

ENGINEERING | DESIGN | PROTOTYPE | PRODUCTION

PTM CORPORATION



“Making Magic with Metal since **1972**”



**WOMEN
OWNED**

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“Making Magic with Metal since **1972**”

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“Living our code for an **environment of excellence**”

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“Our policies are our promise to excellence in **safety** and **production**.”

04

Our Production

“Delivering **quality** products that **exceed** our customer’s expectations”



01 OUR HISTORY

“Making Magic with Metal
since **1972**”



Our Company

Incorporated in **1972** and is a privately owned, **WBENC** Company.

- Number of Associates: **248**
39 Salary/**209** Hourly
- Approximately **25%** of employees are **women or minorities.**
- Non-union
- Campus located in **Fair Haven, Michigan**



An aerial photograph of a lush green landscape with a road and utility poles. A white rectangular text box is centered over the image, containing the number '300,000' in large black font and a descriptive sentence below it. The text box is decorated with dark blue L-shaped corner accents on the top-right and bottom-left.

300,000

PTM boasts almost 300k square feet of production space across 5 different plants.

Our Ownership

The 4 daughters of founder Charlie Russell

Donna Kuhr

President/CEO
/Co-owner

Gina Russell

Shareholder/
Co-owner

Danielle Russell

Shareholder/
Co-owner

Nika Hess

Shareholder/
Co-owner



(L-R: Danielle, Gina, Donna, Nika)



Key Company Milestones

Founded

by Charles T. Russell as a one-man, prototype shop in Mt. Clemens, MI

1972

1979

Acquired

Advanced Engineering Center in Fraser, MI

2010

2014

Relocates

from Mt. Clemens to Fair Haven into a 15,000 sq. ft. building on 72 acres

Ownership

changes / AEC increases press capacity with new 2000-ton press



WBENC

Certification of PTM and addition of Robotic weld cells

2015

WOMEN OWNED

2019

1000-Ton Transfer Press

purchased in 2017, now becomes operational in Plant 1

300,000

PTM expands production space to over 300,000 square feet with \$1.7 million expansion

2020



2022

50th Anniversary

PTM celebrates 50 years of "Making Magic with Metal"



02 OUR VISION

Living our code for an
**environment of
excellence.**





Create a meaningful, **faith based,**
family environment starting with
our associates.

Together we bring **leading edge**
technology, products and services
to our customers.

— **PTM Mission Statement**

Corporate Code of Honor

1. Deliver **exceptional performance** and **peace of mind** to our customers.

2. Act with **integrity, honesty** and a **positive attitude**.

3. **Communicate respectfully** and deal directly with everyone.

4. **Call** and be **called**.

5. Make and **honor commitments**.

6. Be **prepared** and start **on time**.

7. **Share your knowledge** and learn from others.

8. **Never abandon a teammate** and it's ok to ask for help.

9. Celebrate **ALL** wins

10. Embrace the **CODE**, respect the **MISSION**, and **FOLLOW** the policies and procedures.




03

OUR POLICIES

Our policies are our promise to excellence in safety and production.



The background of the slide is a close-up, high-angle shot of a large quantity of stainless steel mechanical components, likely fasteners or connectors, scattered across the surface. The parts are highly reflective, showing bright highlights and deep shadows that emphasize their metallic texture and various shapes. The composition is dense and fills the entire frame.

**“Deliver exceptional
performance and peace of
mind to our customers.”**

- PTM Quality Promise



Quality Promise

We are committed to continuous improvements and have established a **Quality Management System** which provides us the framework for **reviewing, measuring** and **improving** our performance.



“Protect the environment, health, and safety of our associates and our community through continual improvement of our environmental health and safety management system.”


- PTM Environmental Initiative



C.A.M.P

- **C**ontinual Improvement
- **A**dhering to **Environmental Legislation, Regulations,** and **Other Requirements**
- **M**aximizing Pollution Prevention
- **P**reserving Community Resources





**"At PTM, we are committed
to continual improvement in
workplace safety."**

- PTM Safety Promise



Safety

1. We have a policy of 100% reporting of all injuries regardless of severity.
2. Department leaders produce effective 5Y reports to identify and eliminate the root cause of accidents.
3. Safety is monitored currently through our LPAs.





04 OUR PRODUCTION

“Delivering **quality** products
that **exceed** our customer’s
expectations”



