

METAL MANUFACTURING DIVISION

Technology Driven Manufacturing

- Fiber Laser Cutting
- Tube Laser Processing
- CNC Milling
- CNC Turning
- 5-Axis Machining
- CNC Bending
- Welding & Fabrication
- Surface Finishing

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MANUFACTURING DIVISIONS

Technology Driven Manufacturing

Precision metal fabrication from raw material to finished component.

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LASER PROCESSING

High-performance laser systems deliver precision cut parts and complex profile features to keep your projects moving from concept to completion.

PRECISION CUTS
Clean, accurate edges and consistent part quality.

VERSATILE CAPABILITIES
Sheet, tube, and structural laser processing.

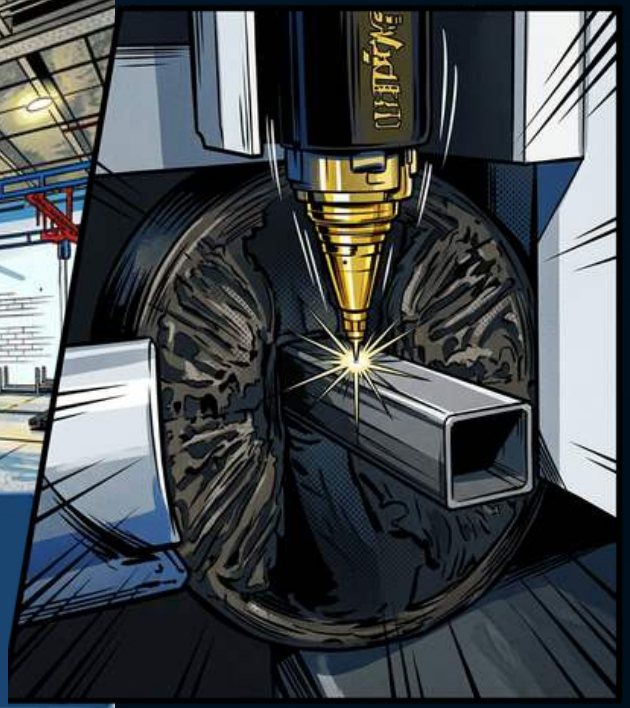
INTEGRATED WORKFLOW
Seamless handoff to forming, weeding, and finishing.



Mazak Optiplex 3015 Fiber Laser

High-speed 2D fiber-laser cutting for sheet-metal components, nestled production parts, brackets, panels, and precision blanks.





Mazak FG-220 3D Tube & Structural Laser

3D laser processing for tube, pipe, and structural shapes, including holes, slots, copes, and other profile features before downstream fabrication.

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BUILT.
DELIVERED.

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CNC PROFILE MACHINING



PRECISION. FLEXIBILITY. SUPERIOR RESULTS.

Our Emmegi CNC profile machining platforms deliver exceptional accuracy and versatility for aluminum, PVC, light alloys, and structural profiles. Advanced 5-axis capability allows us to execute complex geometries, multi-face operations, and precise end machinery with repeatable quality.

EMMEGI COMET R6 HP

5-axis CNC profile machining for aluminum, PVC, light alloys, and selected structural profiles, including drilling, milling, cutting, and end operations.



EMMEGI SATELLITE XT

5-axis CNC profile machining for complex cuts, drilling, milling, and end operations on extrusions and structural profiles.



MULTI-AXIS PRECISION
Complex cuts with high repeatability.

VERSATILE MATERIALS
Aluminum, PVC, light alloys, and structural profiles.

COMPLETE OPERATIONS
Drilling, milling, cutting, and end machinery.

QUALITY YOU CAN BUILD ON
Consistent performance from start to finish.

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STRONGER BY DESIGN.

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ENGINEERED. BUILT. DELIVERED.

