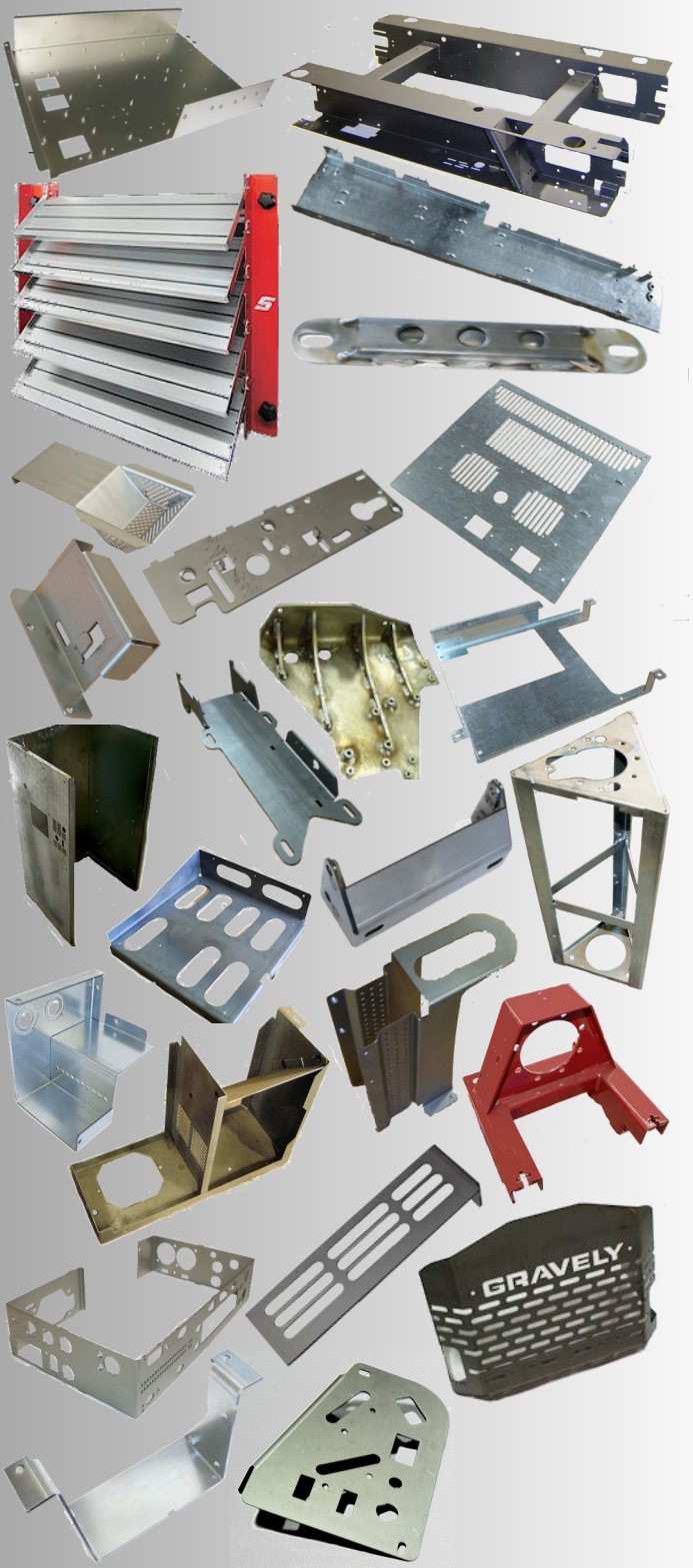
WHAT WE MAKE



MATERIALS WE USE

- Aluminum
- Stainless Steel
- Hot Rolled Steel
- Cold Rolled Steel
- HSLA Steel
- Coated Steels

