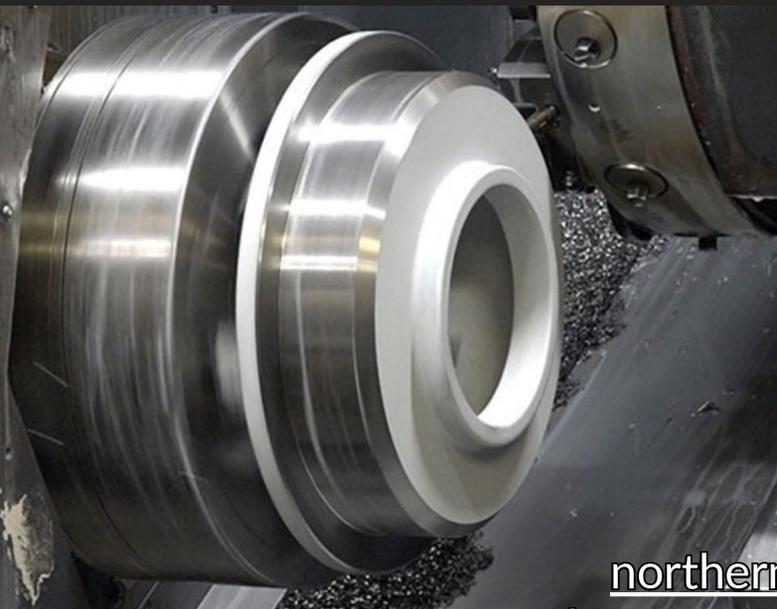


**LAWTON
STANDARD**

ST. PAUL

SAND CAST GRAY IRON CASTINGS,
DUCTILE IRON CASTINGS, AND
AUSTEMPERED DUCTILE IRON
CASTINGS UP TO 250 LBS



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MAKE SURE YOUR CASTINGS ARE
MANUFACTURED TO THE HIGHEST STANDARD
THE LAWTON STANDARD



ST. PAUL

WHAT WE DO: METALS LIST

Grades of Gray Iron

Specification	Grade	Tensile Strength	Hardness (B.H.N)
SAE J431 ASTM A-159 G2500	Class 25	25,000	170-229
G3000	Class 30	30,000	187-241
G3500	Class 35	35,000	207-255
G4000	Class 40	40,000	217-269

Grades of Ductile (Nodular) Iron

Specification	Grade	Tensile Strength	Yield Strength	Elongation % in 2"	Hardness (B.H.N)
SAE J434c	D-4018	80,000	40,000	18	170 Min.
	D-4512	85,000	45,000	12	156-217
	D-5506	80,000	55,000	6	187-255
	D-7003	100,000	70,000	3	241-302
ASTM A536	65-45-12	85,000	45,000	12	156-217
	80-55-06	80,000	55,000	6	187-255
	80-60-03	80,000	60,000	3	201 Min.
	100-70-03	100,000	70,000	3	241-302
	120-80-02	120,000	90,000	2	289-341

Grades of Austempered Ductile Iron

Grade	Tensile Strength	Yield Strength	Elongation % in 2"	Hardness (B.H.N)
ASTM A887				
130/90/09	130,000	90,000	9	269-341
150/110/07	150,000	110,000	7	302-375
175/125/04	175,000	125,000	4	341-444
200/155/02	200,000	155,000	2	388-477

651-778-3300



ST. PAUL



ST. PAUL

WHAT WE DO

Mold

DISA Match 130 automated molding machine with automatic indexing mold handling system

- Can produce up to 120 high-quality molds per hour
- 20x24-8/8 flask size
- High-speed pattern changes
- Ability to utilize existing jolt squeeze or match plate patterns through simple adaptors requiring only minor tooling modifications
- Fast and low-cost conversions
- Dedicated sand system with sand controller
- Automated line is ideal for low to medium requirements

Osborne 30 square line

- 30x30-12/12 flask size
- Patterns mounted on 2 separate plates (cope/drag)
- High-speed pattern changes
- Automated mold handling system
- Dedicated sand system with sand controller

Melt

- (3) 5 ton coreless induction furnaces
- General Kinematic charge feeder and Gaylord preheat hood

Core

- 2 Redford HS 16 Shell
- 1 Redford HS 22 Shell
- 1 B+P - ABC6 Phenolic Urethane



ISO 9001:2015 and ISO 14001:2015

ASTM A536, SAE J434, ASTM A48, SAE J431

Transportation and Power Generation Certification (TPG), WABTEC

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WHAT WE DO

Machining

Lawton Standard-St. Paul machinists are highly trained experts capable of machining everything we cast in iron, especially larger parts in the 50 to 250 pound iron casting range.

We utilize more than 14 CNC machines.

- 2-Nh6300 Horizontal Machining Centers (Mori Seiki)
- Nh6300 automated Horizontal Machining Center with hydraulic fixture capabilities (Mori Seiki)
- 2-Nh5000 Horizontal Machining Centers (Mori Seiki)
- NHX5500 Horizontal Machining Center (Mori Seiki)
- NVX5550 Vertical Machining Center (Mori Seiki)
- 2-Lb45 II-M Turning Centers (Okuma)
- 2-Lb35 II-M Turning Centers (Okuma)



Manual and Peripheral

- 2-Bridgeport 1hp Mills J Head
- Series 1 Bridgeport w/ Digital Readout
- Lagun Tool Room Mill
- Mori Seiki Tool Room Lathe
- Speroni Tool Presetter
- Goff Bead Blaster
- Parts Washer
- 12" Horizontal Band Saw



Inspection Equipment

- 9-12-9 Xcel auto CMM (Brown and Sharpe)
- 998 Global Image Auto CMM (Brown and Sharpe)
- Granite Layout Table
- Horizontal Mag Particle Unit (Magnaflux)



ISO 9001:2015, 45001:2018, and 14001:2015

ASTM A536, SAE J434, ASTM A48, SAE J431

Transportation and Power Generation Certification (TPG), WABTEC

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WHO WE ARE

Lawton Standard St. Paul, formerly Northern Iron & Machine, brings deep foundry know-how to today's supply chain realities. Lawton St. Paul is a partner who can help you ship reliable parts, hit tolerances, and keep programs moving when timelines and quality requirements are tight.

Lawton St. Paul is a full-service iron foundry and machining operation with roots reaching back to 1892. We produce gray iron, ductile iron, and austempered ductile iron castings from a few pounds up to 250 lbs. We have three induction furnaces and automated molding lines designed for repeatability and throughput. When your part design, gating, or solidification risks cost overruns or scrap, our team provides engineering support, computerized solidification modeling, and an in-house metallurgical lab.

Lawton St. Paul can turn your castings into finished, ready-to-install components. Our in-house CNC machining delivers four-axis capability and tight tolerances (± 0.0005 in), with automated CMM checks throughout the shift and final inspection before shipment. Ask about heat treatment, paint, and subassembly. With Lawton St. Paul you get a shorter supply chain, fewer suppliers to manage, and less risk.

St. Paul manufactures to ISO 9001, 14001, and 45001 standards and has been TPG Casting accredited (Performance Review Institute audit), giving buyers confidence.

northernim.com

[651-778-3300](tel:651-778-3300)

MEET THE FAMILY



**IRON CASTINGS UP 45,000 LBS
STEEL CASTINGS UP TO 5,500 LBS**



**ISO CERTIFIED AT ALL
LOCATIONS**