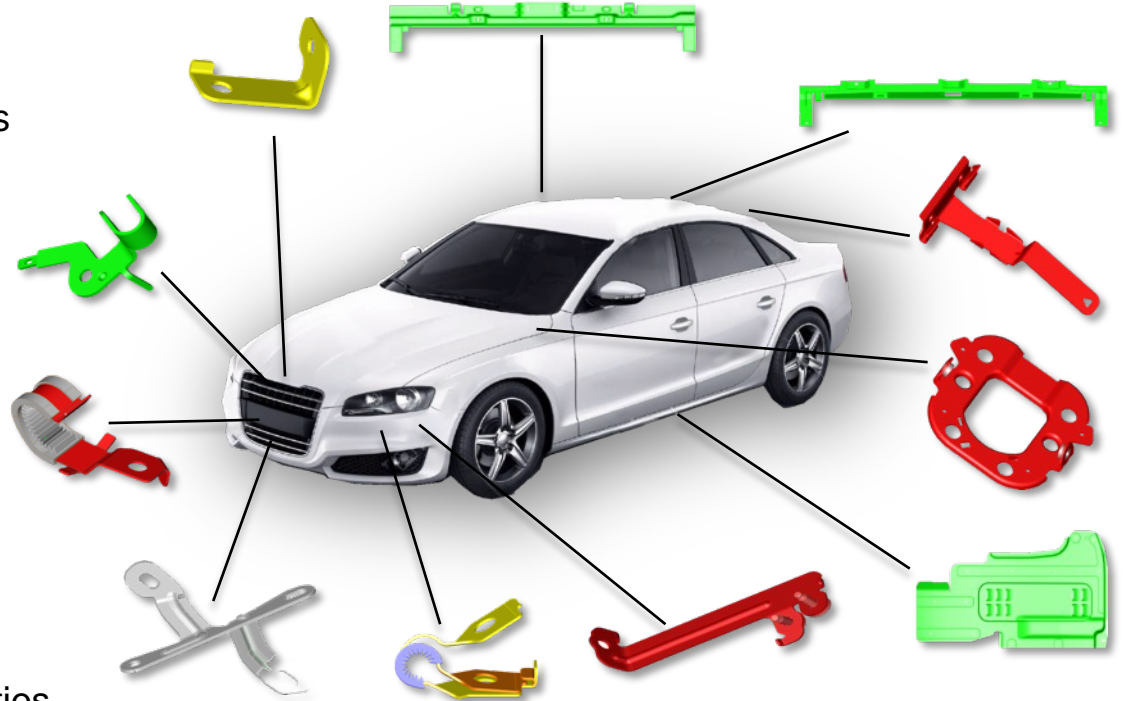


Production Stamping



Production Parts/ Commodities Supplied

- Production metal stampings
- Welded and mechanical assemblies
- Clips
- Clamps
- Brackets
- Fasteners
- Fourslide parts



[Click for full specs and capabilities](#)





FOURSLIDE NILSON #1 - #4

- Up to 25% improvement in tooling lead times compared to progressive tooling
- Cost saving up to 40% versus conventional progressive die cost
- Up to 50% Less scrap than traditional progressive tooling





