COMPREHENSIVE MANUFACTURING SOLUTIONS FOR THE

AEROSPACE INDUSTRY

Mazak

The Sky's THE LIMIT

To propel their business forward in today's highly competitive global marketplace, aircraft part manufacturers are relying more on machine tool suppliers to provide them with cohesive technology capabilities and a synergy of services. That's why we are committed to offering you the most innovative manufacturing solutions and advanced application support in the aerospace industry.

In fact, with hundreds of machine tool configurations to choose from and extensive process engineering expertise, we have everything you need to optimize your metalworking operations, produce the highest quality parts, achieve increased productivity and ensure on-time part delivery.

So, whether you are producing airframe structures, jet engine parts, landing gear or systems control components from titanium, hard metals or aluminum, we can deliver the best total manufacturing solution for helping you soar above your competition — all at the lowest possible cost per part.

AIRFRAME STRUCTURES

JET ENGINE PARTS

LANDING GEAR

SYSTEMS CONTROL COMPONENTS

INNOVATIVE Manufacturing Solutions

By working closely with our aerospace customers around the world, we are able to monitor trends, identify challenges and develop a broad range of machine tool technologies that revolutionize the processing of aircraft components and major assemblies. Those technologies include:

- Multi-Tasking machines for highly efficient DONE IN ONE® part processing, improved part accuracy and advanced machining capability and flexibility
- Machines with long-boring capability, high-torque and high-speed spindles, and unique features for the rigors of aircraft machining
- Advanced CNC machine controls for faster 5-axis machining and superior part surface finishes
- Automated pallet systems for continuous unattended machining and processing versatility

ADVANCED Applications Support

With our regional-based support network, well-established machine service infrastructure, expert industry partners and complete understanding of your unique machining challenges, we offer the best, most comprehensive support in the aerospace industry.

- Our eight regional Technology Centers and a Technical Center put component machining demonstrations, experienced application engineers and comprehensive training in close proximity to you.
- These Technology Centers also play a key role in channeling customer input to Mazak manufacturing for the development of new machine tool technology.
- As part of our Value Inspired Partners (VIP) program, we work with certified technology partners to provide you with optimized turnkey aerospace manufacturing solutions.
- Our proficiency in all of the industry-leading CAM systems allows us to help you optimize your 5-axis programming no matter what system you are running.
- Our Optimum Plus total support program fulfills all of your parts, service and training needs to ensure you get the maximum return on your machine investment.
- We provide secure applications development and complete design privacy of your individual manufacturing system.

STRUCTURAL PARTS

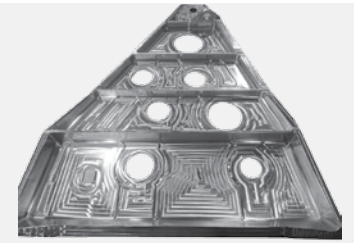
For processing structural parts, we have a wide variety of precision-focused machines with several productivity-enhancing features that can reduce your part cycle times and machine non-cut times — ultimately providing you with extremely high production levels and a low cost of ownership.

Part Types:

- Fuselages
- Wings
- Tail Assemblies
- Bulkheads
- Exit Doors
- Cockpits
- Engine Pylons
- Air Ducts

Materials:

- Aluminum
- Titanium

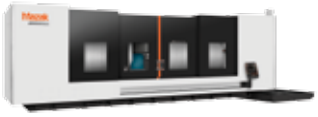


Machine Characteristics:

- High-Torque Spindles
- High-RPM Spindles
- Solid Table Construction
- Full Simultaneous 5-Axis Capabilities
- Precision Roller Gear Cams
- Stable, Accurate Roller Guide System
- Fast Rapid Traverse Speeds
- Highly Advanced CNC Programming
- Ease of Operation

Machine Recommendations:

HCN Series
Horizontal machining centers that combine outstanding value with high-performance features to achieve maximum productivity when working with virtually any type of material.



SVC-2000L Series
Traveling column vertical machining centers with high-speed X-axis linear motors for reducing non-cutting time.

VARIAXIS i-Series
Multi-Tasking machines that deliver full simultaneous 5-axis machining for DONE IN ONE processing of long workpieces and those requiring precision-machined complex curved surfaces.

VCN Series
Vertical machining centers that bring versatility, high positioning accuracy and repeatability to high-speed and heavy-torque machining applications.

VERSATECH Series
Multiple-surface 5-axis double-column machining centers that provide unsurpassed productivity in the machining of very large workpieces thanks to spindle heads that can position to the vertical and horizontal positions and any angle in-between.

