microns thick on the steel surface. Compared to carburizing, this method yields higher surface hardness with less deformation and distortion.



■ Induction Hardening and Tempering

Compared to carburizing, this technology enables selective hardening by heating only part of the material.



■ Vacuum Hardening and Tempering

Compared to carburizing, this method provides superior surface brightness.

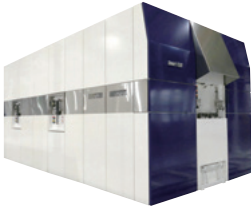


Since launching Japan's first domestically produced batch-type carburizing furnace in 1959, our company has contributed to manufacturing across a wide range of industries through our heat treatment equipment. In the fields of metals, automobiles, semiconductors, and electronic components, in particular, we continue to meet customers' diverse heat treatment needs by combining our proprietary temperature control, atmosphere control, and analysis technologies.

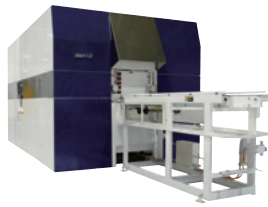
Business Activities : Manufacturing and sales of heat treatment equipment (for industrial use, semiconductor manufacturing, and electronic component manufacturing)
Head Office : No.229, Kabata-cho, Tenri, Nara Pref., 632-0084 Japan
Contact Us : <https://www.jtektthermos.com/contact/>



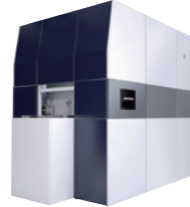
Metal and Industrial Heating Equipment



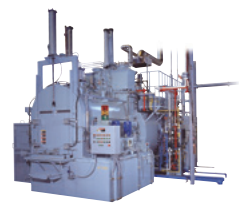
- **Smart FLEC G: Gas Carburizing Furnace**
 A compact carburizing furnace that eliminates the need for pits and enables simple placement. The unit-type structure offers excellent scalability.



- **Smart FLEC V: Vacuum Carburizing Furnace**
 A vacuum furnace based on the same concept as the Smart FLEC G. Enables reduction of CO₂ emissions and total costs.



- **Smart FLEC One: Ultra-Rapid Carburizing Equipment**
 Employs ultra-rapid carburizing technology using induction heating. Enables the ultimate single-piece processing for achieving reduced processing time and CO₂ emissions.



- **None-Flame Batch-Type Carburizing and Gas Soft Nitriding Furnace**
 Features a vacuum-purged oil tank for enhanced safety and improved working environment.

Semiconductor Heat Treatment Equipment



- **Clean Oven Series for Advanced Packaging**
 Supports not only ø300 mm wafers but also substrates up to 600 mm square. Ideal for curing various interposers and drying substrates.



- **SiC Power Semiconductor Activation and Oxynitride Annealing System VF-5300**
 Capable of processing up to 100 ø200 mm wafers per batch. Also supports N₂ load lock.



- **SiC Power Semiconductor Contact Annealing System RLA-4200-V**
 Dual-chamber design and improved transfer unit deliver 2 to 2.4 times the productivity of previous models. Equipped with vacuum load lock.



- **Vertical Heat Treatment Systems VF-5900/VF-5700**
 Compatible with 300 mm wafers. Supports oxidation, diffusion, LP-CVD, and other heat treatment processes.

Heat Treatment Equipment for Electronic Components



- **Superheated Steam-Compatible Oven AF-INH**
 Suppresses product breakage during degreasing of ceramics and electronic components, while reducing the processing time by up to 70%.



- **Superheated Steam-Compatible Continuous Furnace AF-47-MT**
 Mesh-belt continuous furnace for mass production, equipped with condensation countermeasures at the inlet and outlet to support superheated steam processing.



- **High-Temperature Inert Gas Oven / High-Temperature Clean Oven**
 Enables heat treatment in a low-oxygen atmosphere (≤20 ppm) or in a clean environment (cleanliness class 100).



- **Mesh-Belt Continuous Furnace 47-MT**
 Offers excellent sealing, atmosphere stability and reproducibility, and uniform heating, supporting heat treatment in inert or reducing atmospheres.