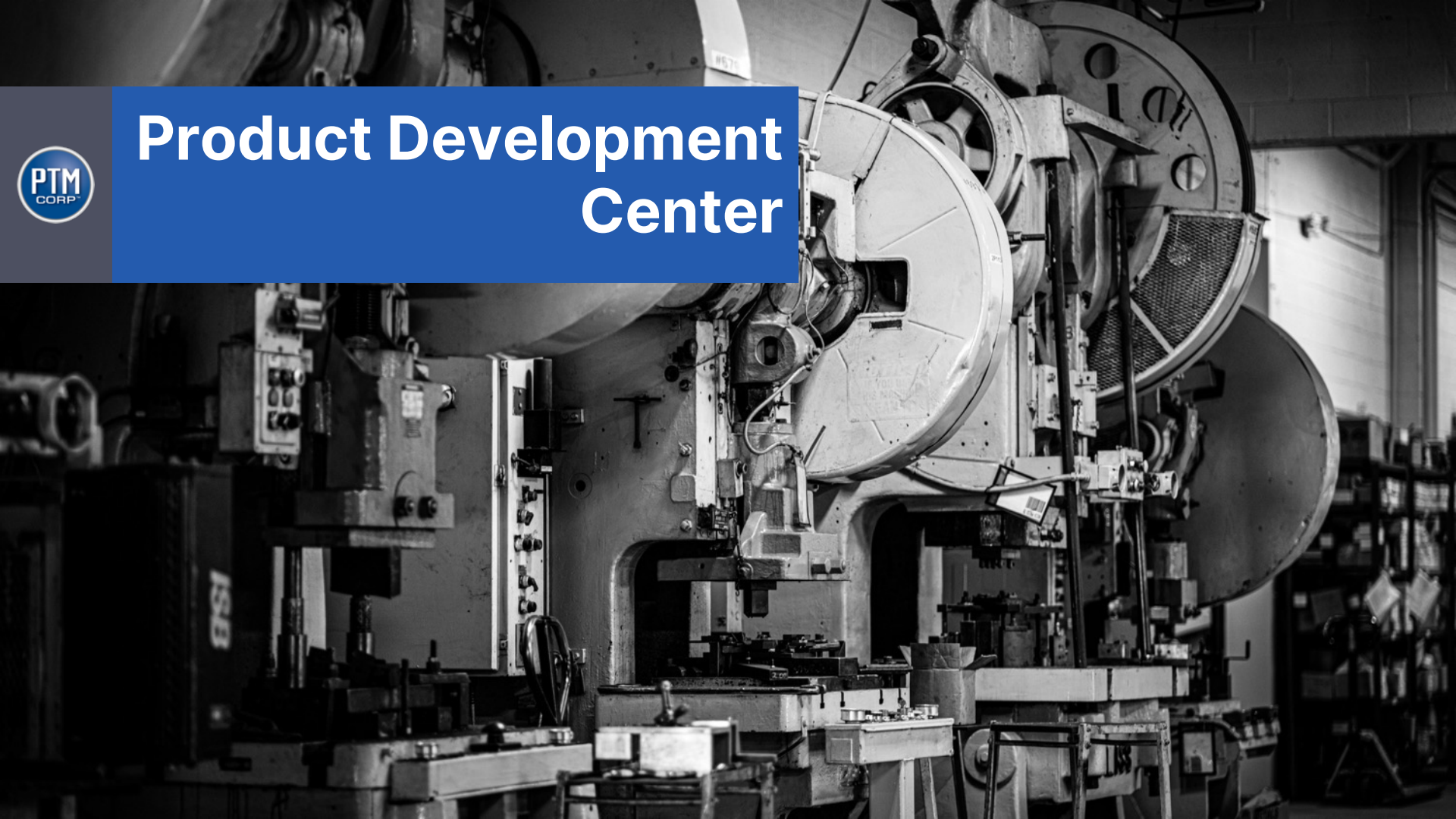
PRODUCTION STAMPING

- Run progressive dies up to 1000 ton
- PTM production ships 1.5 million parts a week utilizing one shift





Product Development Center



Product Development Center

- Specializes in **prototype parts** and **tooling**
- Small prototype parts/commodities supplied

Small Clips



Paint Tools



Brackets



Clamps



3D Printing





Advanced Engineering Center



Advanced Engineering Center (AEC)

- AEC specializes in large complex stamped prototype assemblies and panels.
- Kirksite & steel prototype tooling up to 2000 ton



Component 3rd
Seat Assembly



Lower Windshield
Assembly



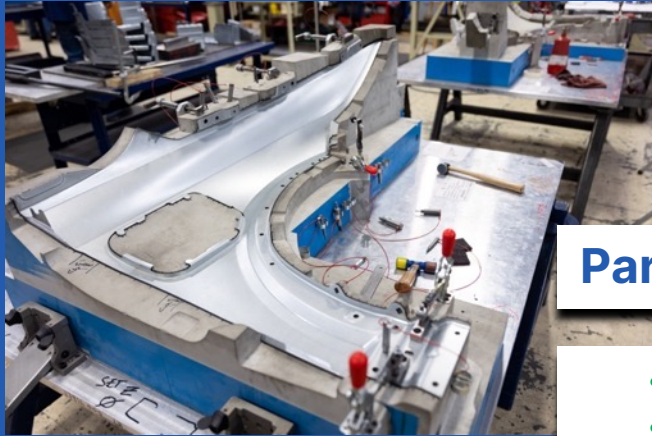
Front Fender
Assembly L/R





Parts/Commodities Supplied

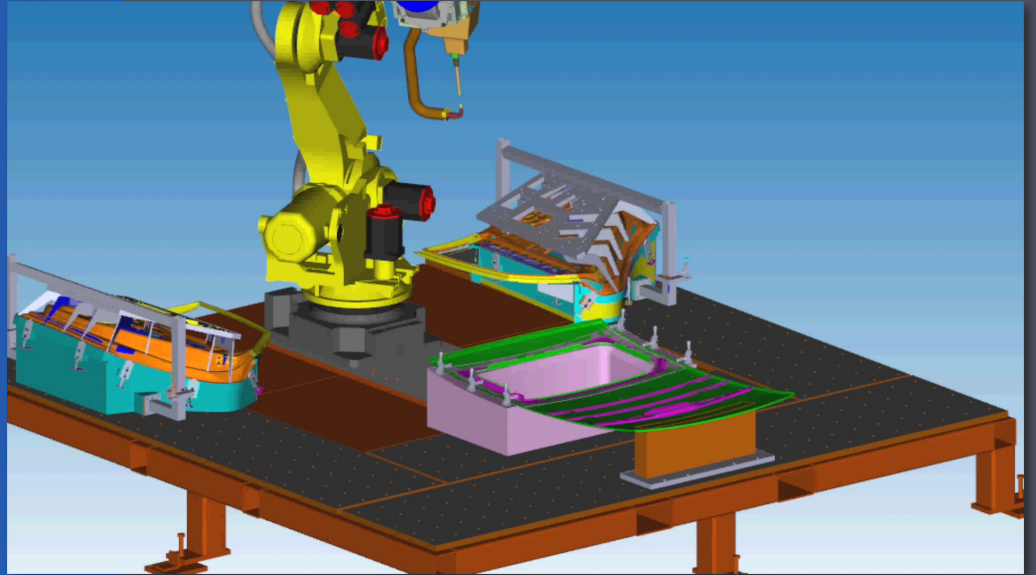
- Door panels
- Hoods
- Deck lids
- Oil pans
- Washer and Dryer panels
- Fenders
- Rails
- Large Assemblies
- Seat Assembly
- Rear floor pan assembly





Design & Engineering Software

- Nx
- Solidworks
- Catia
- Visi 3D
- Spinfire Ultimate
- Autoform
- Polyworks
- MasterCAM
- WorkNC
- Keycreator
- Cenit Fastsuite

