

MANUFACTURING & ENGINEERING SOLUTIONS

DRIVING YOUR BUSINESS



**IN TODAY'S
FAST-CHANGING
WORLD, YOU
NEED TECHNICAL
EXPERTISE AND
THE ABILITY TO
DEPLOY PEOPLE.**



OUR EXPERIENCE MOVING YOU FORWARD.

I've stood in your shoes many times during my 40 plus years of engineering and manufacturing experience with the U.S. Air Force, General Dynamics, Indian Motorcycles, and as the owner and operator of my machine shop. You need an innovative solution, you need it now, and nothing you can find is quite right for your company's challenges.

THAT'S WHY WE'RE HERE.

At Jupiter, we're a first-class engineering and manufacturing team dedicated to designing, building, and deploying high-quality industrial manufacturing solutions.

Since the 1980s, we've serviced, repaired, rebuilt, and overhauled an endless array of CNC machine tool brands and models across North America.

We've cemented our reputation with industry leaders like Toyota, GE Nuclear, and Smith & Wesson by taking on the challenges no one else could or would – and delivering.

When you purchase a Jupiter machine tool, order a custom-engineered solution, or request a laser alignment and calibration you're joining that long list of elite, satisfied customers that rest easy at night knowing their most difficult problems are in the hands of their most trusted and experienced partner.

As Chairman & CEO of Jupiter, I speak for all of our team members when I say that we can't wait to start building that same relationship of success with you.

Ray Whitehead

RAY WHITEHEAD Chairman & CEO



WORLD CLASS CNC MACHINE TOOLS

TAPPING CENTERS



Jupiter's tapping centers are expertly designed to withstand blinding speeds and extreme tolerances for a best-in-class value. Our custom oversized spindle bearings boost rigidity without sacrificing speed. With traditional table or twin-pallet configurations, your new JTC will push your shop's productivity to new heights.

Travel Range X:
19.7 to 29.5 inches

Travel Range Y:
14.9 to 21.6 inches

VERTICAL MACHINING



Jupiter's VMCs range from ultra-fast, compact VMCs for machining delicate 3C components and medical implants to quad-box way powerhouses that can tear through your toughest materials with ease. Jupiter's comprehensive VMC lineup gets it done faster, better, and easier than any other application.

Travel Range X:
29.5 to 79.9 inches

Travel Range Y:
15.7 to 31.5 inches

TURNING



Jupiter offers a wide range of turning solutions from basic 2-axis configurations to live-tooling arrangements and even sub-spindle designs. Both horizontal and vertical solutions will meet your every need. Contact us today for custom quotations on oil & gas horizontal lathes or heavy-duty VTLs.

Chuck Sizes:
6 inches and up

Max Turning Length:
Up to 6 meters

HORIZONTAL MACHINING



Jupiter's HMCs pack unparalleled performance into compact footprints. Available in single and twin-pallet configurations with a wide selection of powerful options, our team will help you choose which machine is right for you.

Pallet Size Range:
380 to 1000 mm per side

Pallet Counts:
Single, Twin, and Multi-pallet

5-AXIS MACHINING



Jupiter's 5-Axis Vertical Machining Center can tackle even the most complex geometries in small volumes. Contact us to get all the performance at only half the price.

Table Diameter:
25.6 inches and up

Max Workpiece Height:
19.7 inches

BRIDGE & GANTRY



Jupiter's range of bridge and gantry mills can handle even the most challenging oversized workpieces. With artisanal attention to detail and outstanding casting rigidity, your mill will reliably machine on mammoth workpieces weighing hundreds of tons measuring up to 135 feet in length.

Travel Range X:
86 to 1,575 inches

Travel Range Y:
59 to 196 inches

JUPITER QUALITY COMES FROM WITHIN



ULTRA-PRECISE BALL SCREWS

C1 grade ball screws maximize positioning accuracy and repeatability over many years of constant machining.