	HCN SERIES	SVC-2000L SERIES
Minimum – Maximum Workpiece Dimensions (Ranges)	Ø24.8" x 35.43" – Ø94.94" x 78.74"	120" – 200" x 20" x 20"
Pallet Size (Ranges)	15.75" x 15.75" – 49.21" x 49.21"	—
Travel (X/Y/Z) (Ranges)	22.05" / 25.2" / 25.2" to 86.61" / 62.99" / 72.83"	120" / 20.08" / 20.08" to 200" / 20.08" / 20.08"
Travel (A/B/C)	—	—
Spindle (30 min. rating) (Ranges)	30 – 50 HP 8,000 – 18,000 RPM	30 HP 15,000 RPM
Rapid Traverse Rate (X/Y/Z) (Ranges)	2,047 IPM and 2,362 IPM	4,725 / 1,968 / 1,968 IPM
Tool Shank	CAT-40 and CAT-50	CAT-40
Tool Storage Capacity (Standard)	40 – 80	30
Floor Space Requirement (Ranges)	87" x 214.72" – 239.41" x 349.13"	224.41" x 141.3" – 411.81" x 169.45"

VORTEX 1400/160-II
A double-column vertical machining center that performs full simultaneous 5-axis machining via a ±40-degree tilting/rotary spindle.

VORTEX e-1250V/8
A vertical machining center with tilt spindle that performs simultaneous 5-axis machining and multiple-surface machining in single setups.

VHP 160XP
Standard equipped with a powerful 107-hp, 30,000-rpm HSK-A63 integral spindle motor, this horizontal machining center quickly cuts through a wide variety of challenging materials. A 30,000 rpm, 160-hp integral spindle motor with HSK-A63/80 interface is also available.

	VARIAXIS i-SERIES	VCN SERIES	VERSATECH SERIES	VORTEX 1400/160-II	VORTEX e-1250V/8	VHP 160XP
Minimum – Maximum Workpiece Dimensions (Ranges)	Ø19.69" x 13.78" – Ø49.21" X 35.43"	35.4" x 16.1" x 22.4" – 80" x 27.5" x 33"	72" x 120" x 384"	160" x 50" x 24"	57.090" x 62.990"	157.48" x 62.99" x 19.68"
Pallet Size (Ranges)	19.69" x 15.75" – 41.34" x 31.50"	35.4" x 16.1" – 80" x 27.5"	82.86" X 118" – 122" x 393.70"	—	31.50" – 39.37"	157.48" x 62.99"
Travel (X/Y/Z) (Ranges)	13.78" / 21.65" / 20.08" to 47.24" / 54.53" / 35.43"	19.69" / 16.93" / 20.08" to 80" / 27.56" / 28.35"	157.48" / 141.73" / 27.95" to 433.07" / 181.10" / 27.95"	165" / 55" / 24"	73.82" / 49.21" / 52.95"	165.35" / 59.06" / 21.65"
Travel (A/B/C)	-120° +30° / –– / ±360°	—		±40° / ±40° / —	— / 150° / 360°	±110° / — / 360°
Spindle (30 min. rating) (Ranges)	30 – 50 HP 10,000 – 12,000 RPM	15 HP 20,000 RPM	25 – 48 HP 6,000 / 8,000 / 12,000 RPM	50 HP / 10,000 RPM	40 HP 10,000 RPM	160 HP 30,000 RPM
Rapid Traverse Rate (X/Y/Z) (Ranges)	2,362 / 2,362 / 2,205 IPM to 1,653 / 1,653 / 1,653 IPM	1,417 / 1,417 / 1,417 IPM to 1,181 / 1,181 / 1,181 IPM	787 / 787 / 709 IPM to 590.6 / 1,181 / 1,181 IPM	787 / 1,260 / 787 IPM	1,654 IPM	1,378 / 1,181 / 1,181 IPM
Tool Shank	CAT-40 and CAT-50	CAT-40 and CAT-50	CAT-50	CAT-50	CAT-50	HSK-A63 / 80 mz
Tool Storage Capacity (Standard)	30	30	30	30	42	30
Floor Space Requirement (Ranges)	94.49" x 120.47" – 137" x 305"	59" x 116.3" – 137.2" x 196"	299.21" x 537.8" – 331.39" x 985.43"	470.67" x 224.21"	204.72" x 315.34"	406.06" x 368.6"

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

ENGINE COMPONENTS

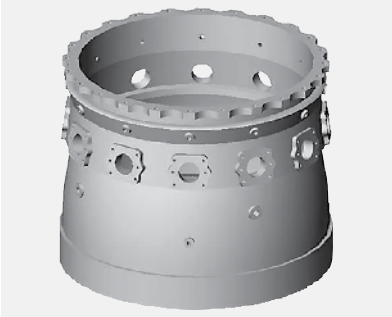
When it comes to processing engine components, we have a wide variety of Multi-Tasking solutions that can simplify your workflow, increase capacity and improve profitability. By creating complex engine parts on a single machine with a single setup, not only do you boost your machining flexibility, you also eliminate the inaccuracies that can occur when having to move parts across multiple workstations.