Heat Treatment Equipment for Experimental Development



- **Compact Box Furnaces**
 The lineup includes models ranging from benchtop units to small-lot production models, with processing temperatures from 400°C to 1800°C.



- **Compact Tube Furnaces**
 By installing a core tube (optional), controlled atmosphere treatment is possible. Various models are available, ranging from benchtop units to small-lot production models.



- **Vacuum-Purge Box Furnace μBF-TVP**
 Supports various controlled atmosphere treatments, including reducing atmospheres. Vacuum purging enables quick atmosphere replacement.

"Smart FLEC" is a registered trademark or trademark of JTEKT THERMO SYSTEMS CORPORATION.



Since our founding in 1955, we have consistently handled the development, manufacturing, and sales of electronic devices, serving as the core company of the JTEKT Group that produces products meeting high standards of safety and functionality. The high level of perfection achieved has earned the trust of major automakers, and our products operate continuously every day in automobiles distributed worldwide. Furthermore, our products are widely used across diverse fields such as factory automation, public transportation systems, industrial equipment, and social infrastructure, contributing to the construction and advancement of a safe, secure, comfortable, and convenient society. We also possess advanced comprehensive capabilities and development strength that extend beyond mere parts manufacturing, including the construction of system solutions for factories and other facilities.

Business Activities : Development, manufacturing, and sales of electronic control equipment and automotive electrical systems

Head Office : 4-9-1, Tenjin-cho, Kodaira, Tokyo, 187-0004 Japan

Contact Us : <https://www.electronics.jtekt.co.jp/en/contact/>



PLC and HMI



JX-BASIC Series

Thin, space-saving board-type controllers. Available in three models depending on application.



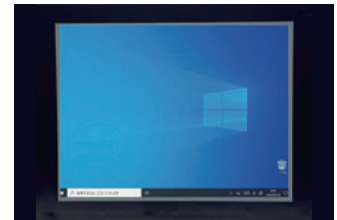
SJ-ETHER Series

Smart controllers with standard Ethernet. Micro PLCs with integrated I/O, ideal for compact equipment.



Remote I/O Series

EtherNet/IP-compatible remote I/O devices with short-circuit detection function, helping reduce system downtime.



Panel Computers

Designed and manufactured in Japan. Enable intuitive operation such as zooming in/out, similar to smartphones and tablets.

Sensors



Rotary Encoders

Sensors that convert the displacement of rotating bodies such as motors into electrical signals. We offer a wide lineup to suit various applications.



Proximity Sensors

Available in cylindrical metal, cylindrical resin, rectangular, top-detection, and front-detection types. Usable in a wide variety of settings and control applications.



Photoelectric Sensors

Manufactured by Banner Engineering (USA). The product lineup includes safety devices, radar sensors, and indicator lights.



Onsin Sensors

Temperature and vibration sensors. Ideal for condition monitoring of equipment and machinery and determination of replacement timing for consumables.

IoE Solution Products



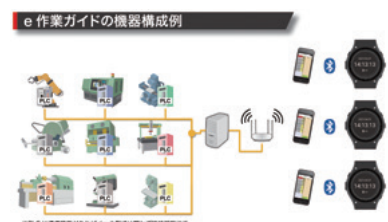
Kado-Up Navi (Operation Uptime Visualization System)

IoE adoption possible with minimal cost and add-on installation. Simply mount on a stack light to wirelessly transmit equipment operating status.



e-KYT System

Educational material creation tool for hazard prediction training. Contributes to raising employee safety awareness.



e-Work Guide

A support system that sends equipment alarms to smartphones or wearable devices. Helps reduce downtime and improve equipment operating rates.

Other FA Equipment



Counters

Drawing on years of expertise, we support all types of measurement and control including addition/subtraction, preset, and aggregation.



AC Servo Systems

Equipped with a motion controller for simplifying system configurations. Contribute to automation, reduced labor, and cost-effective facility investment.



General-Purpose Mini ECU

Equipped with an acceleration sensor to detect tilt angle. The resin-sealed structure allows use even in harsh environments.

"Onsin" is a registered trademark or trademark of JTEKT ELECTRONICS CORPORATION.



