

**JTEKT Machinery Americas** 

# PRODUCTS & SERVICES





# JTEKT MACHINERY AMERICAS

#### OUR MISSION

To be the industry leader in manufacturing equipment and solutions by providing the highest value to our customers, employees, and environment.

Thoughtful engineering has been the cornerstone of JTEKT Machinery since our beginning days in 1941 as Toyoda Machine Works. Our machines and technologies are developed for manufacturing innovators and production-focused operations of all sizes – built for speed, power, and trusted performance. From job shop applications to the highest-volume production demands – we strive to exceed the expectations of our customers by delivering superior manufacturing solutions, with unmatched service and support.

Company Headquarters & Customer Center Arlington Heights, IL

Rebuild, Remanufacturing & Training Center Wixom, MI

### A combined 200,000 sq ft of operational and customer support services:

- Turnkey Development
- Engineering
- Showroom
- Vast, critical spare parts inventory

- R&D
- Spindle Rebuild
- Remanufacturing & Retooling
- Process Runoff





## HORIZONTAL MACHINING CENTERS

# Industry-leading precision and performance - optimized for speed, rigidity, and reliability.

With superior performance that is distinctly JTEKT Machinery, we manufacture state-of-the-art horizontal machining centers for efficient production and high-precision machining. Our columns, beds and tables are manufactured in-house, constructed with casting processes perfected over years of development. When combined with our renowned cutting

technologies, JTEKT Horizontal Machining Centers deliver the speed, rigidity, and accuracy our customers depend on.



FH5000 SERIES

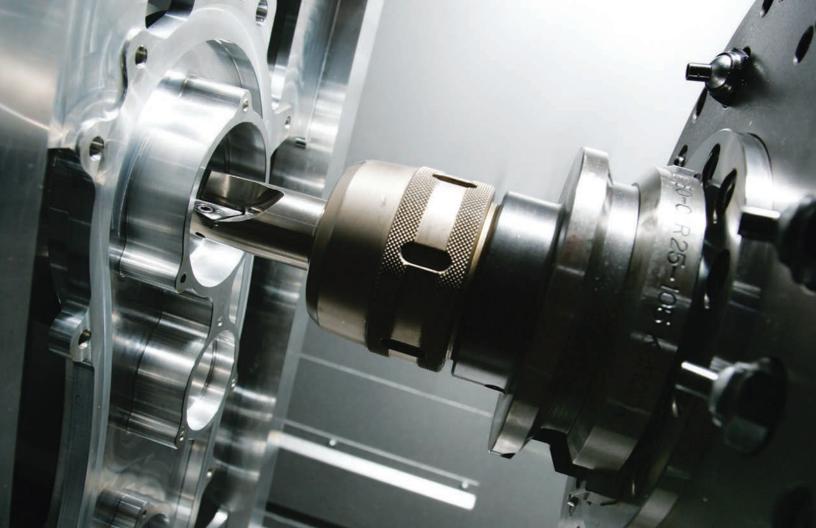
#### Pallet sizes ranging from 500mm – 1600mm

- **FH5000 Series:** The industry's new standard in horizontal machining. Equipped with a direct drive B-axis table featuring an index time (90°) of 0.7 seconds – its unique spindle design, preload system and high torque features enable aggressive, highvolume machining within a remarkably compact footprint.
- 5-Axis Machines: The ideal solution for complex, prismatic components.
- **Quill Spindle Options:** Efficiently machine large components that require extended reach.
- **TOYOPUC-Touch:** Our innovative HMI touchscreen overlay that runs on FANUC 31iMB Plus – simple operation, loaded with advanced features.

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LEARN MORE ABOUT OUR HORIZONTAL MACHINING CENTERS







## VERTICAL MACHINING CENTERS

# Lower your cost-per-part with our range of world-class, high-speed vertical machining centers.

Whether your production requirements demand focus on precision, flexibility, or heavy-duty machining – JTEKT Machinery's line of Vertical Machining Centers deliver lasting performance and value. Together with our VMC platform specialists, WELE and AMS, we offer a diverse range of vertical machining solutions designed to amplify productivity and address.

amplify productivity and address your manufacturing challenges.



AMS GEMINI-XL WELE AQ1265

#### WELE Product Range Superior quality, precision, and power

WELE Vertical Machining Centers feature a built-in, integrated spindle design, along with Meehanite cast iron bases that provide unrivaled rigidity. Increasingly unique within the industry - hand-scraped metalto-metal contact points ensure long-term accuracy, vibration dampening and extended machine life.