OTHER SERVICES

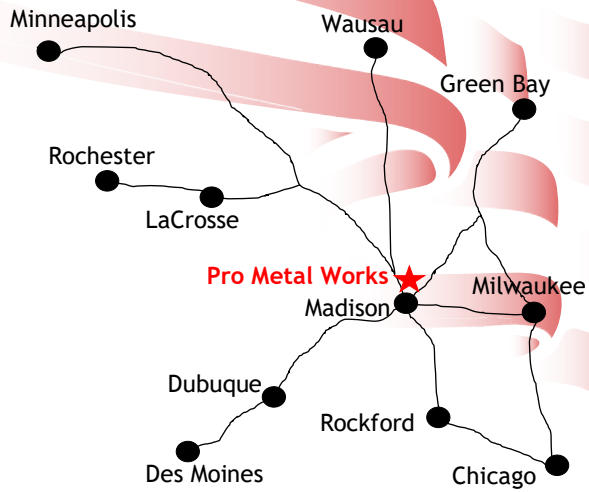
- Plating
- Anodizing
- Machining
- Powder Painting
- E-coating
- Heat Treating

INDUSTRIES WE SERVE

- Police & Fire Equipment
- Military & Defense
- Yacht Manufacturers
- Industrial Equipment
- Point of Purchase Displays
- Commercial Vehicles
- Transportation
- Lawn and Ground Care
- Construction Equipment
- Agricultural Equipment
- Electrical Enclosures and Panels
- HVAC Equipment
- Material Handling Equipment
- Food Equipment
- Residential Hardware
- Lighting Equipment

We support our Troops

We proudly manufacture parts for the US Military. Our parts help to protect our men and women overseas.



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Made in USA

MADE IN WISCONSIN MADE IN

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MISSION STATEMENT

Pro Metal Works, Inc. will provide quality sheet metal parts and related services in a timely, cost effective manner that will meet or exceed customers' expectations.

CELEBRATING 20 YEARS IN BUSINESS EST 1996

Pro Metal Works, Inc

CNC Laser O Turret Punch O Bending

OUR EQUIPMENT & CAPABILITIES

LASER CUTTING AND TURRET PUNCHING

AMADA ACIES 2515NT 4kW Laser w/ Turret Automated System

The ACIES provides unmatched productivity and scratch free production of complex parts.
- 60x120 max material
- .250 max mild steel, stainless, aluminum
- 300 station tool storage
- 4 station tapping tool
- Form up and form down
- Lights out operation load and unload system
- Brush table design provides scratch free processing.

AMADA 6kW LCG3015AJ Fiber Laser Automated System

The LCG is the world's fastest linear drive laser. With cutting speeds 2—4 times faster than comparable 4000watt CO_2 lasers.
- 60x120 max material size
- .250 max. mild steel, stainless, aluminum
- Lights out operation load and unload tower system.

AMADA EMLK3610NT Hybrid 4kW Laser w/ Turret Automated System

Cutting speeds of up to 40m/min the EML is the worlds fastest hybrid punch & laser forming center.
- 60x120 max material
- .250 max mild steel, stainless, aluminum
- 200lbs max per sheet.
- Lights out operation load and unload tower system
- Brushed table design provides scratch free processing.

AMADA CO2 LASER CUTTING SYSTEM — 4kW FOMII 3015N

The FOM2 is engineered to meet the high quality and shorter lead time demands of today's fabricating companies
- 60x120 max material size
- .500" max mild steel
- .375" max stainless steel
- .375" max aluminum

AMADA VIPROS KING w/ Automated material handling

33-ton hydraulic ram delivers superior edge quality, forming capability and accuracy.
- Brush table design provides scratch free processing.
- 48x96 max material size
- 7ga max mild steel, stainless, aluminum

FINISHING DEBURRING AND EDGE ROUNDING

Lissmac SBM-L 1500

- 59" 2 sided deburring and edge rounding
- Efficient processing
- Superior edge condition

Timesaver MODEL LYNX 37MWT

Designed for grinding, deburring, or finishing of parts up to 36" wide

BurrKing Vibra Chamber

High performance deburring, polishing, descaling, and surface conditioning.

