

MAYVILLE™

PRODUCTS CORPORATION

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I N T E G R A T E D M A N U F A C T U R I N G S O L U T I O N S



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I N T E G R A T E D M A N U F A C T U R I N G S O L U T I O N S

Mayville Products Corporation is an ISO Certified producer of precision frames, custom enclosures, electronics chassis, sub racks, and other fabricated metal products. We manufacture to your drawings and specifications, or we can custom-design a product to meet your needs. We specialize in technically challenging designs produced in low to medium lot sizes. We offer our global OEM customers consistently high quality products, responsive “hassle-free” service, short lead times, and quick turn-around. We are proud of our reputation for serving OEMs with consistent quality for more than 60 years.

CUSTOMER FOCUSED APPROACH

We Focus on the Needs of Our OEM Customers:

- Engineered, technically challenging & complex frames, enclosures, chassis, & assemblies.
- Low to medium lot sizes & high variability of demand, design, or configuration.
- Quick-turn & short lead time — reduce manufacturing critical-path time (MCT).
- Responsive “Hassle-Free” service & support.
- Competitive pricing.

PEOPLE

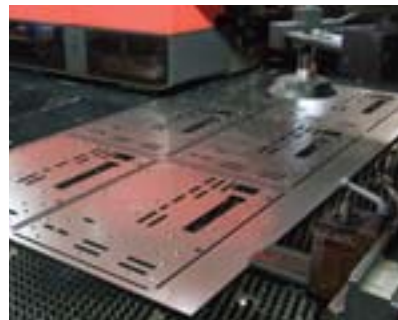
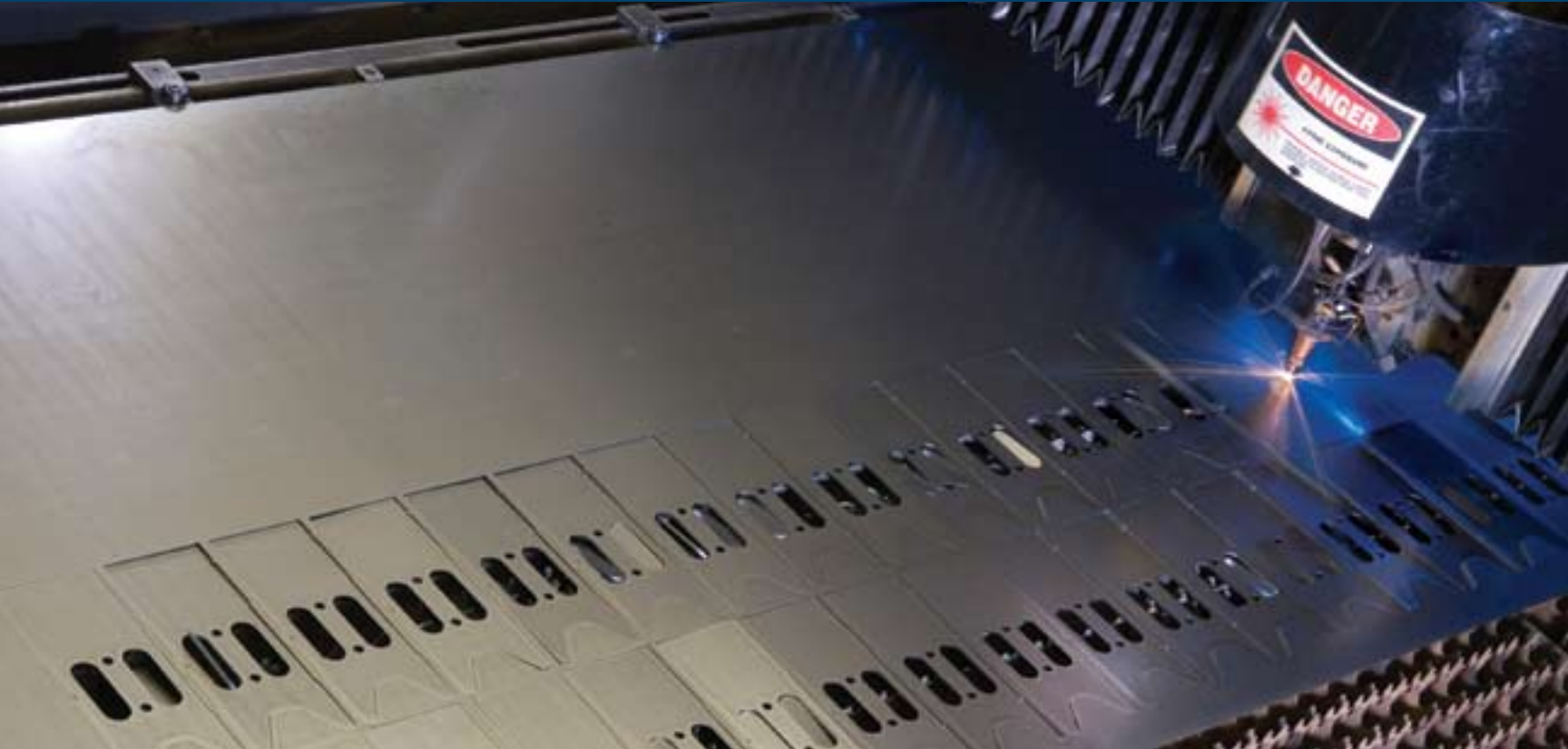