#### AMS Product Range High-performance, cost-effective machining

With products covering the spectrum of manufacturing, AMS has over 12,000 machines installed across the globe. Sought-after for their tremendous quality and value – AMS VMC offerings include high-speed milling and drilling solutions, along with productive twin-spindle machines.

LEARN MORE ABOUT OUR VERTICAL MACHINING CENTERS

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### 5-AXIS MACHINING CENTERS

# Industry-leading precision and performance - optimized for speed, rigidity, and reliability.

As a global leader in 5-axis machining – JTEKT Machinery possess a vast array of deployable capabilities for efficiently machining complex, unique components of all shapes and sizes. When combined with the high quality

craftsmanship and rigidity of our base machines – our powerful tilt/swivel spindles and trunnion rotary tables expand your production capabilities even further, resulting in significantly reduced setup and lead times.



#### JTEKT Machinery 5-Axis Product Highlights:

- **FH1250SX-5Axis:** 49.2" Pallet HMC with versatile 5-axis swivel spindle.
- **FA1050S-5Axis:** 41.3" Pallet HMC with 5-axis trunnion box way.
- FH630SX-i 5-Axis: 24.8" Pallet HMC for highpowered, high-speed 5-axis machining.
- WELE UA2090Ti: The ultimate 5-axis solution for large, titanium and hard alloy components.
- WELE UG Series: Advanced overhead gantry design, with high-precision trunnion rotary table.

LEARN MORE ABOUT OUR 5-AXIS MACHINING CENTERS







### GRINDING MACHINES

# Setting the standard for high-production applications requiring long-term machining accuracy.

As a global leader in grinding machine technology, JTEKT Machinery offers an extensive lineup of high-performance grinding machines that excel in the most demanding, diverse range of applications. Our grinding legacy is founded on the TOYODA STAT® BEARING and floating plate ball nut. These patented technologies optimize performance while eliminating

bearing wear for long-term accuracy.



### JTEKT Machinery offers a complete range of grinding solutions:

- OD Grinding Machines
  - Between Centers Camshaft
  - Centerless - Shoe-Type
- Crankshaft
- Manual Grinders
- ID Grinding Machines
- Vertical Grinding Machines
- Universal Grinding Machines
- Surface Grinders
- Special Purpose Grinders
- Semiconductor Wafer Grinders

LEARN MORE ABOUT OUR GRINDING MACHINES







### BRIDGE & GANTRY MILLS

### Power and endurance for heavy jobs demanding accuracy and high productivity.

WELE bridge and gantry mills provide the power, stability, and durability required in machining large workpieces. This lineup features vibrationdampening Meehanite cast iron bases, effective coolant filtration systems, and fully-equipped Fanuc controls. Additionally, fully programmable five-face machining is available as an option.

#### WELE RB, SB, and LB Series

The trusted solutions for heavy-duty applications

- Standardized features and five-face machining capabilities designed to conquer large, complex applications with ease.
- Massive single-piece, high-grade cast iron bases and dual bridge columns - designed for maximum thermal stability and extreme rigidity.
- Hand-scraped metal-to-metal surfaces for longterm geometrical accuracy.
- Powerful drive motors deliver unrivaled responsiveness without backlash.
- Available with CAT50 6,000 RPM gear-head spindle, CAT50 12,000 RPM integral motor spindle, and CAT40 15,000 RPM direct-drive spindle.

LEARN MORE ABOUT **OUR BRIDGE & GANTRY** MILLS

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WFLF RB212

WELE

WELF



# **JTEKT**

## BORING MILLS

# The ultimate in large-platform rigidity – for the heaviest jobs requiring power and accuracy.

The unmatched, solid construction of WELE's horizontal boring mills have made them the preferred solutions for the heaviest-duty applications worldwide. Designed for maximum thermal stability – the superior vibration dampening and extreme rigidity of these machines offer remarkable accuracy and rapid material removal rates.

WELE HB Series Boring Mills

- Machine bed and column made from specially formulated Meehanite cast iron for long term durability and thermal stability. Structural stability and geometric accuracy are fundamental features to the design and construction of all Wele products, including the HB series.
- Heavy duty linear roller guides provide dynamic accuracy and rigidity for heavy cutting.
- From the ease and convenience of the fully loaded Fanuc 0iM control to the handy air and coolant supply at the load position, the HB series is designed to promote ease of maintenance with convenient accessibility for the operator.