CNC MILLING

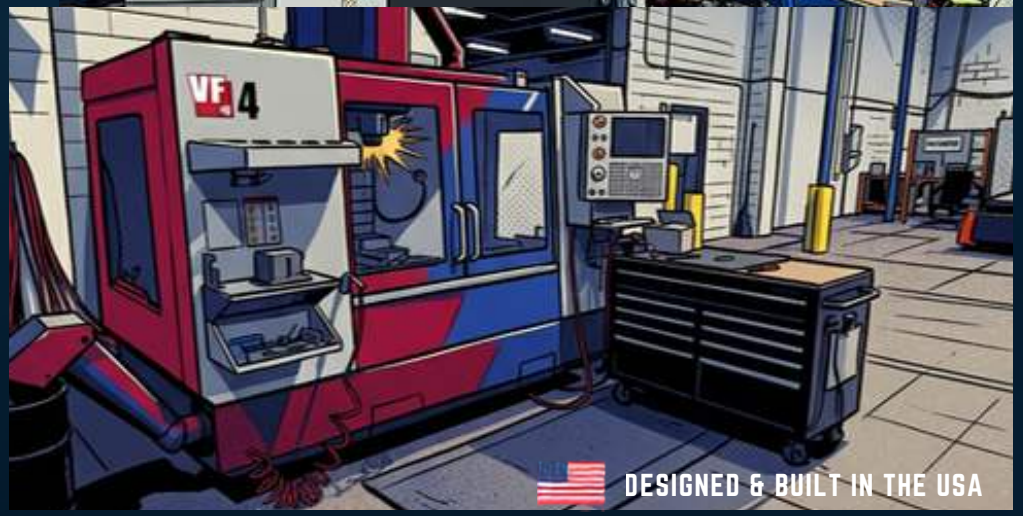
Haas UMC-1000SS 5-Axis

5-axis maching for complex, multi-face components with reduced handling between operations and improved access to multiple surfaces.

Haas VF-4

Vertical CNC milling for drilling, tapping, pocketing, contouring, plates, brackets, fixtures, and machined weldments.





PRECISION MACHING.
CONSISTENT RESULTS.

BUILT TO SUPPORT
EVERY STAGE OF PRODUCTION.

ADVANCED EQUIPMENT.
EXPERIENCED TEAM.

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CNC TURNING

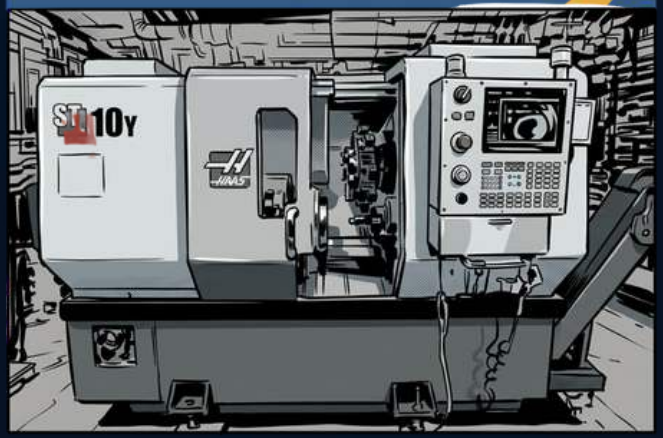
Precision turning for shafts, bushings, fittings, flanges, and other rotational components. Y-axis models support off-center milling, drilling, tapping, and C-axis positioning for multi-operation parts in fewer setups.



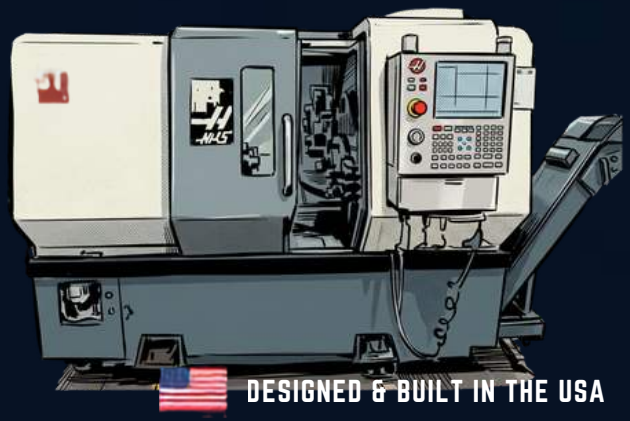
Haas ST-10



Haas ST-10Y



Haas ST-15Y



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VERSATILE CAPABILITIES

From simple turns to complex multi-operation parts.