Mayville Products Corporation is

supported by a dedicated and skilled workforce.

Their strong work ethic, experience, and loyalty form the back bone of our organization. Skilled operators and best in class machinery ensure that every product meets our high requirements for quality, reliability, and on-time delivery. The average tenure of our production team is 26 years, and for all other staff is more than 20 years.

P R O C E S S E S



LASER CUTTING

Top- We offer laser cutting in steel up to 3/8" thick.

Bottom- Punch / Laser combination provides tremendous flexibility.

CNC PUNCHING

Top- Automated Amada CNC presses, including several with "lights-out" automatic load/unload pallet changers and ULX auto stackers.

Bottom- Amada Vipros CNC press with brush table to reduce scratches on parts.

STAMPING

Hard-tool stamping presses compliment our fabrication equipment. Our largest press is a 500 ton coil-fed Danly press with automated leveling equipment.



SAWING

Automated sawing of steel, stainless steel, aluminum tubes and bar stock.

MACHINING

Top– Machining of features into tubular steel frames using Mazak and other vertical machining centers. Laser tube-cutting is also an option.

BENDING/FORMING

3rd From Top– Forming steel cover panels with a checking fixture in the foreground.

Bottom– Forming an aluminum control box on a Cincinnati press brake. Note the quick tool change table in the foreground.

PANEL BENDING

Fully automated Salvagnini panel bender provides efficient manufacture of doors, covers, and panels with up to 3 bends per edge. The Salvagnini bends up to 14 gauge CRS, 18 gauge stainless steel, and 0.098" aluminum.

CLINCHING

Clinching and press-fitting of nuts, studs, and standoffs. Higher quantities of fasteners can be clinched using automated bowl-feeders and CNC programs.

SPOTWELDING

Full spot welding capabilities with manual, semi-automatic, and fully automatic equipment.

P R O C E S S E S



ARC WELDING

Top- Mig welding using modular fixture for short runs and high repeatability. AWS certified welders and in-house CWI.

Bottom- Mig welding using weld fixtures that we manufacture in our tool room. Weld fixtures are primarily used for higher volumes and repeatability for products with tight tolerances.

METAL FINISH

Grinding, buffing, polishing, stroke-sanding, and graining of aluminum, steel, or stainless steel. We have the skills and equipment to meet your demanding cosmetic specifications.

PAINTING

Top- Automated liquid and powder-paint capabilities with 7 stage aqueous wash and iron-phosphate pretreatment line.

Bottom- Batch booths for powder and liquid paint, including full aqueous wash and iron-phosphate pretreatment for large frames and enclosures. Experts in demanding cosmetic specifications.



SILKSCREEN

Our drying oven allows us to handle both simple and complex multi color screening jobs. Small and large products can be silkscreened. We design and build our own fixtures to ensure accurate location and orientation.

ASSEMBLY

- Top**– Chassis assembly
- 2nd From Top**– Decal application
- Bottom**– Custom enclosure assembly & installation of components

ELECTRICAL ASSEMBLY & TEST

Assembling and installing electrical components such as printed circuit boards, wiring harnesses, switches, and connectors. Electrical continuity testing of assembled components. At Mayville Products Corporation, we have a certified electro-static discharge (ESD) controlled area to handle complex electromechanical assemblies.