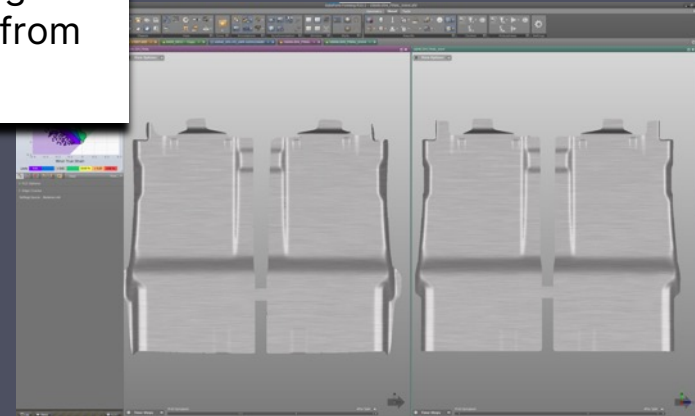
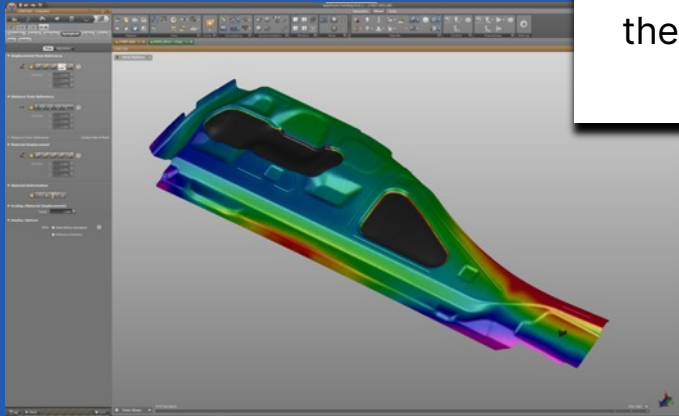
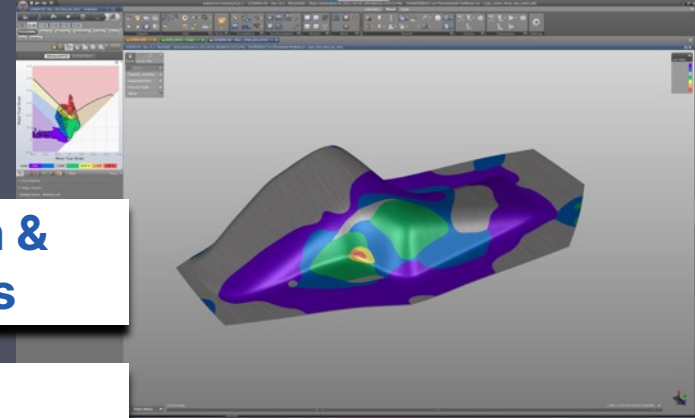
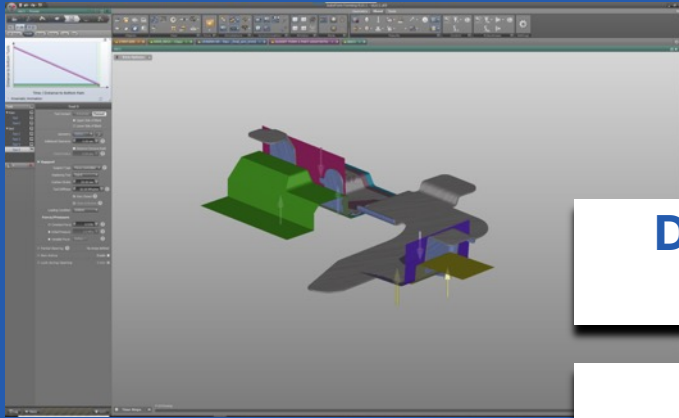




Draw Form Simulation & Spring Back Analysis

AutoForm

lets us morph a tool face to negate the spring back of parts made from high strength material.