FORMING AND BENDING

AMADA HG1003AR Bending Robot w/Automatic Tool Changer

- Workpiece size 40 x 32 & 44lbs
- 6 axis robot with wide range of motion
- Onboard storage 86' lnft tooling
- Complete automated setups
- Tool Navigator (works in unison w/ Dr. Abe Bend)

(2) AMADA HDS 1303NT Press Brake & (2) AMADA HDS 8025NT Press Brake

Ultra-High precision, down-acting Hybrid system. The advanced design offers quick setup, high speed, and increased throughput.
- 1303NT—143 ton and 120" MAX
- 8025NT—88ton and 96" MAX
- 5-axis back gauge speeds setup for complex parts
- Tool Navigator (works in unison w/ Dr. Abe Bend)

AMADA EG 6013 Press Brake

- 67 ton capacity
- 53" length
- 5-axis back gauge speeds setup for complex parts

AMADA RG80 & RG35 Press Brake

- RG80—80 tons and 96" max
- RG35- 35 tons and 48" max

WELDING AND ROBOTIC WELDING

Miller PA-1100HW PerformArc Laser Weld Cell

- 6 axis robot with double 60" rotating trunnion tables
- Utilizes a fiber laser source for welding
- Minimal heat and color distortion
- Precise narrow beam with excellent depth to width ratio
- Drastically increased speeds
- Superior strength welds with automated repeatability

Robotic Welding Cell

- 6 Axis Robotic Welding System
- 55" reach
- 2 zones for load and unload 30" x 36"

AMADA ID40IV-HP-NT Spot Welder

Provides a clean, sparkless weld that requires little or no post processing

Welding

Complete in house welding capabilities.
Manual Mig, Tig,
Certified *AWS D1.1, D1.2, D1.3*

TAPPING AND ROLLING

Wilton ST1000B 57" Station Tapping Machine

.3125 tap in mild steel
.4375 tap in aluminum

JMT HRB4 1504 Plate and Shape Roller

Capacity 60" x 5/32"

PEMMING AND HARDWARE INSERTION

(1) Haeger 824 one Touch - 3
(1) Haeger 824 Plus

We have tooling to insert most types of hardware. Automated with 3 second tool changes.

LASER AND CMM INSPECTED PARTS

Virtek Laser QC

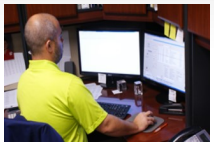
Laser QC captures over 500 data points per second. Accurate to within +/-.002

Faro Arm Platinum

portable CMM with Precision to .0006"

ENGINEERING

Pro Metal Works has invested over the years in updated technology that provides a seamless process for JIT shop technology. We instituted top of the line nesting software like Dr. Abe Blank and offline virtual Press Brake bending solution/ bending programming like Dr. Abe Bend. Visit us at *www.pmwinc.biz* to learn more about this innovative technology.



SolidWorks

Dr.ABE_Blank | Sheet Works | Dr.ABE_Bend | AP100 AS

ABOUT

- Privately owned company that began operations in 1998
- State of the Art manufacturing facility encompassing 72,000sqft
- 38 employees with 2 shifts
- Active ISO certification program for 2019
- Core competency: light sheet metal fabrication, soft tooling, mid-low complexity
- 5S lean manufacturing systems
- Facility has been featured in numerous news articles and selected as host tour facility for Amada.
- Lights out operations with part picking technology eliminating costly deburring.
- Advanced engineering programming for dynamic nesting and virtual bending solutions
- Engineering cost savings design assistance through inception, manufacturability, and design reviews.
- Sustained growth year after year
- Wisconsin Manufacturer of the year nominee
- Madison Top 25 fastest growing companies award
- DOD certified with identifiable cage code
- Certified by fortune 500 companies
- First in North America to adopt new innovative technologies and machinery.
- Vendor scores above 99% for delivery and PPM's well under 200 repeatedly
- Documented APQP quality program featuring PPAP, PFMEA, CONTROL PLAN, & SPC ANALYSIS

APQP (Advanced Product Quality Planning)
Maintain high quality products while keeping projects on schedule with transparent task management and collaboration tools.