LEARN MORE ABOUT Our Boring Mills

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WELE HB SERIES



# **JT<del>E</del>KT**

# G E A R S K I V I N G

# Complete gear production - five separate machining operations in a single machine.

Since being the first to equip a skiving function within a multitasking horizontal machining center - JTEKT remains the leader in gear skiving technologies. With the industry's fastest synchronization capabilities and large tool magazines - our Gear Skiving Centers allow manufacturers to achieve the most efficient, cost-effective mass production of gear components.



GS200H

#### All gear machining processes rolled into one:

- JTEKT's gear skiving centers reduce set-up changeover time through not only integrating gear cutting, but also all processes from turning to drilling on one machine. This machine increases productivity at the same time as improving machining accuracy by completing all processes in a single chuck grasp.
- Small and compact footprint, with straightforward programming and operation.
- JTEKT not only offers advanced gear skiving machinery, but also produces the optimal tooling to ensure peak performance.

LEARN MORE ABOUT OUR GEAR SKIVING CENTERS







### TURNING CENTERS

### Maximum productivity and flexibility for hightorque, high-speed turning and milling applications.

When speed and high-torque are critical – JTEKT Machinery offers maximum turning productivity at an exceptional value. With the combined expertise of Taiwan Takisawa and Ace Micromatic - we provide the most productive, highest quality lathes and CNC turning equipment available in the industry, along with full-service technical support.



TAIWAN TAKISAWA FX1500

### JTEKT Machinery offers a complete range of turning solutions:

#### Horizontal Boxway Turning

Dependable machines with rigid boxway design for applications demanding utmost power.

#### Vertical Turning

Vertical CNC lathes designed for mass production and significantly reduced cutting times.

#### Mill-Turn Multitasking Machines

Machines developed for simultaneous milling and turning operations in a single set-up.

#### Horizontal Linear Turning

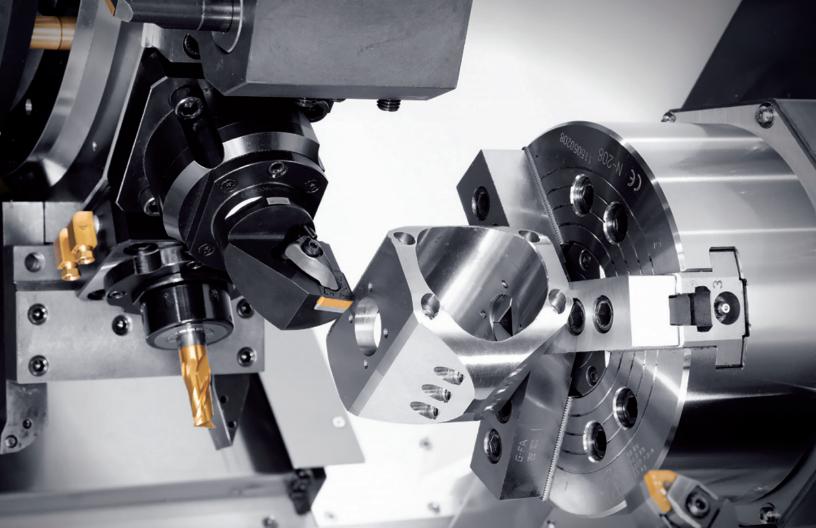
Horizontal lathes with linear guideways offering the fastest feed rates and acceleration.

LEARN MORE ABOUT OUR TURNING CENTERS

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## PALLET & ROBOT AUTOMATION

# Stay ahead of the curve with scalable pallet automation solutions and robotics.

Implementing automation can vastly transform your production processes, leading to new levels of manufacturing efficiency. From managing multiple machines through a central PC for production scheduling, to slashing set-up

times and improving throughput – JTEKT Machinery offers highly flexible automation solutions designed to streamline operations and increase capacity.



LINEAR FMS/RGV PALLET AUTOMATION

#### **Pallet Automation**

- Efficient Pallet Storage: Our flexible Metalcutting Cells allow for the storage of up to 200 pallets available in one, two, or three levels.
- High-Speed RGV: The system's rail-guided vehicle utilizes roller guideways for fast acceleration rates.
- I TIPROS FMS: Our integrated production system software. This intuitive system allows for simple operation and increases production efficiency.

#### **Robot Automation**

We offer a series of engineered robot loading solutions for multiple machine tending or complex loading scenarios. Rail-guided, pedestal, or gantry robotic pallet management allows for dedicated loading and unloading.