PRECISION FOCUSSD

Multi-axis functionality for tighter part control.

BUILT TO PERFORM

Rugged HaaS rebliability in a modern facility.

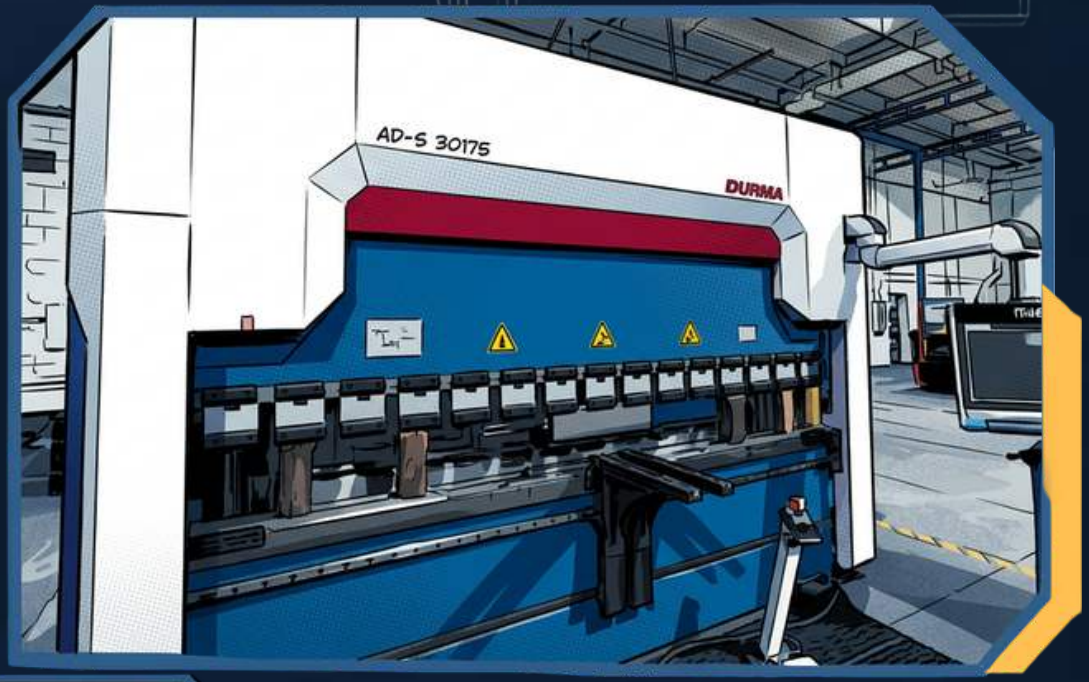
QUALITY PARTS.
ON TIME. EVERY TIME.

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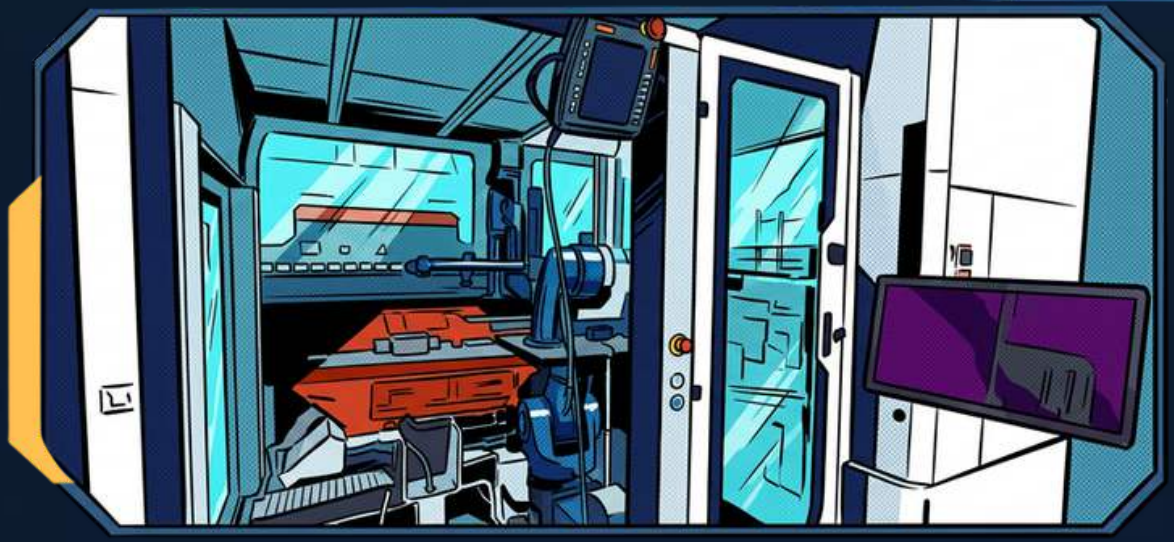
FORMING.