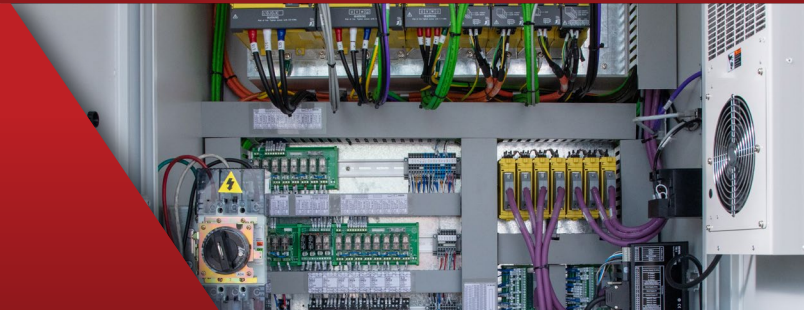
ADVANCED CNC CONTROLS

Every Jupiter machine is equipped with fully-featured, industry-leading CNC control packages featuring oversized screens and full keyboards.



SUPER RIGID CASTINGS

At the heart of every Jupiter machine is a super rigid Meehanite casting produced to the most exacting requirements of density and consistency.



ELECTRICAL EXCELLENCE

High-quality electrical relays, boards, and wiring harnesses are designed to function flawlessly for many years.

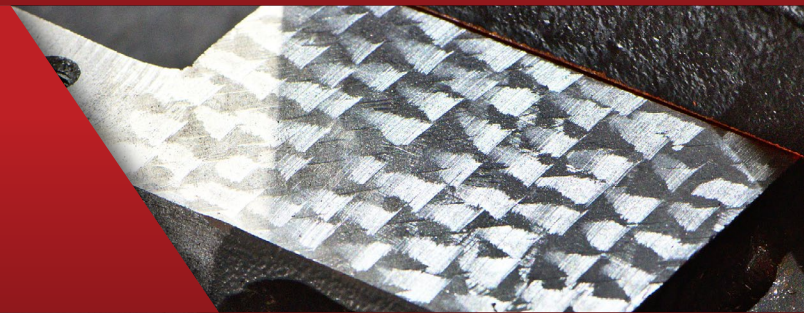
POWERFUL SERVOMOTORS

Each spindle and motion axis is driven by the highest quality, most powerful motors on the market to ensure optimum machining performance under all conditions.



ARTISANAL SCRAPING

All ways and mating surfaces are hand-scraped by Master Scrapers to ensure the best possible contact and precision of assembly.



BRILLIANT BEARINGS

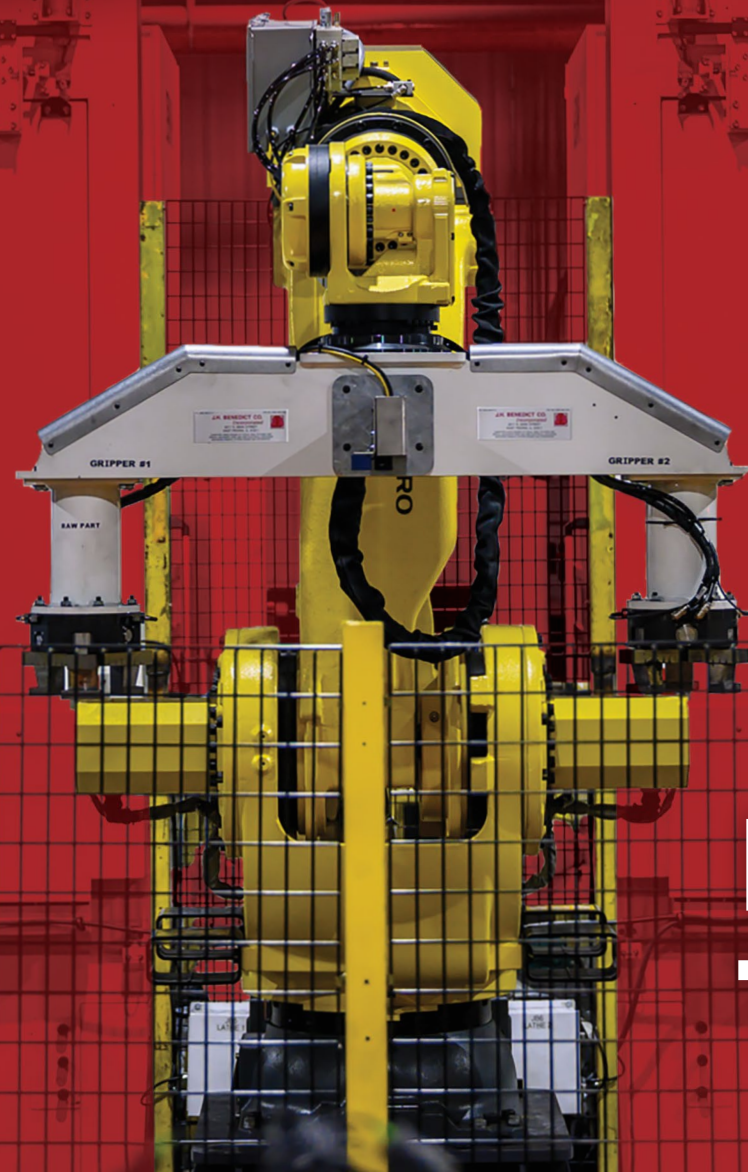
Jupiter spindles feature best-in-class bearing assemblies from leading Japanese manufacturers.