Part Types:

- Blisks
- Blades
- Discs
- Casings
- Shafts
- Turbine Rings
- Nacelles
- Turbo Housings
- Fittings
- Ducts
- Thrust Reverser Components
- Impellers
- Impeller Brackets

Materials:

- Titanium
- Heat Resistant Super Alloys
- Aluminum
- Stainless Steels



Machine Characteristics:

- High-Torque Spindles
- High-Torque Tables
- Multi-Tasking With Full 5-Axis Capabilities
- Precision Roller Gear Cams
- Stable, Accurate Roller Guide System
- Highly Advanced CNC Programming
- Ease of Operation

Machine Recommendations:

INTEGREX e-H Series
The perfect fusion of a CNC turning center and a full 5-axis machining center for the DONE IN ONE processing of large parts with complex geometries. These Multi-Tasking machines offer incredible productivity and efficiency gains to those working with these types of components.

INTEGREX i-Series
Multi-Tasking machines with full simultaneous 5-axis capabilities and a milling spindle with the same level of power as found in a machining center. Offering fast, reliable and accurate performance, these machines achieve high-speed, high-power milling and heavy-duty facing.

INTEGREX e-V Series
Multi-Tasking machines that offer robust turning operations as well as capabilities for machining multiple faces. Simultaneous 5-axis machining allows for the production of parts with highly complex geometries.

VARIAXIS i-Series
Multi-Tasking machines that deliver full simultaneous 5-axis machining for DONE IN ONE processing of long workpieces and those requiring precision-machined complex curved surfaces.

	INTEGREX e-H SERIES	INTEGREX e-V SERIES	INTEGREX i-SERIES	VARIAXIS i-SERIES
Minimum – Maximum Workpiece Dimensions (Ranges)	Ø26.3" x 60" – Ø51.1" x 320"	Ø41.3" x 137"– 40" x 71"	Ø13.9" x 33.6"– Ø25.9" x 98"	Ø19.69" x 13.78" – Ø49.21" x 35.43"
Pallet Size (Ranges)	—	Ø31.5" x 118.11"	—	19.69" x 15.75" – 41.34" x 31.50"
Travel (X/Y/Z) (Ranges)	33.27" / 16.54" / 62.32" to 51.1" / 31.4" / 320"	60.04" / 41.73" / 52.95" to 120.28" / 72.83" / 70.87"	17.7" / 8.27" / 35.5" to 24.2" / 19.8" / 100.9"	13.78" / 21.65" / 20.08" to 28.74" / 33.46" / 22.05"
Travel (A/B/C)	— / 240° / 360°	— / 150° / 360°	240° / 360°	-120 / +30° / — / ±360°
Spindle (30 min. rating) (Ranges)	40 – 60 HP 1,600 – 4,000 RPM	50 – 60 HP 75 – 600 RPM	15 – 40 HP 3,300 – 6,000 RPM	30 – 50 HP 10,000 – 18,000 RPM
Second Spindle (30 min. rating) (Ranges)	40 – 60 HP 1,600 – 4,000 RPM	—	15 – 35 HP 4,000 – 6,000 RPM	—
Milling Spindle (30 min. rating) (Ranges)	30 – 50 HP 10,000 – 12,000 RPM	50 HP 5,000 RPM	10 – 30 HP 12,000 – 20,000 RPM	—
Rapid Traverse Rate (X/Y/Z) (Ranges)	1,969 / 1,969 / 1,969 IPM to 1,575 / 1,575 / 1,575 IPM	1,969 / 1,969 / 1,969 IPM to 1,575 / 1,575 / 1,575 IPM	1,575 / 1,575 / 1,575 IPM	2,362 / 2,362 / 2,205 IPM to 1,653 / 1,653 / 1,653 IPM
Tool Shank	CAT-40 or CAT-50, BIG PLUS and CAPTO C6 or C8	CAT-50, CAPTO HSK	HSK, CAPTO and KM	CAT-40 and CAT-50 HSK
Tool Storage Capacity (Standard)	40	40	36 ~ 220T	30
Floor Space Requirement (Ranges)	132.2" x 290.1" to 226" x 630"	220.47" x 281.50" to 241.86" x 471.26"	120" x 99" to 252" x 111"	94.49" x 120.47" to 106.1" x 211.18"

