

PRECISION SHEET METAL FABRICATION SERVICES

FABRICATION · WELDING · ASSEMBLY



www.hfimfg.com



QUALITY BUILT INTO EVERY PROCESS

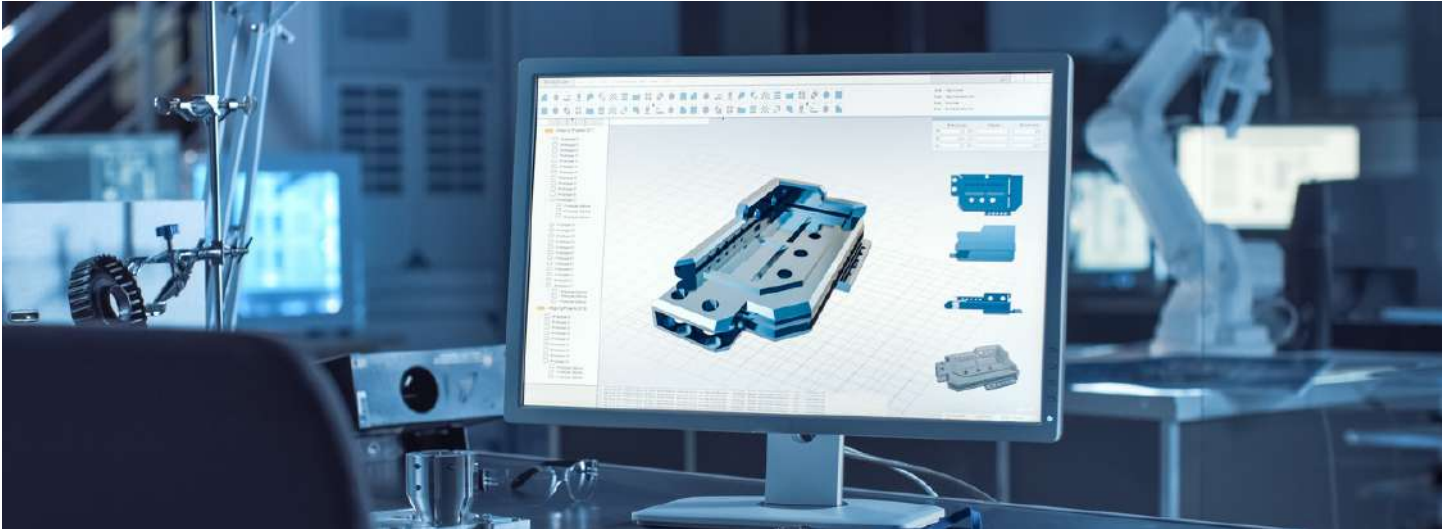
At HFI, quality is integrated into every stage of the manufacturing process—from prototype development through full-scale production. Our experienced team combines advanced inspection technology, digital production tracking, and proven quality systems to ensure every component meets customer specifications, performance requirements, and industry standards.

Whether producing a single prototype or a high-volume production run, HFI delivers complete traceability, consistent quality, and reliable manufacturing performance.

QUALITY CAPABILITIES

- First Article Inspection (FAI)
- PPAP Documentation (up to Level 5)
- In-Process Quality Inspections
- Material & Lot Traceability
- Digital Shop Floor Tracking
- Advanced Inspection Equipment
- Corrective & Preventive Action (CAPA)
- Continuous Improvement Programs
- Customer-Specific Quality Requirements
- Prototype Through Production Validation





PROGRAMMING FOR PRECISION MANUFACTURING.

From customer drawings to production-ready files, our programming team prepares accurate CAD/CAM data to support efficient cutting, forming, welding, and fabrication.

Our team works with customer drawings and digital files to prepare accurate, production-ready manufacturing data. Using CAD/CAM software and established manufacturing processes, we help translate customer requirements into efficient programs that support consistent quality, repeatability, and production efficiency.

From Prototype To Production

HFI supports programming requirements from initial prototypes through repeat production.

Customer drawings and digital files are reviewed and prepared for manufacturing, helping streamline production setup and maintain consistency throughout the process.

Software & Systems

We work with your file formats directly—no translation needed.

SOLIDWORKS – Native file support for efficient file preparation and manufacturing.

DXF / DWG – Direct import of customer drawings

CAD / CAM Software – Integrated programming for production-ready manufacturing files.

ERP Integration – Production planning and shop tracking to improve workflow and scheduling.