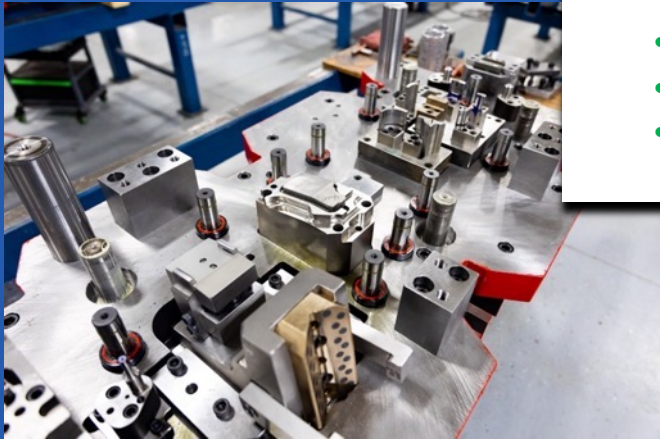
Production Tooling Group





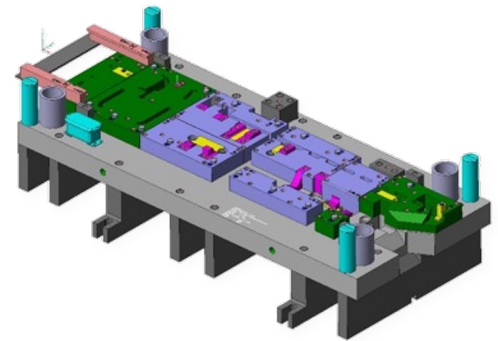
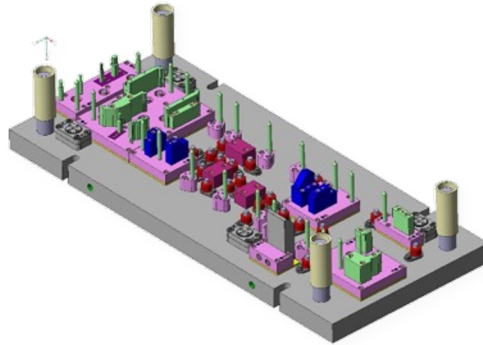
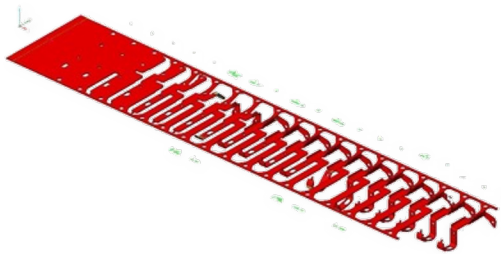
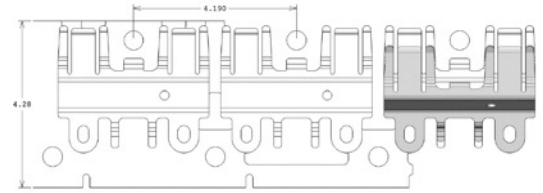
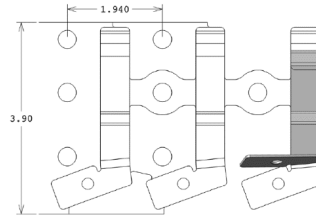
Progressive & Fourslide Tools

- Tool design, build, and tryout facility
- Progressive dies
- Fourslide tooling
- Lines dies



Production Tooling Group

With our investment in **VISI 3D software**, our engineers are well equipped when dedicated solutions for progressive die design and production tools are required.





Assembly





Assembly Equipment

- Production robotic mig and spot weld cells
- Robotic Flexible Integrated Weld and Hem Cell
- High volume automated nut and stud weld cells
- Resistance welding
- Riveters





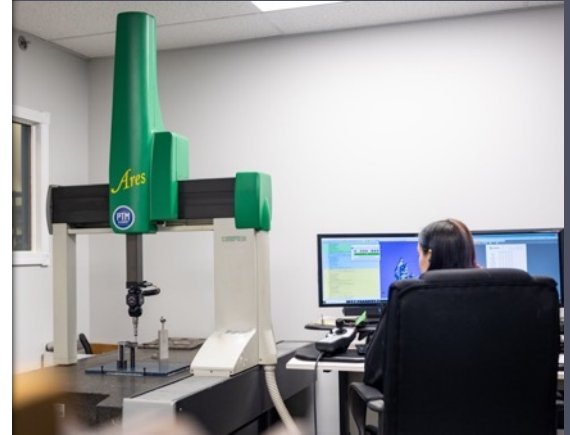
Quality and Testing





Metrology / Inspection Equipment Capabilities

- 4 Faro Arms (Polyworks Software)
- 4 Bridgeport CMM's (Hexagon PCDMIS Software)
- Multiple Optical Comparators
- Attribute / Variable Checking Fixtures
- Digital Hardness Testing Equipment
- Tessonic Ultrasonic Weld testing unit
- High powered Microscopes for Cut -N- Etch Mig welds
- Durability testing of various weld applications
- 3rd party testing with AL2A approved labs