We manufacture and sell bearings, which are indispensable components for automobiles, machinery, and equipment that support modern industry and daily life. Our products are used not only in the automotive field but also across a wide range of industrial machinery fields, including machine tools, semiconductors, and robotics for contributing to the realization of a sustainable society.

Business Activities : Manufacturing and sales of various bearings and bearing-related products

Head Office : No.8-1, Ayumino 2-chome, Izumi, Osaka, 594-1157 Japan

Contact Us : <https://www.precision.jtekt.co.jp/contact/>



Ultra-High-Precision Bearings



■ PRECILENCE (Ultra High-Precision Bearing)

Achieves ultimate precision (rotational accuracy, dimensional accuracy).
Contributes to performance across all types of equipment.

Bearings for Industrial Machinery and Robots



■ Bearings for Wave Motion Reducer

Thin design with high load capacity, enabling miniaturization and weight reduction.

Bearings for Industrial Machinery and Special Environments



■ Bearings for Special Environments

Deliver special performance required of bearings, such as operation in vacuum, high-temperature, and clean environments, as well as high-speed, insulation, and non-magnetic properties.



■ Bearings for Mast Rollers

Our uniquely developed bearings adopt a groundbreaking structure in which special heat treatment intentionally softens the outer surface, allowing controlled wear.

JTEKT FINETECH Co.,Ltd.

<https://www.finetech.jtekt.co.jp/>



Within the JTEKT Group, we leverage our strength in exceptionally precise production and machining technologies to lead the Group globally, including through our overseas bases. By creating higher value-added products in both bearing and non-bearing fields, we aim to grow the company while bringing employment and well-being to our employees.

Business Activities : Manufacturing of needle roller bearings, manufacturing and sales of various precision mechanical components, and manufacturing of rollers and pins for various bearings

Head Office : No.585, Suzumenomiya-cho, Utsunomiya, Tochigi Pref., 321-0121 Japan

Contact Us : <https://www.finetech.jtekt.co.jp/contact/>



Needle Roller Bearings



■ Radial Needle Roller Bearings

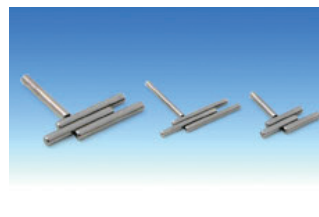
An extensive product lineup to meet diverse application environments, including high-speed rotation, high-load capacity, and low-torque requirements.



■ Thrust Needle Roller Bearings

Rollers for Cross Roller Bearings and Linear Motion System Equipment

Rollers for Bearings



■ Needle Rollers

Responding to diversified needs such as long service life and high-speed rotation required in bearings, we have established processing technologies including special crowning.



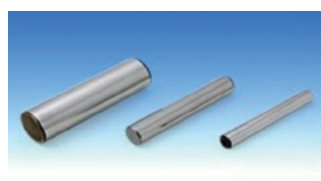
■ Cylindrical Rollers

Pins



■ High-Precision Rollers

Established submicron-level high-precision machining technology for contributing to higher machine rigidity, lower torque, higher speed, and longer life.



■ Pins for Motion Reducers

Used as power transmission pins in motion reducers by employing high-precision, high-strength, high-hardness bearing rollers.



■ Positioning Pins for Machinery and Dies

High-precision, high-hardness rollers for bearings are used as the positioning pins to position two components.

Pressed Products



■ Precision Press Technology

Focused on precision press processing technology, we create new value and provide both manufacturing contributions and solutions.



With “Quality First” and “Swift Action” as our principles, we not only create machines and equipment that delight our customers, but also breathe new life into long-used grinders through overhauls and performance upgrades, contributing to the development of production systems that are friendly to both people and the Earth.

Business Activities : Manufacturing and overhaul of grinders, and manufacturing and sales of rolling machines and mechanical equipment
Head Office : 1-3, Ejiri, Hishiike, Kota-cho, Nukata-gun, Aichi Pref., 444-0113 Japan
Contact Us : eigyou@grinding.jtekt.co.jp



Grinders



■ CNC Cylindrical Grinders

Skilled machining made easy for anyone.



■ Hydraulic Cylindrical Grinders

A best-selling general-purpose grinder that passes down the craftsmanship of experts.