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

LANDING GEAR

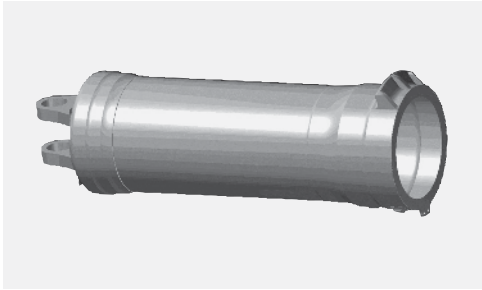
There is a lot riding on your machine tool selection when it comes to processing landing gear. That's why we offer a wide variety of solutions that can accurately machine complex contours on parts, such as axle beams and main cylinders, as well as bore high precision holes with complete repeatability. Furthermore, our long-bed machines can significantly decrease your part cycle times by eliminating the excessive handling of workpieces.

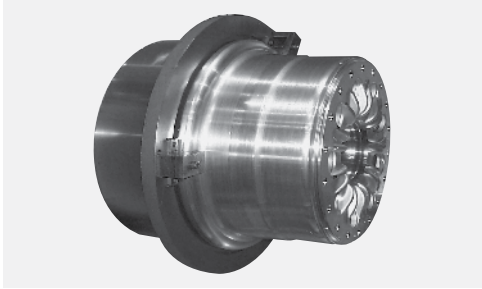
Part Types:

- Axle Beams
- Main Cylinders
- Sliders
- Links
- Brackets
- Brakes
- Shafts

Materials:

- Titanium





Machine Characteristics:

- Long Boring Bar with Deep Hole Capability
- High-Torque Turning and Milling Spindles
- 5-Axis Spline Interpolation
- Precision Roller Gear Cams
- Stable, Accurate Roller Guide System
- Highly Advanced CNC Programming
- Ease of Operation

Machine Recommendations:

INTEGREX e-H Series
The perfect fusion of a CNC turning center and a full 5-axis machining center for the DONE IN ONE processing of large parts with complex geometries. These Multi-Tasking machines offer incredible productivity and efficiency gains to those working with these types of components.

SLANT TURN Series
Heavy-duty CNC turning centers that efficiently machine large, long-shaft workpieces. Select models in the series feature rotary tool spindles that perform roughing, grooving, end milling and face milling, allowing for the completion of several processes in a single machine cycle.

	INTEGREX e-H SERIES	SLANT TURN SERIES
Minimum – Maximum Workpiece Dimensions (Ranges)	Ø26.3" x 60" – Ø51.1" x 320"	Ø35.8" x 160" – Ø42 x 160"
Pallet Size (Ranges)	—	—
Travel (X/Y/Z) or (X/Z/W) (Ranges)	33.27" / 16.54" / 62.32" to 51.1" / 31.4" / 320"	18.31" / 46.12" / 34.25" to 18.31" / 85.24" / 82.01"
Travel (A/B/C)	— / 240° / 360°	—
Spindle (30 min. rating) (Ranges)	40 – 60 HP 1,600 – 4,000 RPM	80 HP 500 – 1,600 RPM
Spindle Bore (Ranges)	Ø3.58" – Ø10.8"	Ø7.28" – Ø22"
Milling Spindle (20& ED) (Ranges)	30 – 50 HP 10,000 – 12,000 RPM	—
Rotary Tool Spindle (4 min. rating) (Ranges)	—	10 HP / 4,000 RPM
Rapid Traverse Rate (X/Y/Z) (Ranges)	1,969 / 1,969 / 1,969 IPM to 1,575 / 1,575 / 1,575 IPM	788 / — / 945 IPM
Tool Shank	CAT-40 or CAT-50, BIG PLUS and CAPTO C6 or C8	—
Tool Storage Capacity (Standard)	40	12
Floor Space Requirement (Ranges)	132.2" x 290.1" – 22"6 x 630"	274.21" x 96.03" – 364.96" x 117.72"

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

SYSTEM CONTROL COMPONENTS

Precision is everything in aerospace machining. So, when it comes to processing systems control parts for aircraft, which often involve small, intricate components, we have an unlimited number of solutions that provide the highest possible levels of cutting accuracy, surface finishing and complex contouring.

Part Types:

- Covers
- Housings
- Gears
- Gear Boxes
- Shafts
- Hydraulic Manifolds
- Stick Shakers
- Flap Traps
- Control Surfaces
- Electric Connectors
- Manifolds
- Engine Controls

Materials:

- Titanium
- Steel

Machine Characteristics:

- High-RPM Spindles
- Full Simultaneous 5-Axis Capabilities
- Precision Roller Gear Cams
- Stable, Accurate Roller Guide System
- Highly Advanced CNC Programming
- Ease of Operation

Machine Recommendations:

INTEGREX i-Series
Multi-Tasking machines with full simultaneous 5-axis capabilities and a milling spindle with the same level of power as found in a machining center. Offering fast, reliable and accurate performance, these machines achieve high-speed, high-power milling and heavy-duty facing.