INSPECTION

- Top**– Scanning of flat parts after laser cutting or CNC punching using FabriVISION automated 2D scanners ensures accuracy.
- Bottom**– Inspecting a precision frame using automated CMM.

MARKETS SERVED



SEMICONDUCTOR

The semiconductor capital equipment market is characterized by stringent quality requirements, short lead times, and competitive pricing. Because Mayville Products Corporation is vertically integrated, we maintain control over all our processes to consistently deliver the highest quality products on-time and within cost targets. For this reason, Mayville Products Corporation is a strategic supplier to the semicon industry.



TELECOMMUNICATIONS

Mayville Products Corporation has supplied the wireline and wireless communications industry with indoor and outdoor enclosures, integrated electronic assemblies, and complex subracks for more than 30 years. With our ESD controlled assembly floor, we can populate and test your chassis or cabinet with electronics including boards, cable harnesses, and power supplies.



AEROSPACE & DEFENSE

Mayville Products Corporation offers our aerospace and defense customers a wide variety of services to satisfy a dynamic market constantly testing the limits of technology. Our ability to handle components with complex geometries, lot traceability, certified process control and documentation, and stringent contracting requirements makes Mayville Products Corporation an ideal source for our defense partners. Our engineers are available to explore state of the art solutions to the complex problem of protecting our soldiers and homeland.



BIOMEDICAL

Our customers typically sell their products to leading hospitals, laboratories, and healthcare centers throughout the world. They expect their instruments to look as impressive as the processes they perform. At Mayville Products Corporation our attention to detail is second to none. Whether you require wet spray paint or powder coating, we can satisfy your finish requirements, with the knowledge that the final result will be a product worth the pride we put into it. We can test for gloss and hardness, as well as perform color match.



COMPUTER/IT/BROADCAST

Mayville Products Corporation serves the computer equipment, IT, and broadcast markets with catalog standard and customized racks, enclosures, and accessories. Our brand-name products complement our OEM custom-manufacturing capabilities, providing our customers with full in-house design and know-how.



INDUSTRIAL

A core competency of Mayville Products Corporation is our ability to offer engineered solutions to the complex problems offered by our customers. Our engineers engage with our customers early in the design and development phase to offer advice with design-for-manufacturability (DFM) and design-for-cost (DFC). Mayville Products Corporation's experience and expertise is relied upon by our customers to achieve their cost, performance, and delivery objectives.

PRODUCTS

REPRESENTATIVE PROJECTS

LARGE TUBE CONSTRUCTION

This frame is representative of the larger structures we manufacture at Mayville Products Corporation on a regular basis. It is approximately 14 feet X 4 feet X 8 feet. It is painted in dual colors to customer specifications. It is used in the solar industry, to inspect solar panels as they pass through the unit on a conveyor system. Due to the process technology, the tolerances on perpendicularity and parallelism were tighter than commercial applications.



FRAME WITH COMPLEX GEOMETRY



Another Mayville Products Corporation core competency is our ability to manufacture frames with complex geometries and tight tolerances requiring sophisticated welding fixtures. This complex frame requires robust, highly accurate processing and fixturing to control the many "Critical to Function" features in the design.

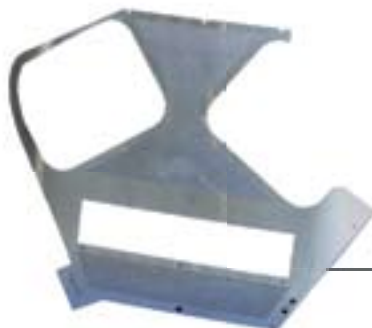
PIONEER ENCLOSURE

Our Pioneer™ brand enclosures are an excellent representation of our diverse capabilities. Pioneer brand offers the flexibility, versatility and strength to meet the requirements of IT and Broadcast applications. They are offered in Pre-Configured, Configure Your Own, and Seismic models, with over 25 different sizes creating hundreds of configuration possibilities.



Mayville Products Corporation personnel are experts with technically challenging and complex frames, enclosures, chassis, & assemblies. Whether indoor and outdoor NEMA enclosures, chassis and sub racks, engineered precision frames, panels, doors, or skins, we can meet your needs. Here are just a few examples of what we can do for you.