LEARN MORE ABOUT OUR AUTOMATION SOLUTIONS





# **JTEKT**

# SPINDLE REBUILD

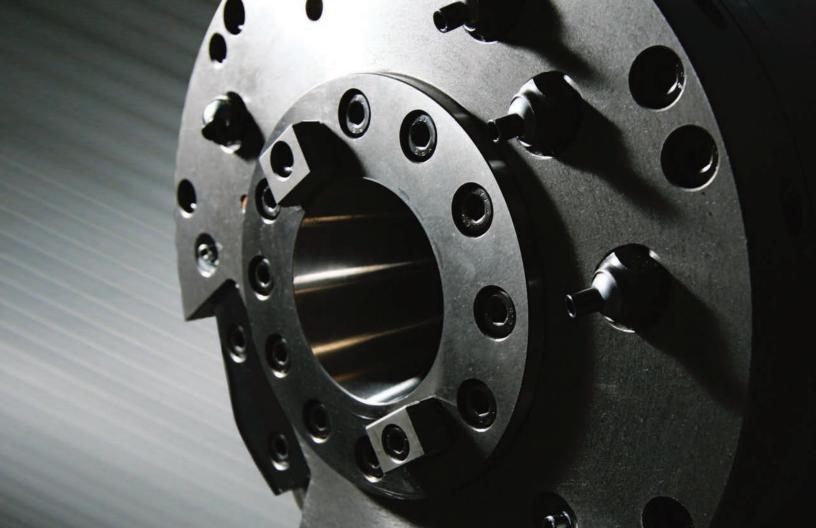
# Reduce machine downtime and keep production flowing.

Overlooking the true cost of downtime is one of the biggest errors manufacturing companies often make. We understand that every day your machine is down, you're losing money. Our vast inventory houses over 9,000 readily available OEM bearings and spare parts with over 200 spindles in-stock for immediate delivery - keeping your machine downtime at an absolute minimum. Only JTEKT engineers can rebuild our precision spindles to OEM specifications. Access to proprietary documentation and manufacturing techniques ensure that a spindle rebuilt by JTEKT will perform like new.

- OEM parts, prints and procedures
- Factory-trained rebuild technicians
- Immediate delivery of stock spindles
- 100% backed warranty
- Factory-trained field service technicians

LEARN MORE ABOUT JTEKT MACHINERY SPINDLE REBUILD







## REBUILD & REMANUFACTURING

# Extend the lifecycle of your machines with JTEKT Machinery's OEM expertise.

Our facility in Wixom, Michigan has been dedicated to the repairing and remanufacturing of machines since the 1970s. Our team of machinery experts specialize in returning overworked machining centers and grinding machines to OEM specifications. Based on your requirements and the condition of your equipment, we'll implement a fast-turnaround rebuild or a complete overhaul to get your machinery back into production.

#### Rebuilding: A quick turnaround

Subassembly rebuilding is a full or partial reconditioning of a machine component that offers a quick turnaround time in bringing the machine back to production. Our team of engineers conduct a point-by-point inspection to determine what steps are necessary.

#### Remanufacturing: A complete overhaul

We strip machines down to the base - and all major castings are steam-cleaned, sandblasted, primed, and painted. Subassemblies are assessed and repaired as needed, while parts that have metal-to-metal contact are hand scraped for perfect alignment. Each machine is thoroughly tested by our technicians before returning to your floor.

LEARN MORE ABOUT OUR REBUILD & REMANUFACTURING SERVICES







## PARTS, SERVICE & Customer support

# Your manufacturing success is our top priority.

Every JTEKT Machinery machine comes with our unmatched commitment of support. From replacement parts to technical guidance, our responsive team of in-house specialists will ensure you're running at peak performance. With our strategically placed, highly experienced field service technicians - should on-site support be needed at your facility, we're never far away. Additionally, we're proud to have one of the industry's most extensive parts inventories enabling us to fulfill requests with remarkably short turnaround times.

JTEKT Machinery provides unmatched expertise with the following family of products: JTEKT, WELE, AMS, Toyoda, and Taiwan Takisawa

- Service & Technical Support
- Controls & Applications Engineering
- Programming Training
- Maintenance Training
- Vast Parts Inventory
- Spindle Rebuilding
- Machine Evaluation
- Aftermarket Options
- Machine Repair
- Control Retrofits
- Machine Rebuilding / Hand Scraping
- Preventive Maintenance

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LEARN MORE ABOUT JTEKT MACHINERY CUSTOMER SUPPORT







#### W W W . J T E K T M A C H I N E R Y . C O M

#### **CORPORATE HEADQUARTERS**

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