VCN Series
Vertical machining centers that bring versatility, high positioning accuracy and repeatability to high-speed and heavy-torque machining applications.

VARIAXIS i-Series
Multi-Tasking machines that deliver full simultaneous 5-axis machining for DONE IN ONE processing of long workpieces and those requiring precision-machined complex curved surfaces.

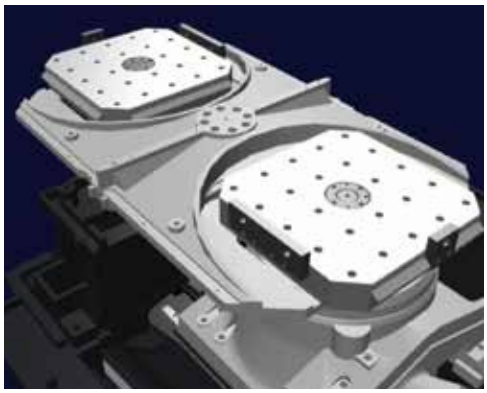
VC Series
These highly versatile Vertical Machining Centers bring advanced technology and value to high precision small-parts machining for various industries. Available in 3-axis fixed table and 5-axis rotary/tilt table configurations, all VC models share the same small footprint, allowing them to fit into virtually any manufacturing facility.

	INTEGREX i-SERIES	VARIAXIS i-SERIES	VCN SERIES	VC SERIES
Minimum – Maximum Workpiece Dimensions (Ranges)	Ø13.9" x 33.6"– 25.9" x 98"	Ø19.69" x 13.78" – Ø49.21" x 35.43"	35.4" x 16.1" x 22.4" – 80" x 27.5" x 33"	13.7" x 11.8" x 12" – 35.4" x 19.6" x 12"
Pallet Size (Ranges)	—	19.69" x 15.75" – 41.34" x 31.50"	35.4" x 16.1" – 80" x 27.5"	15.7" x 11.8" – 19.6" x 40"
Travel (X/Y/Z) (Ranges)	17.7" / 8.27" / 35.5" to 24.2" / 19.8" / 100.9"	13.78" / 21.65" / 20.08 " to 28.74" / 33.46" / 22.05"	19.69" / 16.93" / 20.08" to 80" / 27.56" / 28.35"	11.8" / 11.8" / 20" to 40" / 19.8" / 20"
Travel (A/B/C)	240° / 360°	-120 / +30° / — / ±360°	—	B ±20° - (-) 120°/ C-+ /- 360° --B (+)95°- (-)45°
Spindle (30 min. rating) (Ranges)	15 – 40 HP 3,300 – 6,000 RPM	30 – 50 HP 10,000 – 18,000 RPM	15 HP 6,000 – 20,000 RPM	10 – 15 HP 10,000 – 20,000 RPM
Second Spindle (30 min. rating) (Ranges)	10 – 35 HP 4,000 – 6,000 RPM	—	—	—
Milling Spindle (20% ED) (Ranges)	10 – 30 HP 12,000 – 20,000 RPM	—	—	—
Rapid Traverse Rate (X/Y/Z) (Ranges)	1,575 / 1,575 / 1,575 IPM	2,362 / 2,362 / 2,205 IPM to 1,653 / 1,653 / 1,653 IPM	1,417 / 1,417 / 1,417 IPM to 1,181 / 1,181 / 1,181 IPM	945 IPM
Tool Shank	HSK, CAPTO and KM	CAT-40, CAT-50 HSK	CAT-40 and CAT-50	CAT-40 and BIG PLUS
Tool Storage Capacity (Standard)	36 ~220T	30	60	20 – 30
Floor Space Requirement (Ranges)	120" x 99" to 252" x 111"	94.49" x 120.47" to 106.1" x 211.18"	59" x 116.3" to 137.2" x 196"	38.5" x 96.4" x 104.3" to 108.3" x 125" x 131.8"

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

AUTOMATION OPTIONS

With an efficient automation solution added to your aerospace part-processing operations, you can improve your machine tool utilization and gain a significant competitive advantage. Through our own internal capabilities and strategic partnerships, we can provide you with a standardized or customized automation system that offers immediate benefits for increased productivity, including higher levels of consistent quality.



TWO-PALLET CHANGER

Two-pallet changers increase the spindle utilization on our horizontal machining centers and Multi-Tasking solutions, allowing for continuous, uninterrupted production. This simple and efficient automation feature enhances productivity by allowing operators to load, unload and inspect parts on one pallet, while the machine continues to work uninterrupted on parts fixtured on the other pallet.