■ Grinder Overhauls and Rebuilds

Restore performance equivalent to new machines, ensuring the quality at the time of initial delivery.

Rolling Machines



■ TZ Type Rolling Machines

High-precision machines with a wide variety of models.



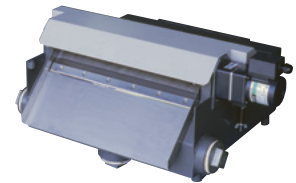
■ TZN Type Rolling Machines

Automate OPD (Over Pin Diameter) adjustment tasks, enabling single setup change-overs.



■ Coolant Systems

High-cleanliness filtration systems that help maintain machine performance and reduce running costs.



■ Magnetic Separators

Helping to improve the cleanliness and life of coolant. Our proprietary optimal magnet arrangement achieves high magnetic flux density across the entire flow path.

Environmental Products



■ Cyclone Separator

Separates and removes chips and abrasive grains from water-soluble coolant. The filterless design improves operating rate and reduces running costs.



■ TANCLEAN

This is coolant tank cleaning vehicle. Clean the coolant tank while the machine is running.



■ Oil Belt Skimmer

Prevents oil from leaking outside the factory premises.



■ Perfect Resource Equity Creating System

Our proprietary compression molding and revolutionary hardening technology makes solidifies metal polishing sludge and enables it to be reused.

Transfer Equipment



■ Gantry-Type Loader

Capable of high-speed transfer of heavy workpieces (up to 120 kg). In-house design allows for enabling flexible layout and transport cycles.



■ Robot-Arm Loader

Automates and reduces labor within existing layouts. Can be installed not only in straight lines but also U-shaped and other layouts, helping reduce dead space.



■ Stacker Cranes

Supports transport between all types of equipment, from battery manufacturing processes to transport between cutting machines.



As a specialist manufacturer of diamond rotary dressers and superabrasives wheels, JTEKT Grinding Tools has consistently strived to create products that satisfy our customers through product and technology development, challenges in precision machining, and pioneering new fields. Moving forward, we will continue to cultivate steady execution capabilities and strive to become “a company that shines brightest worldwide, even though we are small like a diamond,” and “a company where every individual can experience the joy of creating things.”

Business Activities : Manufacturing and sales of diamond rotary dressers and superabrasive wheels

Head Office : 1-54, Shiroyama, Maigi-cho, Okazaki, Aichi Pref., 444-3594 Japan

Contact Us : <https://www.tools.jtekt.co.jp/en/contact/index.html>



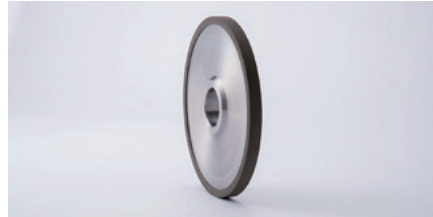
Vitrified CBN Wheels



■ SAKURA

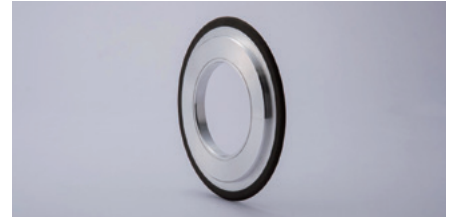
Ideal for grinding automotive cams, crankshafts, and shafts. Contributes to improved cuttingability, machining accuracy, and surface quality immediately after truing.

Resin Wheels



■ Revomate

Ideal for ceramic processing for semiconductor fixtures and other applications and motor core molds. Contributes to reduced processing time and stable machining accuracy.



■ Teramate

Ideal for ceramics and mold machining. Optimized abrasive grain size and chip pockets contribute to high-precision machining.

Diamond Rotary Dressers



■ Reverse plated HS type

Rotary dresser for raceway surface machining used by linear motion and bearing manufacturers in Japan and overseas. Provides excellent grinding wheel cutting ability after dressing.



■ Reverse plated DD type

Surface features scattered indentations for low distribution. The sharp tip shape achieves exceptional cutting performance after dressing.



■ Reverse plated SC type

Diamond grains fixed by the electroplating method. Effective for fine, complex shapes requiring high accuracy.