Pro Metal Works, Inc
CNC Laser O Turret Punch O Bending

WORLD CLASS EQUIPMENT AND FACILITY

Equipment List

Sheet Metal Fabrication

Lasers

1 Amada LCG3015AJ Fiber Laser Automated System (2017)
- 6000 watt
- 60"x120" maximum material size
- .250" maximum material thickness
- 10 shelf tower system for lights out operation

1 Amada FO-3015NT Laser (2014)
- 4000 watt
- 60"x120" maximum material size
- .500" maximum material thickness

Turret / Laser Combination

1 Amada Acies 2515NT Laser / Turret Automated System (2017)
- 4000 watt
- 33 ton electric servo punch
- .180" maximum material thickness
- 60"x120" maximum material size
- 300 station built in tooling library
- live tooling for tapping
- TK part pick, sort, and stack technology
- Recessed turret for punch up and punch down functioning
- 8 shelf tower system for lights out operation

1 Amada EMLK3610NT Laser / Turret Automated System (2008)
- 4000 watt
- 33 ton electric servo punch
- .250" maximum material thickness
- 60"x120" maximum material size
- TK part pick, sort, and stack technology
- 8 shelf tower system for lights out operation

Turret

1 Amada Vipros King Turret Automated System (2003)
- 33 ton hydraulic servo punch
- .105" maximum material thickness
- 48"x96" maximum material size
- automatic loading and unloading of sheets for lights out operation

Press Brakes

1 Amada HG1003AR Robot bending cell w/ auto tool changer (2016)
- 6 axis robot
- onboard tooling storage 15 punches and 18 dies
- 110 ton capacity
- 120" bed length
- built in potentiometers provide accurate angles
- 39" x 31" and a weight of 44lbs maximum size

2 Amada HDS 1303 Press Brakes (2004 and 2008)
- 120" bed length
- 143 ton capacity
- 5-axis back gauge

1 Amada HDS 8025 Press Brakes (2010)
- 96" bed length
- 88 ton capacity
- 5-axis back gauge

1 Amada EG 6013 Press Brakes (2013)
- 53" bed length
- 67 ton capacity
- 5-axis back gauge

1 Amada RG80 Press Brake (1998)
- 96" bed length
- 88 ton capacity

Welding

Robotic

1 Miller PA-1100HW PerformArc Laser Weld Cell (2018)
- 6 Axis Robot
- 2 station 60" rotating trunnion tables
- Utilizes Fiber Laser Source for welding
- Minimal heat and color distortion
- Precise Narrow Beam with Excellent Depth to Width Ratio
- drastically increased speeds compare to conventional systems

1 Worker Automation / OTC Daihen E Series Weld Cell (2009)
- 6 Axis Robot
- 2 stations with maximum size of 36" x 48"

Manual

1 MillerMatic 350P
1 Miller Syncrowave 250P
1 Lincoln Electric TIG 200

Spot

1 Amada ID40ST Spot Welder

Support Equipment

Rolling

1 JMT HRB4 1508 Plate Roller (2015)
- 48" maximum width

Pem Insertion

1 Haeger 824 One Touch 3 Pem Machine (2014)
- 8 tons of ram force
- Multi Tool and Multi Bowl platform

1 Haeger 824 Plus Pem (2004)
- 8 tons of ram force
- single tool and single bowl

Deburring

1 Timesaver Lynx 37MWT (2016)
- 37" part deburring

1 BurrKing Vibra King Model 45 (2014)

Tapping

1 Wilton ST1000B 57" Tapping Machine

Quality Equipment

Inspection Equipment

1 Virtek Laser QC (2004)
1 Faro Arm Platinum (2007)

SPC Measuring and Test Equipment

22 12" Digital Calipers
2 24" Digital Calipers
7 8" Digital Calipers
1 40" Digital Caliper
2 60" Digital Calipers
2 24" Height Gages
35 Assorted Gage Blocks, Chamfer Gages, and Go-No-Go Gages

NEW

Miller PA-1100HW PerformArc Laser Cell

eco product

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Pro Metal Works is leading the way in metal fabrications and adopting laser technology in the area of welding. Laser welding has many technical advantages. Among these are, minimal heat into the part and drastically minimizing distortion, ability to access confined areas, the beam is narrow with an excellent depth-to-width ratio and higher strength, able to shape the focused beam to fit specialized welding requirements, and many more. The main advantage to laser welding, however, is the ability to automate the welding process and take advantage of increased production rates. By computer controlling the laser, the power level, pulse shape, power ramping and other laser parameters, the process can be precisely controlled and monitored, allowing for production rates previously unachievable with conventional welding methods.