HIDDEN QUALITY

Jupiter machines are full of hidden flourishes of quality, such as copper lubrication lines instead of plastic or aluminum. Copper costs a little bit more for us, but lasts a great deal longer for you.

UPTIME IS A GUARANTEE



NOT A TARGET

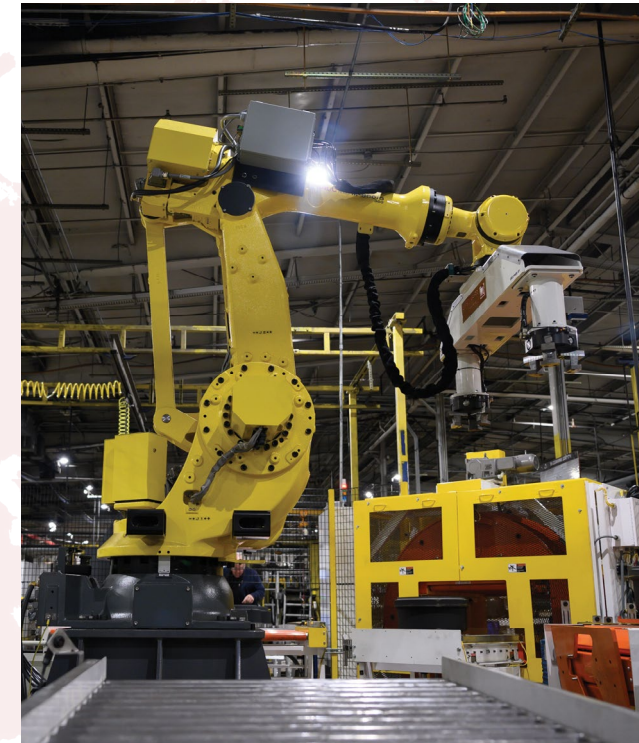
USE OUR EXPERIENCE TO GROW

Whether you're a student aspiring to become a machinist, a small shop needing guidance, or a multi-floor plant with hundreds of machining centers, Jupiter's mission is to help you accomplish your goals more efficiently.

Jupiter employees have years of international experience, working with clients ranging from Toyota, U.S. Air Force, and BNSF Railway to small, independent contractors.

In the repair business alone, we have 45 years of experience in industrial production, including CNC machines, lasers, plasma, and presses. We leverage our extensive knowledge and technology to design the right support for the applications you need.

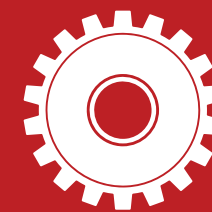
The reality is many companies focus on only one area: repair, sale of new machines, or product design and application support. Most companies don't cross those lines.