CUSTOM PANELS



Coupled with our vertical integration, Mayville Products Corporation has state of the art equipment capable of running "lights out" to deliver the most cost effective custom panels you require. Our in-house paint, powder, and silkscreen capabilities allow us to control the final finish to exacting quality requirements.

PRODUCTS

REPRESENTATIVE PROJECTS

Mayville Products Corporation can manufacture complex chassis to your custom specifications. Our engineering staff is available to turn your manufacturing questions into engineered solutions. The computer chassis pictured is an integral component to a larger assembly, where form, fit, and function are imperative.

COMPUTER CHASSIS



RACK MOUNT ENCLOSURE



Mayville Products Corporation has been supplying cabinets and enclosures to the data center, telecommunications, and broadcast industries for over twenty years, both through our branded products division, and our custom fabrication division. Our customers include leading data center providers, over-the-air and cable TV broadcasters, and telecommunications equipment OEMs. We have the ability to offer products from our catalog or we can design a custom enclosure to your demanding specifications.

COMPLEX FRAME WITH CUSTOM FINISH

Mayville Products Corporation offers complete manual and automated wet spray or powder coating solutions for your custom finish requirements.



FACE PLATE



With our in-house wet spray and powder capability, we can manufacture, paint, and silkscreen your panels and faceplates to the most demanding quality requirements. This face plate is used on wire-line telecommunications equipment.

TUBULAR FRAME WELDMENT



We supply a variety of tubular frame weldments, complete with coating, to the semiconductor industry. Because these frames are involved with wafer manufacturing, they need to be clean room ready. Fabricated tolerances are extremely tight and cleanliness is of paramount importance.

PRECISION EQUIPMENT CART

It is not unusual that chassis and components need to fit within larger enclosures that we manufacture. This highlights our ability to manufacture to exacting tolerances. This precision equipment cart fits into the tubular frame weldment highlighted above.



FRAME FOR ROBOTIC AUTOMATION



This is a formed sheet metal frame that houses the electronics and electro-mechanical systems for controlling high speed mail sorting. Postal applications are some of the most highly automated systems in the world, demanding uncompromised engineering and unsurpassed mechanical performance.

SHEET METAL FRAME WITH HIGH COSMETIC REQUIREMENTS

The semiconductor industry demands some of the tightest quality requirements of any industry. There are no exceptions to perfection with respect to form, fit, or function. Mayville Products Corporation controls these processes in-house to ensure that your product is monitored by our professionals, from engineering and start of production through final inspection and shipment.



**ELECTRONIC
ENCLOSURE**



A core competency at Mayville Products Corporation is the ability to design and manufacture complex enclosures, both indoor and outdoor NEMA rated, to exacting customer specifications.

**FRAME FOR
UNMANNED VEHICLE**

Built for the military, this complex welded frame is the structural base for an all-terrain unmanned security vehicle, whose mission is to detect threats from a remote controlled site.



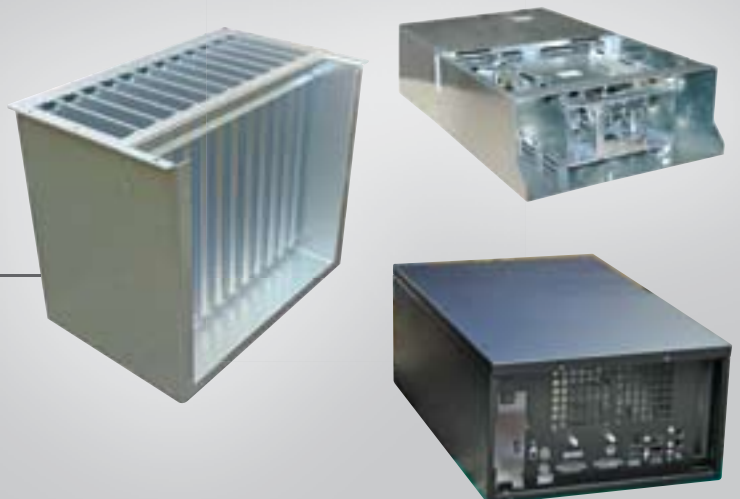
**PRECISION SHEET
METAL FRAME**



One of our core competencies at Mayville Products Corporation is the manufacture of structural frames. Because of our quality, vertical integration, and attention to detail, the semiconductor capital equipment market has evolved as an important industry partner.