Our Customers



TOYOTA



HONDA



TI Automotive

BOURNS®

EATON

FCA



Autoliv

Gestamp 



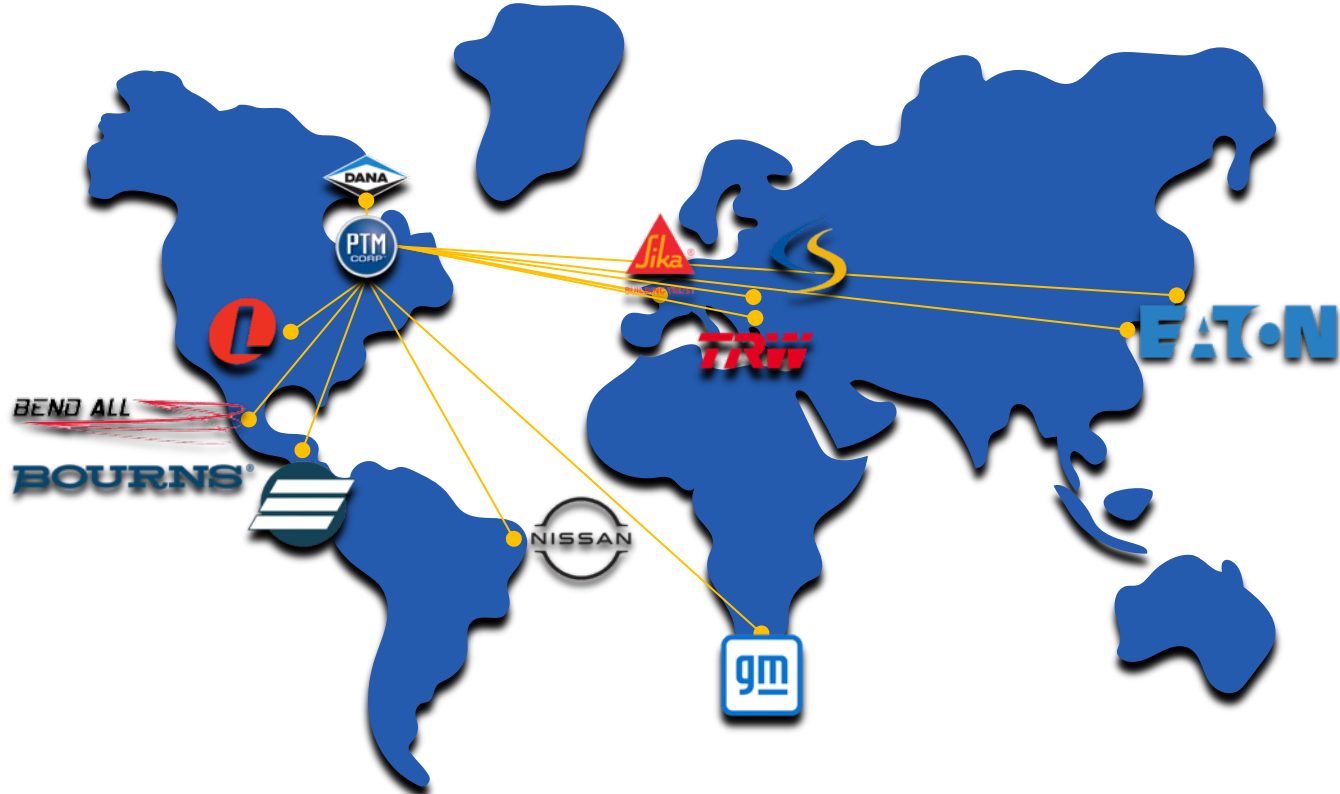
 RIVIAN



BUILDING TRUST

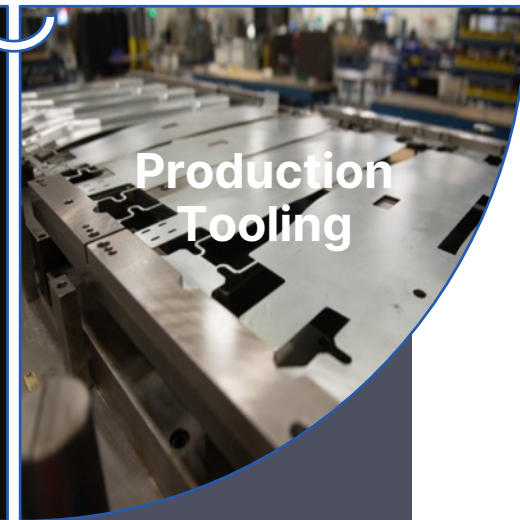
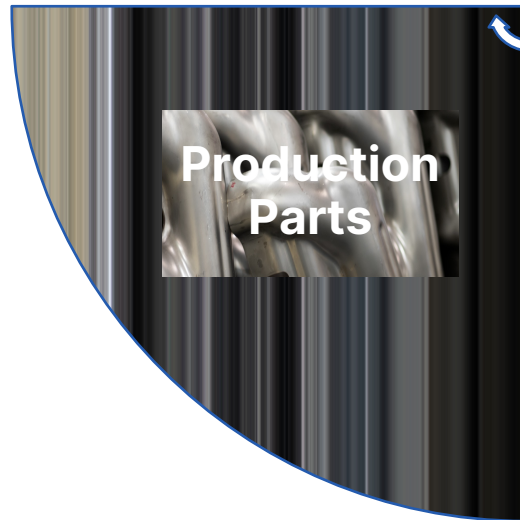
 THAI SUMMIT
AMERICA

Global Customers



Full Cycle Manufacturing Solutions

PTM is driven to provide a **complete manufacturing solution** to our customers from **development to production.**



Customer Feedback

You are an excellent supplier. Material is always delivered on time and there are no quality issues. I wish all my suppliers were like you...

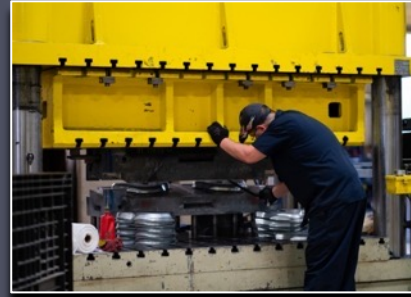
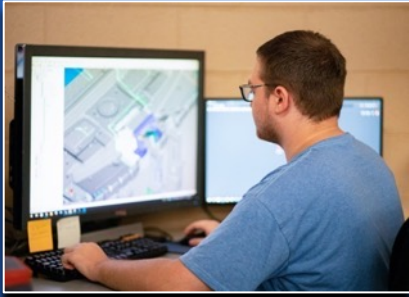
— **Corporate Purchasing Agent for Tier One Company**

We have received all parts (360) and PPAPs for the project three days early...GREAT JOB! Please congratulate your team!

— **Senior Buyer for Tier One Company**



ONE Stop ONE Point of Contact ONE Total Solution Provider



A vertically integrated campus allows all major processes to be self contained



PTM Corporation

Let us make magic with metal for you!

contact@ptmcorporation.com

(586) 725-2211

ptmcorporation.com



6560 Bethuy Road, Fair Haven, MI 48023

APPENDIX

The following slides contain the technical specifications of our production capabilities.