Diamond Rotary Dressers



■ Infiltrated Type

Ideal for shaft machining by domestic and overseas automakers. More robust than other rotary dressers with capability of repair and reuse.



■ UP Dresser Premium

Diamond electrodeposited dresser for gear grinding. Provides long life time and stable quality.

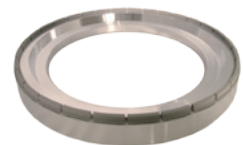
Metal Diamond Wheels



■ Teramate MT3

Ideal for machining difficult-to-cut materials such as ceramics and toolings. Highly wear-resistant, contributing to extended tool life time.

Vitrified Diamond Wheels



■ nanoVi

Achieves both excellent sustained sharpness and low wear rates, contributing to improved productivity in SiC wafer grinding.

Tool Grinders



■ DPCG-4

Compact tabletop edge grinder for PCD, CBN, and carbide tools, designed for high-mix, low-volume production.



■ CHMF-I

Manual chamfering device for PCD, CBN, and carbide tools.



■ HPCD-150M

Manual edge grinder for PCD, CBN, and carbide tools, designed for high-mix, low-volume production.



At JTEKT METALTEC CORPORATION, we leverage our extensive experience and the latest technologies in bearing component manufacturing to deliver high-precision, high-quality products under an integrated system, from hot-forged parts and cold-rolled parts to turned parts.

Business Activities : Manufacturing and sales of forged and turned bearing inner and outer rings and automotive parts
Head Office : No.1626 Sanagu-cho, Iga, Mie Pref., 518-0001 Japan
Contact Us : eigyo_cfc@metaltec.jtekt.co.jp

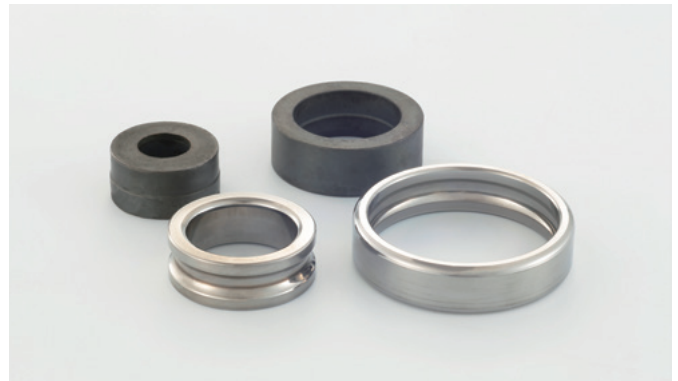


Forged Parts for Bearings



■ Tapered Roller Bearings: Inner and Outer Rings

Drawing on our extensive experience and the latest technologies, we provide high-precision, high-quality products under an integrated system, from hot-forged parts and cold-rolled parts to turned parts.



■ Deep Groove Ball Bearings: Inner and Outer Rings

Forged Automotive Parts



■ Hub Bearings: Inner Shafts and Outer Rings

Integrated processed products manufactured with high-efficiency forging presses and automated lines.



■ Gear Parts and Ring-Processed Products

Our "No. 1 & Only One" hot press rolling forging technology achieves high yield and near-net shape for contributing to resource savings.



■ Various Steering Parts

Manufacture of a wide range of steering parts that play a vital role in a vehicle's turning function.



The steering column is a critical safety component responsible for vehicle steering functions and safety in case of collisions. We are a specialized manufacturer of steering columns, handling a wide range of products for passenger cars, commercial vehicles, recreational vehicles, and industrial vehicles. Our product lineup covers both mass production and small-lot production needs.

Business Activities : Manufacturing and sales of automotive parts
Head Office : 2028 Washizu, Kosai, Shizuoka Pref., 431-0431 Japan
Contact Us : https://www.column.jtekt.co.jp/en/inquiry_e.php



Automobiles (Passenger Cars, Trucks, Buses)



■ Manual Tilt and Telescopic Steering Columns

Driving position can be manually adjusted in two directions: tilt (up/down) and telescopic (forward/backward).



■ Electric Tilt and Telescopic Steering Columns

Driving position can be electrically and automatically adjusted via switch operation or position memory function. Mainly installed in luxury vehicles.