Pro Metal Works, Inc
CNC Laser O Turret Punch O Bending

Watch this great video link to see this piece of equipment operate.
https://youtu.be/tQtHl7GdE1A

Schedule a visit now to see this machine perform, and see why Pro Metal Works can not be outperformed. Come see what this machine can do for you.
Contact: Wayne Sherwood 608-279-3137

NEW

Amada LCG3015AJ Fiber Laser w/ Material Storage Tower

4x Faster Than Other Lasers

eco product

Our new LCG3015AJ is a 6,000kW fiber optic laser that has a 60" x 120" table and is able to cut 1/2" mild steel, 1/2" stainless steel, and 1/2" aluminum. The LCG AJ Series does not require laser gas, mirrors, or any other items typically associated with generating a common laser beam. A single fiber optic delivery cable eliminates the need for additional external mirrors. The result is significantly less operating costs, less maintenance, and higher speed which equals the lowest price advantage for our customers.

Pro Metal Works, Inc
CNC Laser O Turret Punch O Bending

Watch these great video links for more information

https://youtu.be/DCZRqSS2yME

https://youtu.be/vAdIzIP2m64

Schedule a visit now to see this machine perform, and see why Pro Metal Works can not be outperformed. Come see what this machine can do for you.
Contact: Wayne Sherwood 608-279-3137

NEW

Amada HG1003AR Bending Robot w/Automatic Tool Changer

eco product

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Pro Metal Works takes the lead once again in the area of automation by bringing in the first Amada HG 1003AR ATC bending robot in North America. This new robot is leading our charge into faster more automated equipment by reducing lead times, opening capacity and providing 24/7 bending capabilities. The HG1003AR is a fully-integrated robotic bending system, with internal tooling and automated setup. It can also perform quality inspections by checking parts as it bends them. With our engineering ability to do virtual bending solutions and programming, all we have to do is feed this machine programs and material24/7.

Pro Metal Works, Inc
CNC Laser O Turret Punch O Bending

Watch these great video links for more information.

https://youtu.be/YXLH21sK954

https://youtu.be/CRITIcFtwIs

Schedule a visit now to see this machine perform, and see why Pro Metal Works can not be outperformed. Come see what this machine can do for you.
Contact: Wayne Sherwood 608-279-3137

NEW

Amada Acies 2515T Laser / Turret w/ Material Storage Tower

eco product

When you combine a laser system with a turret you achieve unmatched performance and versatility. The Amada ACIES boasts rapid hit rates and a tooling library capable of holding 300 tools, say bye-bye to long human interactive tool setups, with an automated tooling library setups are a breeze. New technology introduced by Amada now allows form ups and form downs, and the ACIES also incorporates live tool centers for thread tapping all in one machine.

300 station tool library

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Pro Metal Works, Inc
CNC Laser O Turret Punch O Bending

Watch these great video links for more information

https://youtu.be/K_Op-QO5saA

https://youtu.be/hUZmHWlVJNA

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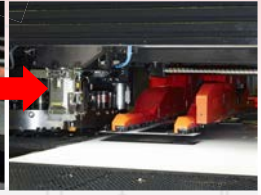
Advantages of using the Amada Acies

Do your have parts that require pem nuts? Example:
Here we have what looks to be a part with 14 pem nuts. This could cost as much as $2.00 dollars in hardware and labor to install these.

With the Acies we can eliminate pem nuts by punching, extruding, and tapping holes all in one operation, to create the same effect reducing labor and hardware costs.

Are your parts produced using a turret punch? If they are then each part has to be joined together, and when a sheet is complete all those parts are removed by hand and deburred by hand, that involves a lot of time which adds cost.



With the Acies part pick system completed parts are punched and laser cut then removed from the nest and neatly stacked ready for there next operation eliminating removal and deburring by hand saving time and money

Punched parts can require a lengthy and tedious tooling setup. This takes time and adds to the cost of a part.

With the Acies we have a built in 300 station tool changer. This system will perform its own setup operation robotically in the fraction of the time. This gives us the ability reduce or almost eliminate setups and the costs associated with them.