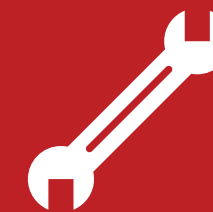
THE JUPITER TEAM BRINGS YOU THE BENEFIT OF END-TO-END SOLUTIONS:



DESIGN



MANUFACTURING



SERVICE & REPAIR



LESS DOWNTIME
MORE UPTIME

**STATE-OF-THE-
ART SOLUTIONS
DELIVERED
AROUND THE
WORLD**

TRANSFORMATIVE TECHNOLOGY

Get instant 24/7 service from top experts through our Jupiter Connect program. Enhance your manufacturing experience with Jupiter's cutting-edge augmented reality smartglasses.

"Our service guy can look at exactly what the customer is seeing," says Jon Hays, VP of Sales for AHB Tooling & Machinery. "It's a slick system and we're really excited about it."



Jupiter's augmented reality Preventive Maintenance platform reduces operator error and increases equipment uptime.



WE CUSTOMIZE TO MEET YOUR NEEDS

We tailor our equipment to meet your specific needs. Larger companies are less inclined to be flexible for unique requests, but with Jupiter, we flex to meet your needs.

Machining is the foundation and the nexus of our world. Consider an ore excavator, a foundry machine, an assembly line, or a finished vehicle, each part carefully designed. Even the computers doing the schematics began their lives as workpieces inside a CNC machine tool. Jupiter's leading-edge technology approach ensures that both your Jupiter machine tool and your shop are always running.

"Jupiter has provided us with nothing short of outstanding customer service and reliable quality engineering work. We rely on the Jupiter Team's honest and realistic recommendations for both machine solutions and service."

Sean Matsuoka | Vice President, YMA



PROVEN, EXPERIENCED APPLICATION EXPERTS STANDING BY TO HELP YOU WITH ALL YOUR NEEDS

CAD Creation

Application Review

CNC Programming

Cutting Tool Selection

Machine Tool Selection

Metrology

Workholding & Fixture Design

Definition of Mid-Process Inspection Points & Benchmarks

Cycle Time Determination

Machine Tool Setup

Machine Tool Operation & Maintenance



Jupiter HMC-400



KEEPING YOU RUNNING AT 100%

VALUE-BASED ENGINEERING

Jupiter's Application Engineering Division is ready to provide world-class manufacturing support to help your organization achieve its goals faster, easier, and at a lower cost. No challenge is too small or too large for our experts. Jupiter Application Engineering is not confined to Jupiter products. Our engineers have decades of experience crafting solutions for all manner of CNC and non-CNC manufacturing installations.

From thermal control to tombstones, programming to professional training, our Application Engineering Division is ready to serve.

WORKFORCE TRAINING

On-site on-demand employee training in maintenance, general repair, setup, operation, programming, quality control, and process improvement.

SOFTWARE ANALYSIS

Advanced performance and failure-mode analysis for preventative maintenance and rapid design improvement.

PRECISION LEVELING

Machine straightness, roll, and pitch optimization as well as facility foundation stability inspection with Mahr Federal electronic levels.

BALL BAR INSPECTION

X/Y, Y/Z, & Z/X circularity, backlash, drive tuning, straightness, squareness, linear positioning, and volumetric accuracy inspection, adjustment, and optimization with Renishaw hardware.

LASER ALIGNMENT

Inspection and correction of machine linear positioning, straightness, squareness, pitch yaw and roll, and parallelism with Renishaw and HP lasers.

PROGRAMMING

Jupiter provides programming, PLC, repair, and retrofit services for the most popular CNC system brands.

LAYOUT & AUTOMATION

When multinational corporations need transfer lines relocated and production facility layouts drafted, they call Jupiter.

LEGACY OVERHAUL

From Bullards to DeVliegs, Cincinnati to G&Ls, Jupiter can tear it down to the casting, overhaul it, and restore the quality and legendary performance of your legacy hardware.



SPINDLE

Re-alignment, re-balancing, gear repair, overhaul, and total rebuild of all makes and models of direct-drive, gear-driven, built-in, and belt-driven spindles.