■ Manual Tilt and Telescopic Steering Columns (Nick Tilt Type)

Provides a wider driving position adjustment range than standard types, including steering wheel swing (neck tilt) adjustment.



■ Intermediate Shafts for Trucks and Buses

These shafts feature both long shaft sliding range and smooth motion while reducing play.

Industrial Vehicles (Construction Machinery, Agricultural Machinery, Recreational Vehicles)



■ Side-by-Side Manual Tilt and Telescopic Steering Columns

Columns for golf carts and PTVs (Personal Transport Vehicles). Adjustment range of driving position can be customized upon request.



■ 900 Series Manual Tilt and Telescopic Steering Columns

For large trucks and special-purpose vehicles. Can be offered together with column covers and other parts, and support small-lot production.



■ 555 Series Manual Tilt and Telescopic Steering Columns

Developed for construction and agricultural vehicles, with durability to withstand harsh environments. The adjustment range of driving position can be customized.



■ 410 Series Intermediate Shafts

Simplified design for trucks and special-purpose vehicles, with durability for a wide range of operating environments. Available in small lots.



As a comprehensive manufacturer specializing in gears, we handle everything from the development of production equipment to manufacturing for meeting all of our customers' gear-related needs. In particular, in the production of hypoid gears, we are the only manufacturer in Japan that manufactures hypoid gear cutting machines and possesses peripheral technologies, and one of the leading mass-production manufacturers in the country.

Business Activities : Manufacturing and sales of automotive components and machine tools

Head Office : 3-45 Akatsuki-cho, Seto, Aichi Pref., 489-8550 Japan

Contact Us : <https://www.gear.jtekt.co.jp/en/contact/>



Machine Tools



■ G-30NF-1: Hypoid Gear Cutting Machine

Supports both drive pinions and ring gears. Enables high-speed face hobbing and face milling.



■ GTH-30N: Hypoid Gear Grinding Machine

Compact design. Compared with lapping, this reduces variation in tooth contact to 1/3 and tooth surface roughness to 1/2. Eliminates the need for set management during lapping.



■ L-45N: Hypoid Gear Lapping Machine

High-speed oscillation minimizes the outflow of lapping fluid from the machine. Vertical layout makes easier loading/unloading of ring gears.

Machine Tools



■ T-45MN: Hypoid Gear Testing Machine

Features fully automated machine setup, gear meshing, backlash adjustment, and brake setting.



■ GRF-6: Gear Rolling Finishing Machine

Equipment for finishing tooth surfaces of planetary gears with high accuracy. Enables shorter cycle times and improved die life for contributing to lower workpiece costs.

Various Gears



The lineup includes compact, durable, and low-noise gears. We tailor our processes from design to production to meet every customer requirement.

Automotive Components



■ Differential Carrier Assemblies

Transmit engine drive power to the left and right wheels and adjust the rotational difference between them when cornering.



■ Hypoid Gears

Gears with offset meshing, used in differential carrier assemblies. Machined using our in-house developed equipment.



■ Differential Gears

Gears that absorb the inner wheel difference that occurs when a vehicle turns a corner.



■ Helical Gears

Gears used in transmissions and reduction gears. High strength with reduced vibration and noise.



JTEKT SURPRET CO., LTD. was established through the merger of Koyo Heat Treatment Co., Ltd. founded in 1938 as a specialist in heat treatment, and Yamato Seiko Co., Ltd., a manufacturer engaged in roller turning and grinding processes. In metal component processing, we create new value through three core technologies, namely, heat treatment, turning, and grinding. We also provide solutions that meet customer expectations with optimal processes combining precision machining and heat treatment.

Business Activities : Heat treatment processing of metal products, and integrated roller processing (from turning and heat treatment to grinding)
Head Office : 134-6 Nishi-Ando, Ando-cho, Ikoma-gun, Nara Pref., 639-1066 Japan
Contact Us : <https://surpret.jtekt.co.jp/contact/>



Turning Processes



■ Turning of Bearing Rolling Elements (Cylindrical/Tapered/Hollow/Pin) and DPs

Produces a wide range of rollers from 15 mm to 120 mm in outer diameter. Supports thin-walled ring-shaped products and small-lot production.