Precision Metal Bending.

Advanced press brake and robotic bending technology delivering accurate, repeatable forming for complex parts and assemblies.



Durma
AD-S 30175
Press Brake



Bystronic
ByBend Star 80
Robotic Cell

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PRECISION FORMING
Consistent, accurate bends for complex geometries.

ADVANCED TECHNOLOGY
Press brake power meets robotic flexibility for reliable results.

BUILT TO PERFORM
Engineered solutions for demanding applications.

**QUALITY PARTS.
ON TIME. EVERY TIME.**

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SURFACE FINISHING

ROSLER EURO 780

REPEATABLE QUALITY.
SMOOTH AND READY
FOR FURTHER
PROCESSING.

DEBURRING

SMOOTHING SURFACES

REPEATABLE RESULTS

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MILLER PERFORMARC PA550H

MILLER PERFORMARC PA1100HW

WELDING ROBOTS

Repeatable welds, high productivity, and stable process quality.

- PRECISION WORK
- REPEATABLE RESULTS
- EFFICIENT ROBOTIC CELLS

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MANUAL MIG/MAG/TIG WELDING

Experience, control, and solid connections for demanding structures.

- MIG/MAG
- TIG
- Flexible Workstations

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QUALITY CONTROL







- INCOMING INSPECTION
- FIRST ARTICLE INSPECTION
- IN-PROCESS INSPECTION
- FINAL INSPECTION
- TRACEABILITY
- QUALITY DOCUMENTATION

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PVC & TECHNICAL FABRIC DIVISION



CORE EQUIPMENT

- FIAB RF 1400
- FIAB RF 1400 LS
- FIAB RF HPS Q-DRIVE
- CNC HIGH-FREQUENCY WELDING SYSTEM
- ZÜND G3 XL -2200
- MILLER WELDMASTER FOR PVC KEDER WELDING

HIGH-FREQUENCY WELDING, PRECISION CUTTING AND TECHNICAL FABRIC MANUFACTURING.

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FIAB RF HPS Q-DRIVE

ADVANCED SERVO-CONTROLLED HIGH-FREQUENCY WELDING MACHINE



CAPABILITIES

- High-frequency RF welding
- CNC-controlled positioning
- Large-format membrane manufacturing
- Automated multi-path control
- Reinforcement welding
- Header insertion welding
- Complex geometry welding
- Consistent seam quality

APPLICATIONS

- Event tent roofs
- Tent walls
- Industrial fabric structures
- Architectural membranes
- PVC covers
- Custom textile assemblies

CUSTOMER BENEFITS

- Precise automated welding
- Excellent seam consistency
- High production efficiency
- Repeatable product quality
- Large-format manufacturing capability

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FIAB
RF 1400

HIGH-FREQUENCY WELDING MACHINE

The Fiab RF 1400 is used for precision welding of PVC-coated fabrics and reinforcement details.



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CAPABILITIES

- RF welding
- Seam welding
- Reinforcement patch welding
- Component fabrication
- High-strength joints

TYPICAL APPLICATIONS

- Fabric reinforcements
- Connection points
- PVC assemblies
- Custom textile products

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FIAB RF 1400 LS

LONG-TABLE HIGH-FREQUENCY WELDING SYSTEM



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The FiAB RF 1400 LS provides extended working capacity for larger PVC components and long weld seams.