LASER CUTTING AND TURRET PUNCHING

Laser cutting offers a cost-effective method to manufacture parts with complex geometries in both ferrous and non-ferrous materials. The laser cutting process provides excellent edge quality, accuracy, and repeatability with little to no setup cost.

Fiber laser technology, automated loading, stainless, aluminum, and carbon steel processing capabilities

Laser technology provides flexibility for both prototype and high-volume production.

Our multiple turrets and lasers allow HFI to make tight tolerance parts.

We have the capability of a laser/turret combination, allowing us to laser cut precision blanks and add complex formed features, such as louvers, shear forms, and other custom features in our turret department. Our automated load and unload systems allow us the possibility of lights-out and extended production capability, which leads to more capacity and schedule flexibility.

Our fiber laser technology, automated loading systems, and stainless steel, aluminum, and carbon steel processing capabilities enable us to efficiently support both prototype and high-volume production.

CNC punching offers a more cost-effective means of manufacturing parts on many materials. Amada Turrets are equipped with scratch free brush tables. Not only do our turrets offer cost-effective blanks, they also perform a vast array of machining and forming operations during the blanking process.





PRECISION FORMING

We have a advanced forming department with press brakes allowing us to form parts up to 12' long. We have a large array of standard and special press brake tooling. With over 60 years of trusted experience, HFI has the knowledge and expertise to form even your most complicated parts.

Forming can be one of the most challenging processes, one which we have addressed through skilled operators and state of the art equipment with programmable back gauges, tooling and precision CNC controllers.

Automated forming technology improves repeatability, consistency, and production efficiency.

PRECISION WELDING — ALUMINUM, STEEL & STAINLESS

Our welding department combines skilled craftsmanship with advanced robotic technology to deliver high-quality welded assemblies for OEMs across a wide range of industries. From prototype development to high-volume production, HFI provides reliable welding solutions built to meet demanding customer specifications.

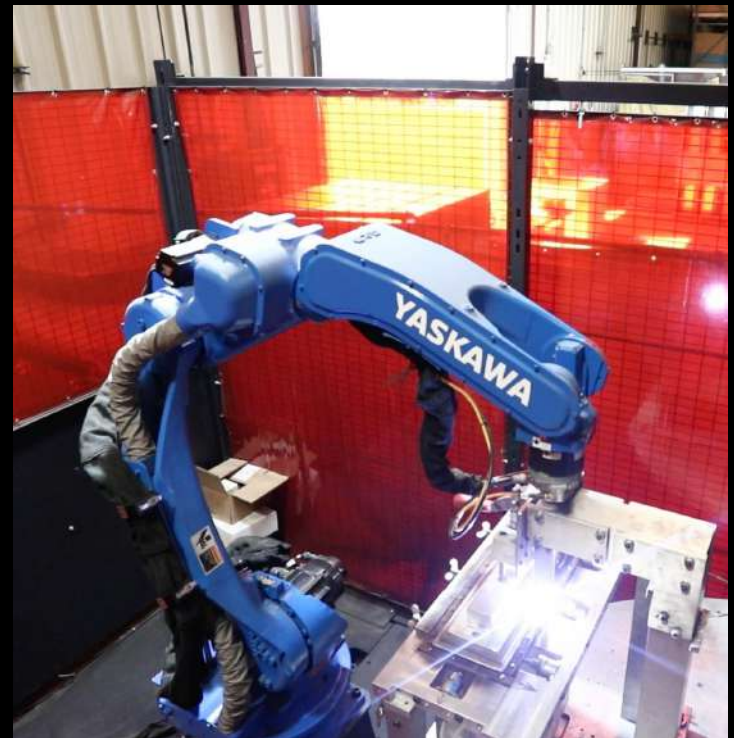
Precision Through Every Weld

Our experienced welders and robotic welding systems produce strong, consistent welds that improve product quality, repeatability, and production efficiency. Whether your project requires manual precision or automated production, HFI delivers dependable results while maintaining tight quality standards.

We weld aluminum, carbon steel, and stainless steel to meet your exact specifications. Our robotic welding systems deliver consistent quality, repeatable results, and increased production efficiency for both prototype and high-volume manufacturing.

Our Welding Capabilities Include:

- MIG Welding
- TIG Welding
- Robotic MIG Welding
- Robotic TIG Welding
- Pressure Testing



PRECISION SPOT WELDING & HARDWARE INSERTION

HFI provides precision spot welding and hardware insertion services that strengthen sheet metal components while improving assembly efficiency and product reliability. These value-added processes reduce manufacturing time, eliminate unnecessary secondary operations, and deliver consistent results from prototype through full-scale production.