SERVO DRIVEN TAILSTOCK AND STEADY REST

CNC programmable tailstocks provide our turning centers with simple, precise and automatic control of Z-axis directional movement and thrust force settings. The electronic AC servomotor and ball screw-driven tailstock generates consistent holding pressure for supporting long, heavy workpieces to ensure consistent high-accuracy turning. For even more accuracy and repeatability, a steady rest eliminates problems with concentricity and chatter when machining slim, shaft-type workpieces.

PALLETECH SYSTEM

Our pre-engineered PALLETECH System makes fully automated unattended production possible on a wide range of our horizontal machining centers and Multi-Tasking solutions. Available in single, double and triple level pallet stocker configurations, the system's modular construction allows it to grow its capabilities as workpiece complexity and job volumes increase. PALLETECH accommodates up to 16 machines, 6 to 240 pallets and as many as 8 loading stations.

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

CAM SYSTEMS

CAM software, which generates part-machining programs for CNC machine tools, is essential for the quick and accurate processing of aerospace parts with complex geometries. However, with the wide variety of CAM software available today, it can be difficult to differentiate between the intricacies of each one as they relate to your application requirements.

At Mazak, we have proficiency in all of the leading CAM systems, which enables us to help you optimize your Multi-Tasking and 5-axis programming no matter what system you are running inside your shop.

OUR EXTENSIVE CAM SOFTWARE EXPERIENCE can assist you in tasks that include:

- Determining the best possible CAM system for your needs
- Programming every machine tool in your shop in a uniform manner
- Reading any type of electronic data and manipulating it for machining efficiency
- Generating efficient tool paths for a variety of complex geometries quickly and easily
- Simulating the machining process in a virtual environment to ensure program accuracy
- Producing clear, easy-to-understand process setup documentation for the shop floor

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

EASY PROGRAMMING AND FAST MACHINING

Whether you're running 3-axis or Multi-Tasking operations, we're able to meet your unique aerospace requirements through our advanced control technology that perfectly complements our machine tools and systems.

MAZATROL SmoothG CNC

Highly optimized programming for complex workpiece geometries

- HCN Series
- SLANT TURN Series
- SVC-2000L Series
- VC Series (selected machines)
- VCN-430A
- VCN-430B
- VCN-530C

The MAZATROL SmoothG CNC simplifies operations when processing parts through off-centerline machining as well as angled drilling, milling and tapping. A variety of innovative programming, performance and monitoring functions allow it to provide high-speed, high-accuracy machining. Advanced hardware such as a tilting CNC panel and intuitive, multi-touch control screen allows for complete ease of use, while an SD card stores up to 32GB of program data.

Product images are for illustration purposes only and may not be exact representations of the products. Mazak reserves the right to change product images and specifications at any time without notice.

MAZATROL SmoothX CNC

Revolutionary programming for highly complex workpiece geometries

- INTEGREX e-H Series
- INTEGREX e-V Series
- INTEGREX i-Series
- VARIAXIS i-Series
- VERSATECH Series
- VORTEX e-1250V/8

As the fastest, most progressive CNC on the market, the user-friendly MAZATROL SmoothX ensures the shortest possible machining cycle times, especially in fine increment programs for simultaneous 5-axis operations. Innovative software functions, including High Gain Feed Forward Control, Smooth Corner Control and Variable Acceleration Control, bring maximum productivity to highly complex parts production. Advanced hardware such as a tilting CNC panel and intuitive, multi-touch control screen allows for complete ease of use, while an SD card stores up to 32GB of program data.

Product images are for illustration purposes only and may not be exact representations of the products.
Mazak reserves the right to change product images and specifications at any time without notice.