BALL SCREWS

Diagnostics, alignment, tuning, repair, and replacement of any length, any brand ball screws.

HYDRAULICS & PNEUMATICS

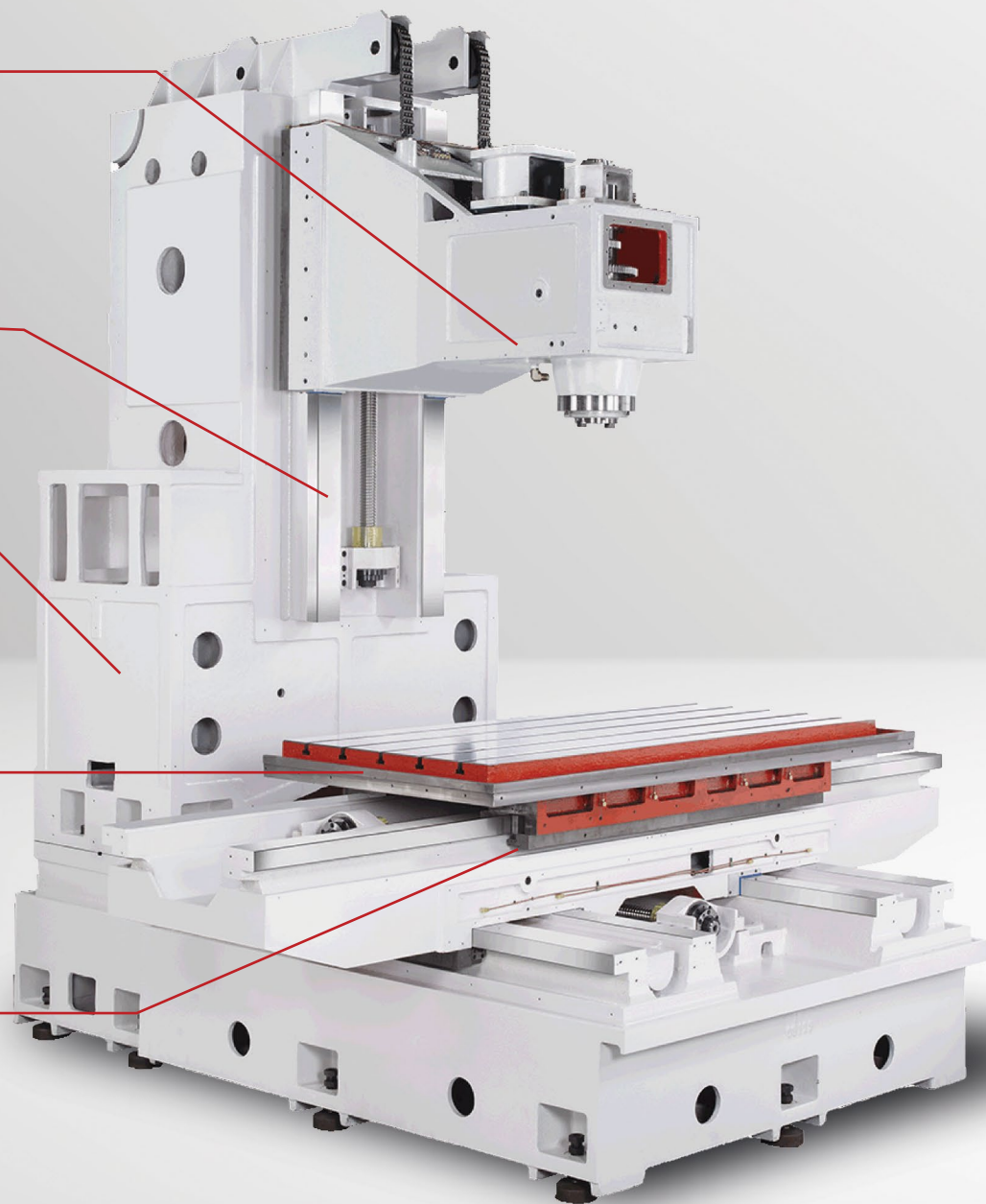
Trouble-shooting, repair, replacement, and enhancement of machine hydraulic and pneumatic systems.