CAPABILITIES

- Long seam welding
- Large-format PVC assemblies
- Structural fabric manufacturing
- Continuous RF welding operations

ADVANTAGES

- Large work area
- Consistent weld quality
- Efficient production of oversized components
- Reduced handing of large membranes

PRECISION CUTTING & KEDER WELDING



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ZUND G3 3XL-3200

CNC CUTTING FOR LARGE-FORMAT TECHNICAL FABRICS AND PVC MATERIALS.

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MILLER WELDMASTER

MACHINE USED FOR WELDING PVC KEDER.

ACCURATE CUTTING.
RELIABLE KEDER INTEGRATION.

PVC MANUFACTURING CAPABILITIES



MATERIALS PROCESSED

- PVC-COATED POLYESTER FABRICS
- ARCHITECTURAL MEMBRANES
- TECHNICAL TEXTILES
- REINFORCED PVC MATERIALS
- KEDER SYSTEMS
- INDUSTRIAL FABRIC MATERIALS

OPERATIONS

- RF WELDING
- FABRIC CUTTING
- REINFORCEMENT INSTALLATION
- KEDER INTEGRATION
- LARGE PANEL ASSEMBLY
- CUSTOM FABRIC FABRICATION
- MEMBRANE MANUFACTURING
- FINAL FINISHING & INSPECTION



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HP LATEX 1500 INDUSTRIAL PRINTING SYSTEM.



PRINTING TECHNOLOGY

- TECHNOLOGY: HP LATEX PRINTING TECHNOLOGY
- INKS: HP LATEX WATER-BASED INKS
- COLORS: 6 COLORS + HP LATEX OPTIMIZER (7 CARTRIDGES TOTAL)

PRINT WIDTH & QUALITY

- MAXIMUM MEDIA WIDTH: 126 IN (3.2 M)
- OPTIONAL: 2 X 63 IN (2 X 1.6 M) IN DUAL ROLL MODE
- MAXIMUM RESOLUTION: 1200 X 1200 DPI

PRODUCTION PRODUCTIVITY

MODE	OUTPUT
OUTDOOR	UP TO 800 FT²/HR (74 M²/HR)
OUTDOOR PLUS	UP TO 610 FT²/HR (57 M²/HR)
INDOOR HIGH QUALITY	UP TO 480 FT²/HR (45 M²/HR)
TEXTILES & CANVAS	UP TO 260 FT²/HR (24 M²/HR)
HIGH SATURATION BACKLIT	UP TO 170 FT²/HR (16 M²/HR)

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HP LATEX 1500

MATERIALS, COLOR CONTROL & APPLICATIONS.



SUPPORTED MATERIALS

- PVC BANNER
- FRONTLIT
- BACKLIT
- MESH
- SELF-ADHESIVE FILMS
- TEXTILES
- CANVAS
- WALLCOVERINGS
- SYNTHETICS
- TECHNICAL FABRICS
- ARCHITECTURAL MEMBRANES

ROLL HANDLING

- MAXIMUM ROLL WIDTH: 126 IN (3200 MM)
- MAXIMUM ROLL WEIGHT: 350 LB (160 KG)
- MAXIMUM ROLL DIAMETER: 11.8 IN (300 MM)

COLOR CONSISTENCY & REPEATABILITY

- MAXIMUM COLOR DIFFERENCE: ⩽ 2 DE2000
- BUILT-IN SPECTROPHOTOMETER
- AUTOMATIC COLOR CALIBRATION
- CONSISTENT COLOR REPRODUCTION BETWEEN PRINTS

> CAPABILITIES

- LARGE-FORMAT PVC MEMBRANE PRINTINGEVENT GRAPHICSCORPORATE BRANDINGSPONSOR GRAPHICSCUSTOM TENT ROOFS AND SIDEWALLSARCHITECTURAL MEMBRANE GRAPHICSMILITARY AND GOVERNMENT MARKINGSHIGH-RESOLUTION OUTDOOR ADVERTISING

KEY BENEFITS

IN-HOUSE BRANDING CAPABILITIESHIGH-RESOLUTION PHOTOGRAPHIC OUTPUTUV AND WEATHER RESISTANCEFAST TURNAROUND TIMESCONSISTENT CORPORATE COLOR REPRODUCTIONCOMPLETE CONTROL OVER MEMBRANE PRODUCTION AND GRAPHICS

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Get in Touch

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