Mayville Products Corporation has the ability and equipment to populate and test our cabinets and chassis with electronics, including boards, cable and harness assemblies, and power supplies.

CUSTOM CHASSIS



MAYVILLETM

PRODUCTS CORPORATION



MAYVILLE VALUES

COMMITMENT TO CUSTOMERS:

We will continually exceed the expectations of internal and external customers in providing superior performing products and services that set world class standards in cost, quality and satisfaction.

COMMITMENT TO EXCELLENCE:

We will accept responsibility, personal accountability and authority for overcoming obstacles to our goals. We choose to excel in all aspects of the business.

COMMITMENT TO TEAMWORK:

We will effectively and actively involve employees, suppliers, customers and other stakeholders in the course of business. We will engage the talents of individual people, while encouraging team growth, in an environment that is clean and safe.

COMMITMENT TO THE INDIVIDUAL:

We will demonstrate respect for each person, and recognize and reward their achievements. We trust employees to act with initiative, self-respect, and self-discipline, to do the right thing at the right time, always maintaining the highest level of personal and corporate integrity.

COMMITMENT TO CONTINUOUS IMPROVEMENT:

We believe that sustained success depends on our ability to continuously improve the quality, cost and timeliness of our products and services to internal and external customers.

www.MayvilleProducts.com

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MAYVILLE™ PRODUCTSCORPORATION



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Mayville Products Corporation

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Customer Service

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www.MayvilleProducts.com

Maker of APWMayville™, Stantron® and EMI™ brand products.

APWMAYVILLE™
DATACOM/IT/TECHNOLOGY

STANTRON®
BROADCAST AND PRO A/V

EMI™
SECURITY

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Catalog #94-0182A

SUMMARY EQUIPMENT LIST

FACILITIES

General Information:

- Site - 350,000 sq. ft.
- 172,050 sq. ft. fabrication
- 67,600 sq. ft. paint
- 60,000 sq. ft. assembly
- ISO 9001 : 2008 certification by UL, as registrar
- Established as Mayville Metal Products in 1947
- Average tenure of shop employees is 26 years
- Average tenure of staff is 20 years

Production Capabilities:

- Large tube and sheet metal frame capabilities
- Modular fixturing for short runs
- Large scale precision inspection equipment
- Automated paint line with capability for powder or liquid paint
- Batch paint and assembly for larger products and short runs
- Frames, equipment mounting shelves, chassis, enclosures
- Indoor and outdoor cabinets
- Full tool room for production tooling & fixturing
- Water Testing
- Maximum Work Envelope: 98" H x 88" W x 120" L

Paint & Assembly Capabilities:

- Gloss and Color match, full wash & pre-treatment
- Assembly – Level 3 Integration, Electro-mechanical assembly, ESD Areas, Inspection and Test

EQUIPMENT

- Turret Presses – 14 Amada (with load-unload stations, ULX part pickers, and six pallet changers)
- Punch Presses – 13- (50 to 500 ton)
- Press Brakes – 29- (25 to 350 ton Cincinnati and Amada, largest is 350 ton w/14 ft. bed)
- Auto Form – 1-Salvagnini
- Laser – 2-Amada and 1-Cincinnati
- CNC Machining – 5-Milltronics, 1-Mazak, 1-Bergonzi
- Welding – RSW, TIG, MIG (manual and robot), AWS Certified
- Inspection – CMM, FabriVISION, ELM, ROMER
- Quality – Gage Calibration Lab
- Automated Washer – 7 Stage Power Wash with iron phosphate pre-treatment
- Automated Paint Line – dual powdercoat booths with reclaim units & liquid spray booths

Mayville Products Corporation continues to invest in the best machinery and systems available to provide fast, efficient, and low-cost production with the highest possible quality. Our production process begins on Amada FMS multi-pallet punching centers with lights-out capability. We have 20 Cincinnati brand press-brakes and a fully automated Salvagnini panel bender that can instantly bend, fold, and finish doors, panels, shelves and other components. Our dual station robotic welding centers ensure consistent quality.

Because the key to good painting is solid prep work, we have a seven stage conveyerized wash and pre-treatment system.

Parts are cleaned thoroughly before moving into an automated powder coat line. Everything is done in-house at our manufacturing headquarters in Mayville, Wisconsin, ensuring our reputation for quality and on-time delivery.

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