Spot Welding

Spot welding creates strong, permanent joints quickly and efficiently, making it an ideal solution for sheet metal assemblies produced in high volumes. The process minimizes heat distortion while delivering consistent weld strength, helping manufacturers improve product quality, reduce production time, and lower overall manufacturing costs.

Our Spot Welding Capabilities Include:

- Resistance Spot Welding
- Steel & Stainless Steel Components
- Precision Sheet Metal Assemblies
- High-Volume Production
- Consistent Weld Quality

Hardware Inserts

Hardware inserts provide durable, permanent fastening points directly in sheet metal components, eliminating the need for loose hardware or secondary fastening operations. By installing self-clinching hardware during fabrication, HFI helps simplify final assembly, improve structural integrity, and create reliable threaded connections that withstand repeated use.

Our Hardware Insert Capabilities Include:

- Self-Clinching Nuts
- Studs
- Standoffs
- Inserts
- PEM® Hardware Installation
- Precision Hardware Insertion

Whether your project requires spot welding, hardware insertion, or both, HFI delivers precision manufacturing solutions that improve product durability, streamline assembly, and support efficient production from prototype through high-volume manufacturing.



ASSEMBLY & KITTING SERVICES

HFI provides complete assembly and kitting services that simplify your production process. From PEM® hardware installation and rivet fastening to sub-assemblies, packaging, labeling, and production-ready kits, we help reduce labor, improve accuracy, and accelerate fulfillment.



Our assembly & kitting capabilities include:

- PEM® nuts, studs, standoffs, and specialty fasteners
- Auto-feed PEM® hardware insertion
- Riveting and mechanical fastening
- Sub-assembly and final assembly
- Production-ready kitting
- Packaging and labeling
- Kits organized to your bill of materials (BOM) and requirements

Benefits of partnering with HFI:

- Reduce suppliers and simplify purchasing
- Receive complete assemblies and production-ready kits
- Reduce internal assembly and handling requirements
- Improve production efficiency
- Maintain consistent quality through a single manufacturing partner

PRODUCTS & CAPABILITIES

Our One-Stop Shop for Precision Sheet Metal Fabrication HFI provides complete manufacturing solutions, delivering high-quality products from prototype to full production. Our capabilities include precision fabrication, forming, welding, assembly, and finishing—all under one roof.



**Restaurant
Equipment**



**Medical
Devices**



**Beverages
& Water**



**Data
Centers**



**Industrial
Machinery**



**HVAC &
Refrigeration**



**Energy &
Power**



**Commercial
Fixture**



**Custom
OEM**



**Telecommunication
Enclosures**



Anodized Panels

Custom anodized aluminum panels manufactured to precise specifications for commercial, industrial, and OEM applications.



Custom Electrical Enclosures

Fabricated electrical enclosures designed to protect electronic controls and sensitive equipment in demanding environments.



Control Panels

Precision-fabricated control panels built for industrial automation, electrical systems, and custom OEM requirements.



OEM Assemblies

Complete OEM components and sub-assemblies manufactured and assembled for streamlined production and seamless integration.

CUSTOM FABRICATED SOLUTIONS BUILT TO YOUR SPECIFICATIONS.



Custom Chassis

Sheet metal chassis engineered for strength, precise fit, and reliable equipment integration.



Precision Brackets

Custom-fabricated brackets and support components for OEM and industrial applications.



Precision Enclosures

Fabricated enclosures designed to protect electronic, electrical, and mechanical systems.



Complex Forming

Precision-formed sheet metal components manufactured to exact customer specifications.



Formed Channels & Mounting Components

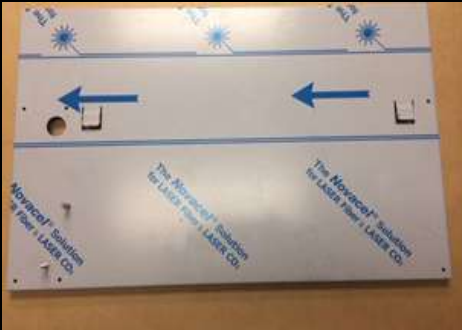
Custom channels, rails, and structural components fabricated for OEM assemblies.



Welded Assemblies

Complete welded fabrications and sub-assemblies built for production-ready installation.

CUSTOM FABRICATED SOLUTIONS ACROSS MULTIPLE INDUSTRIES.