Heat Treatment



■ Heat Treatment of Automotive and Bearing Components

We provide heat treatment technologies and optimal equipment and process proposals tailored to customer needs with advanced technical expertise. Our deformation control technology enables support for a variety of shapes.

Grinding Processes



■ Grinding of Bearing Rolling Elements (Cylindrical/Tapered) and Pins

Possesses grinding technology that achieves high-precision quality. Supports grinding of various shapes, such as cylindrical and spherical, and available in small lots.



Since its founding in 1960, our company has grown and developed as the JTEKT Group's specialized design company. We are professionals in mechanical design, FA control, and press die design, and expanded our business into IT systems and automotive software development. We also provide solutions and digital transformation (DX) services using 3D engineering technologies in recent years.

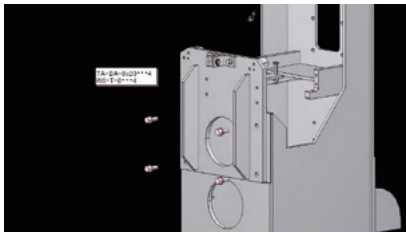
Business Activities : Mechanical design of industrial machinery, control design, and IT system software development

Head Office : 7-11-15 Ginza, Chuo-ku, Tokyo 104-0061 Japan

Contact Us : <https://www.hightech.jtekt.co.jp/contact/>

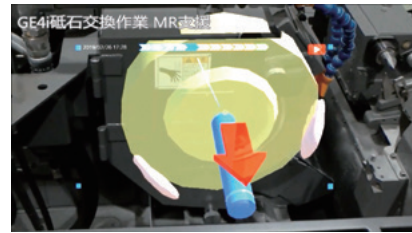


3D Solutions



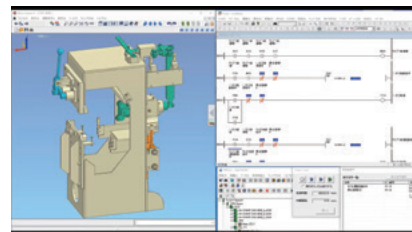
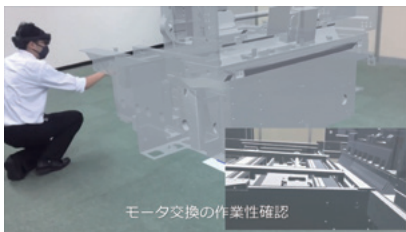
Digital Manuals

Combine 3D model animations with existing operation process lists or operation videos to create a more user-friendly manual.



XR Manuals

Digital manuals that combine real-world objects with 3D data (holograms) displayed on AR glasses, overlaying work procedures.

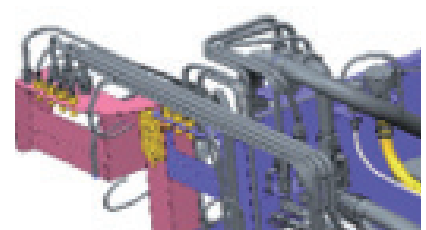


Virtual DR

Generate full-scale 3D models from 3D CAD data, allowing confirmation of the actual size of areas difficult to assess using CAD alone.

Control Motion Verification

Build environments identical to actual machines, such as PLCs and operation panels, and connecting them to 3D models to verify control circuits. This eliminates the need to debug on the actual machines.



Parametric Design

Generate 3D models by inputting Excel data directly into 3D CAD. Even users unfamiliar with 3D CAD operations can easily create models.

CAE Analysis Services

Offer structural analyses (e.g., stress and displacement) using various analysis software tools.

3D CAD Wiring and Piping

We examine routing using dedicated wiring and piping software, and by modeling the layouts in 3D, determine optimal lengths—helping to reduce material waste.

Die Design



Leveraging our expertise in press die design for automotive body manufacturing, we deliver high-quality press die solutions through precise design technology and comprehensive simulation.

Various Mechanical and Electrical Control Designs



We undertake both mechanical and electrical control designs comprehensively, offer simulations based on mechanical and control design data, and provide analysis and manufacturing support.

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- ☆ The contents of this catalog are subject to change without prior notice. Every possible effort has been made to ensure that the data herein is correct; however, JTEKT cannot assume responsibility for any errors or omissions.

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