TURCITE & RULON

Repair, replacement, and retrofit of guideway coatings for maximizing machine longevity.

HAND SCRAPING

Dedicated master scrapers for both on- and off-site scraping work of castings, tables, and ways.



24/7 PROFESSIONAL SERVICE

ANY BRAND, ANY STYLE, ANY PROBLEM, ANYTIME

With over 30 years of experience, Jupiter Machine Tool has the understanding to help companies around the world get every last drop of performance out of their machine tools. From installation to relocation, alignment to verification, repair to rebuild, overhaul to retrofit and upgrade – Jupiter does it better, faster, and more affordably.

RETOOL • REFIT • RETROFIT RESCRAPE • REPAIR • REFURBISH

✓ Classic DeVlieg horizontal boring machine totally rebuilt and upgraded with new Fanuc control.



> Venerable old Pratt & Whitney mill rescraped and returned to full production.



WHY JUPITER?

You need a partner that works with you every step of the way: from design, through manufacturing, to uptime with service and repairs. Jupiter is that partner. We are committed to helping your business thrive.

 **ENGINEERING**

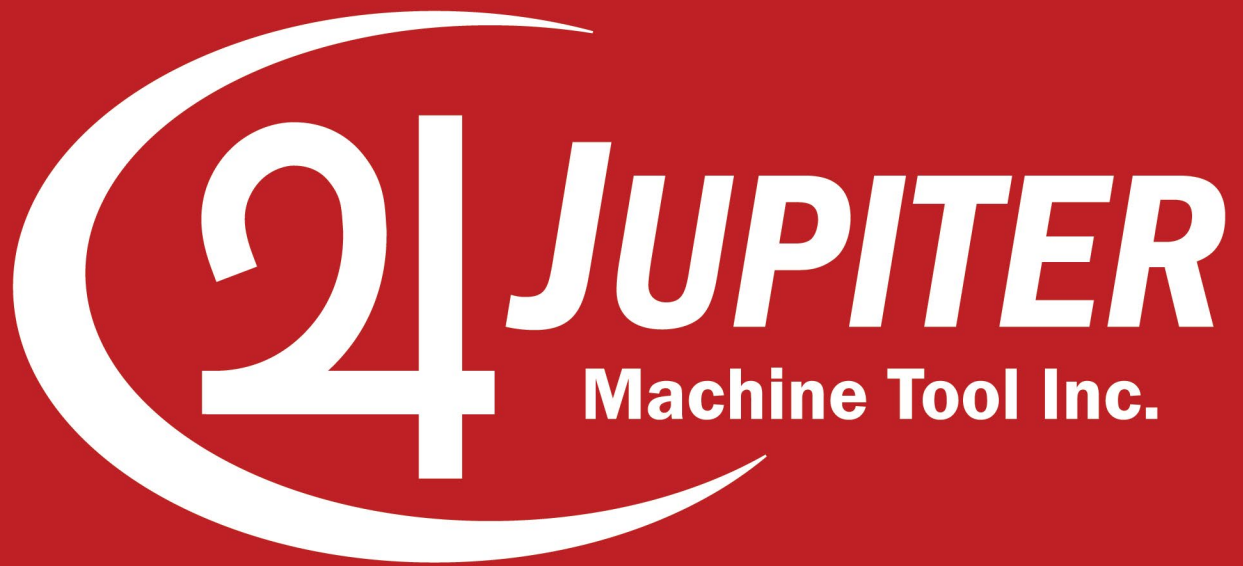
 **TECHNOLOGY**

 **EXPERIENCE**



The Department of Defense trusts Jupiter to keep its most sophisticated CNC machines running in top condition.





JUPITERMT.COM

309.342.9342

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A white industrial machine tool, likely a vertical mill, is shown from a side profile. It has a tall, rectangular body and a base. The Jupiter logo and model number are visible on the side.

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VMC-4022