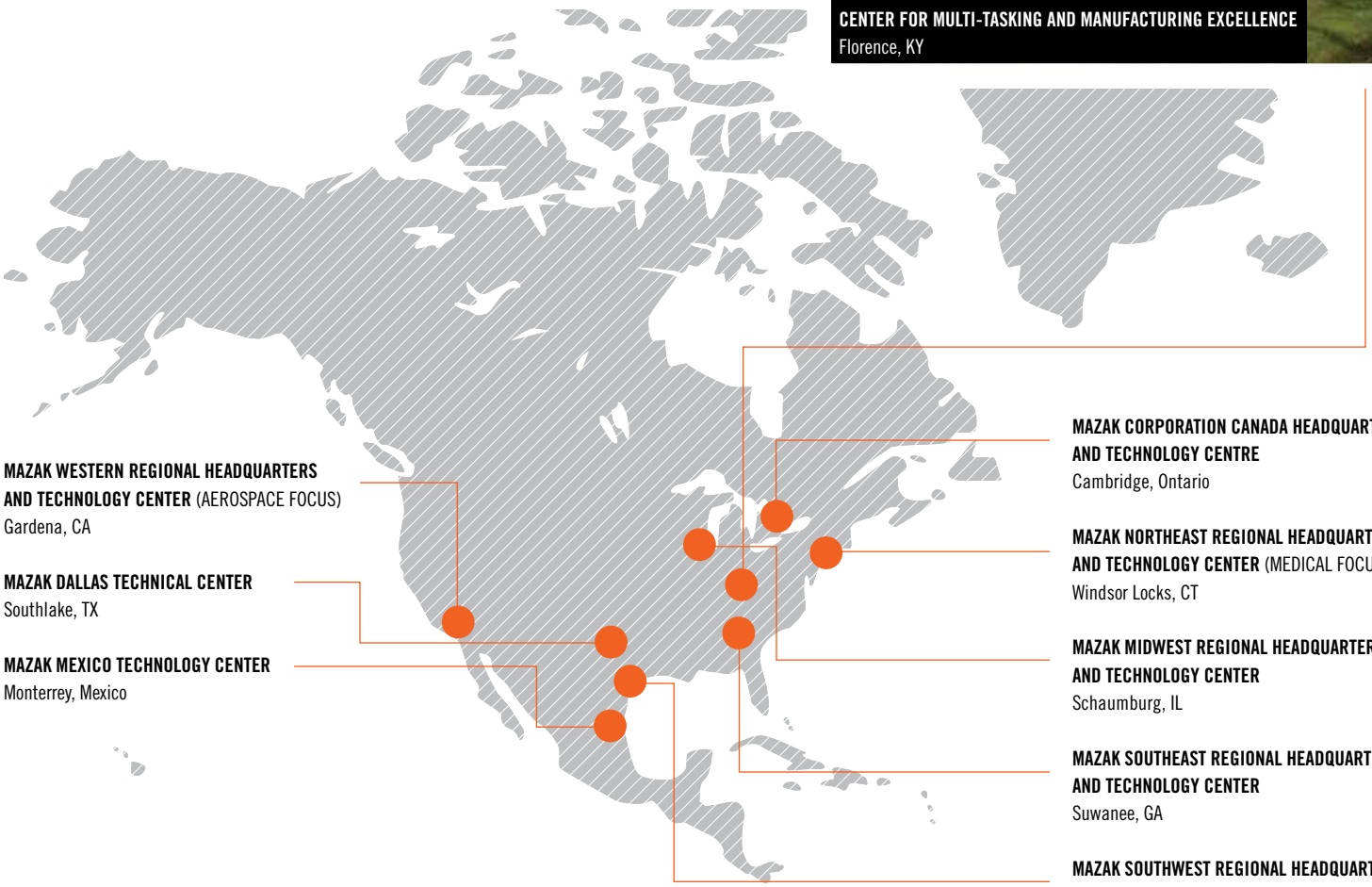
WE'VE GOT YOUR BACK

We believe in working closely with each of our aerospace customers to increase their productivity, efficiency and equipment utilization, and we are able to do so through our Technology Centers and Optimum Plus total support program.

Technology and Technical Centers

Our eight Technology Centers and a Technical Center spread across North America provide easy access to the latest, most advanced manufacturing systems for optimizing your part-production processes. You can also take advantage of each location's industry expertise, training programs and application resources to achieve improved throughput, shorter production lead times and increased profitability.

MAZAK NATIONAL TECHNOLOGY CENTER & CENTER FOR MULTI-TASKING AND MANUFACTURING EXCELLENCE
Florence, KY



MAZAK WESTERN REGIONAL HEADQUARTERS AND TECHNOLOGY CENTER (AEROSPACE FOCUS)
Gardena, CA

MAZAK DALLAS TECHNICAL CENTER
Southlake, TX

MAZAK MEXICO TECHNOLOGY CENTER
Monterrey, Mexico

MAZAK CORPORATION CANADA HEADQUARTERS AND TECHNOLOGY CENTRE
Cambridge, Ontario

MAZAK NORTHEAST REGIONAL HEADQUARTERS AND TECHNOLOGY CENTER (MEDICAL FOCUS)
Windsor Locks, CT

MAZAK MIDWEST REGIONAL HEADQUARTERS AND TECHNOLOGY CENTER
Schaumburg, IL

MAZAK SOUTHEAST REGIONAL HEADQUARTERS AND TECHNOLOGY CENTER
Suwanee, GA

MAZAK SOUTHWEST REGIONAL HEADQUARTERS AND TECHNOLOGY CENTER (ENERGY FOCUS)
Houston, TX

Click here for more information on Mazak Technology Centers.