6560 Bethuy Road, Fair Haven, MI 48023

PTM Press Specifications

Press No.	Make	Model	Tonnage	Year	Bolster Size (F/B x L/R x Thk.)			Hold-down	T-Slot Max Width L-R	Ram size (F/B x L/R x Thk.)			Hold-down	T-Slot Max Width L-R	Press Stroke	Min. Shut Ht.	Max. Shut Ht.	Adjust	S.P.M.	Tool Build Shut Ht.	Tool Build Feed Line	Feeder Type	Max. Stock Width	Min./Max. Mat'l Thk.	Payoff Type	Min. Coil I.D.	Max. Coil O.D.	STRAIGHTENER	DIE PROTECTION	TONNAGE MONITOR	FEED DIRECTION	
MTI																																
3	AIDA	NC2-110	120		20.50	53.50	7.00	5/8-11 T-SLOT	36.00	20.50	53.50	7.00	5/8-11 T-SLOT	24.00	7.09	15.75	15.75		35-71	15.00	8.00	Servo	18.00									RIGHT TO LEFT
7	NIAGRA	SC2-250-72-42	250		42.00	72.00	7.00	5/8-11 T-SLOT	60.00	42.00	72.00	7.00	5/8-11 T-SLOT	60.00	12.00	16.00	27.00	11.00	0-28	15.00	10.50	Servo										LEFT TO RIGHT
1	CCI	S2-400-84-48	400	1983	48.00	84.00	8.00	3/4-10 T-SLOT	48.00	84.00	8.00		3/4-10 T-SLOT		10.00	22.00	32.00	10.00	20-50	24.00	16.00	Servo	29.00									LEFT TO RIGHT
PTM																																
1	KOMATSU	OBW-150-3	150	1998	29.90	82.20	6.69	5/8-11 T-SLOT	48.00	22.80	63.00	5.50	5/8-11 T-SLOT	48.00	7.84	14.16	18.10	3.94	35-65	15.00	10.50	Servo-Max	18.00	0.125	REEL	16"-20"	42"-46"	YES	YES	YES	LEFT TO RIGHT	
2	KOMATSU	OBW-150-3	150	1985	29.88	78.75	5.50	5/8-11 T-SLOT	48.00	21.65	63.00	5.50	5/8-11 T-SLOT	48.00	7.87	14.16	18.10	3.94	35-65	15.00	10.50	Coe Servo CPRF-S218	12.00	.020-	125	REEL	16"-20"	42"-46"	YES	YES	YES	RIGHT TO LEFT
3	KOMATSU	E2W-110	110	2006	27.56	65.35	6.30	5/8-11 T-SLOT	48.00	20.50	55.20	6.30	5/8-11 T-SLOT	48.00	4.33	11.81	15.75	3.94	50-100	15.00	10.50	Coe Servo CPRF-M12	10.00	0.080	LAZY SUSAN	16"-20"	40"-44"	NO	YES	YES	LEFT TO RIGHT	
4	BLISS	NO 6T5 B	75	1966	20.00	48.00	6.00	5/8-11 T-SLOT	15.00	48.00	6.00		7/8 THRU HOLES		3.00	11.25	12.88	1.63	40-90	12.00	7.50	Coe Servo CPRF-M13	10.00	0.080	LAZY SUSAN	16"-20"	40"-44"	NO	YES	NO	UNKNOWN OUT OF LINE-UP	
5	MINSTER		160	2001	33.50	63.00	4.92	5/8-11 T-SLOT	48.00	33.50	63.00	4.92	5/8-11 T-SLOT	48.00	5.90	18.70	22.64	3.94	25-250	19.50	10.50	Minster Servo	20.00	0.125	LAZY SUSAN	16"-20"	40"-44"	NO	YES	YES	RIGHT TO LEFT	
6	BLISS		60	1932	19.40	36.00	3.00	5/8-11 TAPS	14.00	30.00	3.00		5/8-11 TAPS		3.00	10.13	12.13	2.00	45-160	12.00	5.00	Crank Roll Feed	6.00	0.060	CRADLE	16"-20"	40"-44"	NO	YES	YES	UNKNOWN OUT OF LINE-UP	
7	KOMATSU		300	1965	39.30	84.60	9.80	5/8-11 T-SLOT	72.00	35.40	84.60	9.80	5/8-11 T-SLOT	72.00	4.92	17.71	21.65	3.94	50-200	19.50	11.00	Coe Servo	24.00	0.250	DBL. END REEL	16"-20"	50"-55"	YES	YES	YES	RIGHT TO LEFT	
8	KOMATSU	OBW-110	120		27.50	74.80	6.30	3/4-10 T-SLOT	48.00	20.50	55.10	6.30	3/4-10 T-SLOT	36.00	4.33	12.80	15.75	2.95	50-100	15.00	8.00	Servo	18.00	0.125	REEL	16"-20"	42"-46"	YES	YES	YES	RIGHT TO LEFT	
9	NIAGRA	SA2-100-48-30	100		30.00	48.00	7.00	3/4-10 T-SLOT	36.00	18.00	48.00	7.00	3/4-10 T-SLOT	36.00	4.00	12.00	19.00	7.00	20-250	15.00	7.00	Servo	13.00	0.125	REEL	16"-20"	42"-46"	YES	YES	YES	LEFT TO RIGHT	
10	BLISS		200	1963	42.00	60.00	6.00	5/8-11 T-SLOT	36.00	42.00	60.00	4.00	5/8-11 T-SLOT	36.00	8.00	11.50	16.50	5.00	25-50	15.00	10.50	Coe Servo CPRF-S218	24.00	.020-	185	CRADLE	16"-20"	42"-46"	YES	YES	YES	LEFT TO RIGHT
11	KOMATSU		300	1999	61.00	122.00	7.10	3/4-10 T-SLOT	108.00	61.00	122.00	7.10	3/4-10 T-SLOT	108.00	7.80	13.78	20.08	6.30	40-100	19.50	11.00	Servo-Max	24.00	0.093	DBL. END REEL	16"-20"	50"-55"	YES	YES	YES	LEFT TO RIGHT	
12	KOMATSU	E2W-110	120		27.50	65.40	6.30	3/4-10 T-SLOT	48.00	20.50	55.10	6.30	3/4-10 T-SLOT	36.00	4.33	11.81	15.75	3.94	20-100	15.00	8.00	Coe Servo CPRF-M13	24.00	0.125	REEL	16"-20"	42"-46"	YES	YES	YES	LEFT TO RIGHT	
13	KOMATSU	OBW-110	120		27.50	74.50	6.30	3/4-10 T-SLOT	48.00	20.50	55.10	6.30	3/4-10 T-SLOT	36.00	4.33	12.80	15.75	2.95	50-100	15.00	8.00	Coe Servo CPRF-M13	18.00	0.125	REEL	16"-20"	42"-46"	YES	YES	YES	LEFT TO RIGHT	
14	EAGLE	SES2-600-144-54	600		54.00	144.00		5/8-11 T-SLOT	54.00	144.00			5/8-11 T-SLOT		10.00	20.00	30.00	10.00	30-50	24.00	16.00	Servo	39.00	0.090	DBL. END REEL	16"-20"	50"-55"	YES	YES	YES	RIGHT TO LEFT	
15	KOMATSU	H2W200 (H)	200	2012	43.00	84.65	7.08	3/4-10 T-SLOT	60.00	43.00	72.84	3.54	3/4-10 T-SLOT	48.00	5.90	15.00	19.70	4.70	5-85	19.50	10.50	Servo	24.00	0.25	REEL	14"-22"	60"	YES	YES	YES	RIGHT TO LEFT	
16	AIDA	TMX-L2-500	550	1990	55.50	142.25	6.50	1"-8 T-SLOT	132.00	55.00	142.25	6.50	1"-8 T-SLOT	132.00	16.00	24.75	28.75	4.00	15-25			Minster Servo	74.00	.030-	375	REEL	19"-24"	72"	YES	YES	YES	LEFT TO RIGHT
17	JIER	S4-1000-6100-2450	1000	2018	2450mm	6100mm	300mm	28mm x 32mm		96.00	240.00	300mm	28mm x 32mm		600mm	36.00	48.00	400mm	8-35	1200mm		Minster Servo (From 16)	74.00	.03-	375	REEL	19"-24"	72"	YES	YES	YES	LEFT TO RIGHT