Precision Covers

Custom-fabricated sheet metal covers designed to protect equipment and internal components.



Custom Panels

Precision-cut and formed metal panels manufactured to customer print specifications.



Custom Tanks

Stainless steel tanks and fluid-handling components fabricated for commercial and industrial applications.



Ventilated Panels

Perforated and louvered panels engineered for airflow, ventilation, and equipment protection.



Precision Enclosures

Custom-formed enclosures designed to house electrical, electronic, and mechanical assemblies.



Stainless Steel Instrument Jars

Durable stainless steel containers fabricated for medical, laboratory, and industrial storage applications.

CUSTOM FABRICATED COMPONENTS



Precision Fabricated Components

Custom-fabricated stainless steel components manufactured to customer print specifications for specialized OEM and industrial applications.

FILTRATION



Perforated Filter Basket

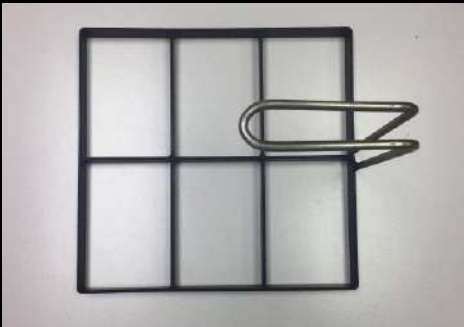
Precision-fabricated stainless steel filter baskets designed for filtration, separation, and fluid processing applications.

ENCLOSURES



Precision Equipment Enclosure

Custom-fabricated sheet metal enclosures designed to protect electrical, electronic, and mechanical systems.



Custom Formed Rack

Welded and formed stainless steel racks designed for food service, medical, and industrial equipment applications.



Perforated Filter Panel

Custom perforated panels engineered to provide airflow, filtration, and equipment protection while maintaining structural integrity.



Custom Stainless Steel Enclosure

Fully assembled stainless steel enclosures manufactured for OEM equipment requiring durability, corrosion resistance, and precision fit.

PRECISION GRINDING & SURFACE FINISHING

HFI provides complete grinding, finishing, and polishing services to meet the cosmetic, functional, and corrosion-resistance requirements of your products. From simple paint preparation to fully polished food-grade stainless steel finishes, our experienced team delivers consistent, high-quality results that improve appearance, durability, and overall product performance.

Our grinding and finishing capabilities include:

- **Paint preparation**
- **Edge deburring**
- **Timesaver finishing**
- **Stroke sanding**
- **Tumbling and vibratory finishing**
- **Cosmetic polishing**
- **Food-grade stainless steel finishes**
- **Passivation**
- **Anodizing**
- **Plating**
- **Silk screening**
- **Laser etching**



Our grinding personnel are equipped with a wide range of hand tools and finishing equipment to support both prototype and production requirements.

Whether your project requires surface preparation, cosmetic finishing, or corrosion-resistant treatments, HFI delivers dependable results that meet demanding OEM specifications.

LOCAL DELIVERY SOLUTIONS THROUGHOUT CHICAGOLAND

Located near major transportation routes, HFI provides efficient local delivery solutions throughout the Chicagoland area.

Our dedicated fleet, combined with trusted logistics partners, supports reliable, on-time deliveries to your facility.

Every shipment is carefully prepared using custom packaging, including skidding, boxing, racking, and other protective methods to help ensure products arrive safely and ready for production.

Value-Added Delivery Services:

- **Kanban Programs**
- **Kitting Services**
- **Managed Inventory Programs**
- **Custom Packaging & Skidding**
- **Local Fleet Delivery**
- **Third-Party Logistics Coordination**

These value-added services help reduce lead times, simplify inventory management, and streamline your supply chain for greater production efficiency.





Innovation in Stainless Steel Fabrication

HFI is a full-service sheet metal fabricator, specializing in stainless steel innovation for fifty years. Our nearly 65,000 square foot facility is home to the modern fabrication and welding technology equipment built to service the Food, Beverage Equipment, Water Purification, Air Filtration, Temperature Control Solutions, Telecommunications, Energy, Medical, Electronics, Lighting, Display, Data & Technology Infrastructure, Gaming and many others.

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Our Mission

HFI is dedicated to making the highest quality parts from the prototype stage through production runs. We have prioritized and dedicated our quality department and software programs to provide customers with parts that meet their exact specifications and allow for complete traceability throughout the fabrication process at our facility.

We look forward to building a strong, mutually beneficial, long-term relationship with your organization.

SCAN ME