Optimum Plus

This total support program represents our company-wide commitment to helping you maximize the value of your Mazak purchase, achieve the best possible competitive advantage and keep your equipment running smoothly at all times.

The program encompasses five distinct areas to ensure complete customer care.

SINGLE-SOURCE SERVICE

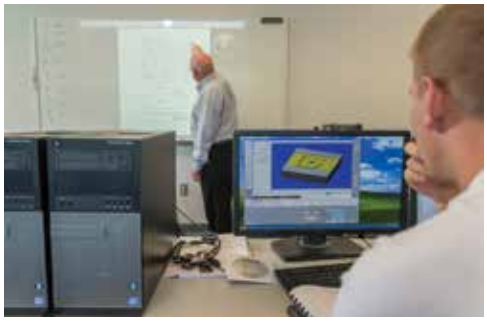
We are your single point of contact for any Mazak-related service need, whether it involves a machine, control, accessory or automation solution.

MACHINE & CNC SUPPORT

Every Mazak machine comes with a comprehensive warranty, free technical phone support and software upgrades for the entire life of the product.

PARTS SUPPORT

We have the industry's largest inventory of spare parts, ensuring 97% same-day shipping on part orders. Click here to register for after hours parts support.



PROGRESSIVE LEARNING

We partner with our customers to train them to achieve the highest levels of productivity and profitability.

SPINDLE & UNIT REBUILD

Our industry-leading exchange and rebuild program offers new and remanufactured spindles, index tables, ATC shifters and milling turrets for 24-hour shipment.

GLOBAL SUPPORT NETWORK

MAZAK PROVIDES TOTAL BEFORE AND AFTER SALES AND SUPPORT

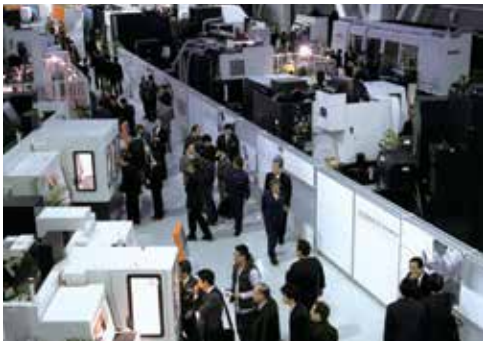
FAST SPARE PARTS DELIVERY

To consistently achieve high machine uptime and maximum performance, it is imperative that spare parts are available as quickly as possible when they are needed. The World Parts Center is designed to supply spare parts worldwide 24 hours a day, 365 days a year. The World Parts Center works closely with our regional parts centers all over the world to ensure that they are properly stocked to support the installed base of machines in each region.

TECHNOLOGY AND TECHNICAL CENTERS

Yamazaki Mazak has established more than 38 Technology Centers and 40 Technical Centers in more than 20 countries. In addition to providing machine demonstrations and introductions to advanced technology and concepts, our Technology and Technical Centers have been established to provide opportunities for our customers to learn how to improve productivity with their machine tools after they have been purchased and installed.

The Technology and Technical Centers are the local bases for our team of highly skilled service engineers that provide support to customers wherever their manufacturing facilities are located.



WORLDWIDE R&D CENTERS

Yamazaki Mazak has established strong R&D Centers in all of its manufacturing plants so that product development can consistently reflect local customer requirements as quickly as possible.

MAZAK GLOBAL SUPPORT NETWORK

The worldwide production base and the worldwide network of Technology Centers and Technical Centers provides technical support for higher productivity and timely service.

EUROPE
Yamazaki Mazak U.K. Ltd.

CHINA
Ningxia Little Giant Machine Tool Co., Ltd.

SOUTHEAST ASIA, INDIA AND OCEANIA
Yamazaki Mazak Singapore Pte., Ltd.

JAPAN
Yamazaki Mazak Corporation

NORTH, CENTRAL AND SOUTH AMERICA
Mazak Corporation

JAPAN
Yamazaki Mazak Minokamo Corporation
Minokamo Plant 1

JAPAN
Yamazaki Mazak Minokamo Corporation
Minokamo Plant 2

JAPAN
Yamazaki Mazak Seiko Corporation

JAPAN
Yamazaki Mazak Optonics Corporation

Mazak

www.MazakUSA.com

MAZAK CORPORATION
NORTH AMERICAN MANUFACTURING HEADQUARTERS
8025 Production Drive, Florence, KY 41042
Tel: (859) 342-1700 Fax: (859) 342-1865

9_17_IND_AERO_B

COMPREHENSIVE MANUFACTURING SOLUTIONS FOR THE AEROSPACE INDUSTRY