Key Processes & Equipment

Design & Engineering

- Formability Simulation
- Tooling and Product Design
- Spring Back Analysis
- Tool Face Compensation
- Reverse Engineering
- Robot Simulation and Offline Programming

Miscellaneous Equipment

- Automated Grinding Equipment
- Robotic welding, hemming & assembly
- ARO weld systems

Metal Stamping

- High-Volume Production
- Low-Volume Production
- Large Prototype
- Small Prototype

Press Equipment

- 20 production stamping mechanical presses w/feed lines ranging from 100 tons to 1000 tons
- 19 prototype hydraulic stamping presses ranging from 60 tons to 2000 tons
- 12 low volume production mechanical line die presses ranging from 75 tons to 200 tons

CNC Machining Equipment

- 2- Haas Super VF3 40" x 20"
- 1 - Haas VM2 30" x 15"
- Hartford 3 Axis 120" x 80" x 48"
- Hartford 3 Axis 80" x 60" x 48"
- Hartford 3 Axis 80" x 40" x 36"
- Kao Ming 3 Axis 78" x 48" x 36"
- Fadal 3 Axis 60" x 30" x 30"

Laser Cutting Equipment

- 1 kW – 48" x 96"
- 1.5kW – 48" x 96"
- 2 kW – 60" x 120"
- 2.5kW – 60" x 120"
- 5 axis Turbo X-48 Champion/1000 watt/Max. Sheet Size: 4' x 8'
- 5 axis Super Turbo X-48 Mark II/1500 watt/Max. Sheet Size: 4' x 8'
- 5 axis Super Turbo X510 Mark II/2500 watt/Max. Sheet Size: 5' x 10'
- 1-1500KW 5X8
- 2-3000KW 8X11

Assembly

- Manual Welding - Resistance and MIG
- Flexible Robotic Spot & MIG Weld Cells
- Riveting/ Self Piercing Riveting (SPR)
- Component Assembly

