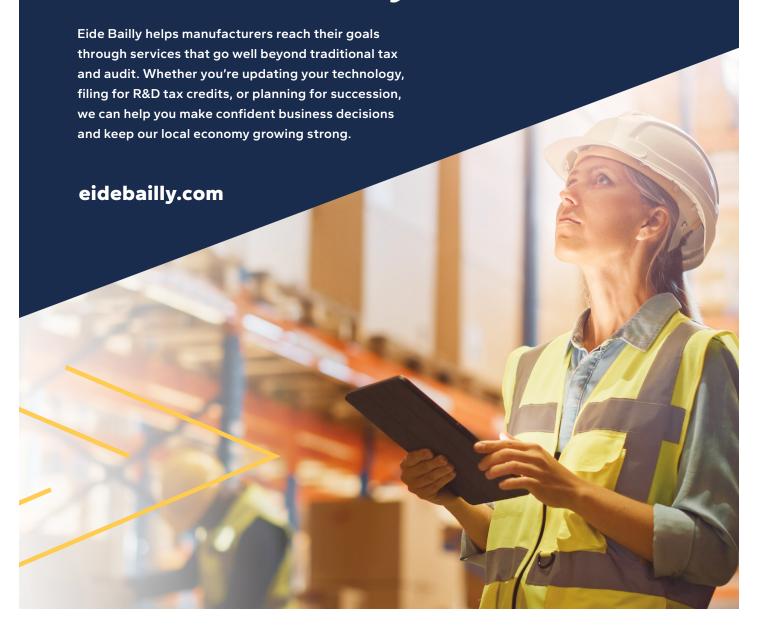




**CPAs & BUSINESS ADVISORS** 

# Build a Better Way



2024

### **Welcome** to the

# SOUTH CENTRAL TOUR OF MANUFACTURING

In celebration of manufacturing in South Central Minnesota, we are excited to showcase manufacturers each October during the South Central Tour of Manufacturing. Manufacturers across the region have opened their doors to showcase their facilities, products, machines, and the variety of opportunities in their in-demand and high paying sector.

Participants in this year's tour can look forward to accessing information about each contributing manufacturer through this publication, including information about each company such as fun facts, career opportunities, and onsite tours allowing you the experience of what is happening inside the walls of the buildings you drive by every day. Students, job seekers, and those who are just curious, can join the tours, learn about how products are made, and how to get started in a career in manufacturing. This tour is a great opportunity for both high school students exploring careers, as well as current job seekers looking to advance their skillset or make a career change.

Manufacturing employers are hiring and are excited to show the variety of careers they offer, including finance, production, engineering and design, marketing, IT, robotics, organizational development, maintenance, human resources and more. Manufacturing is innovative and high-tech, it's indemand, and offers a wage much higher than the regional average.

We would like to thank our participating manufacturers for opening their doors and sharing their story, Eide Bailly for their generous sponsorship and continued investment in this tour, and all of you for participating in this great event year after year. Enjoy the tour!

South Central Tour of Manufacturing Partnership



#### Sponsored by:





www.tourofmanufacturing.com



tourofmanufacturing@gmail.com

# SOUTH CENTRAL TOUR OF MANUFACTURING PARTNERSHIP ...

A big thank you to all of the people who invest their time and talents through the South Central Tour of Manufacturing Partnership each year. Without you the tour would not be possible.

- City of Fairmont
- Community and Economic Development Associates
- Eide Bailly
- The Free Press
- Greater Mankato Growth
- Mankato Public Schools
- MN Dept. of Employment & Economic Development
- MN State Engineering Center of Excellence
- · New Ulm Chamber of Commerce
- Region Nine Development Commission
- South Central College
- South Central Service Cooperative
- South Central WorkForce Council
- Vocational Rehabilitation Services
- Waseca Chamber of Commerce

# IN GRATITUDE:

We thank 3M & South Central College for their generous donation of protective equipment for students.









CPAs & BUSINESS ADVISORS

# Thursday, October 3rd

	Host Site	Address
1	Industrial Fabrication Services, Inc - Lake Crystal	460 Commerce Street, Lake Crystal, MN 56055
2	TBEI - Lake Crystal	52182 Ember Road, Lake Crystal, MN 56055
3	Taylor Corporation - Label Works - North Mankato - <b>Students Tours Only</b>	2025 Lookout Drive, North Mankato, MN 56003
4	Nidec - North Mankato - <b>Students Tours Only</b>	2075 Howard W Drive, North Mankato, 56003
5	South Central College - North Mankato	1920 Lee Blvd. North Mankato, MN 56003
6	Automotive & Manufacturing Engineering, MSU Mankato	Nelson Hall Room 105, Mankato, MN 56001
7	Brennan Companies - Lewis Lofts Construction Site - Mankato	209 Dewey Street, Mankato, MN 56001
8	Crown Cork & Seal - Mankato	174 Chestnut St., Mankato, MN 56001
9	Maclean Power Systems, Dotson Iron Castings - Mankato	200 W Rock St., Mankato, MN 56001
10	Winegar, Inc Waseca	1209 South State Street, Waseca, MN 56093
11	Cambria - Le Sueur	31496 Cambria Ave, Le Sueur, MN 56058
12	Jarraff by Prinoth - St. Peter	1731 N Gault St, St Peter, MN 56082
13	3M - New Ulm - Students Tours Only	1617 North Front Street, New Ulm, MN 56073
14	Booth Welding and Fabricating - New Ulm	520 18th North, New Ulm, MN 56073
15	Haala Industries part of the Afinitas Family - Sleepy Eye	22076 State HWY 4, Sleepy Eye, MN 56085

# Saturday, October 5th

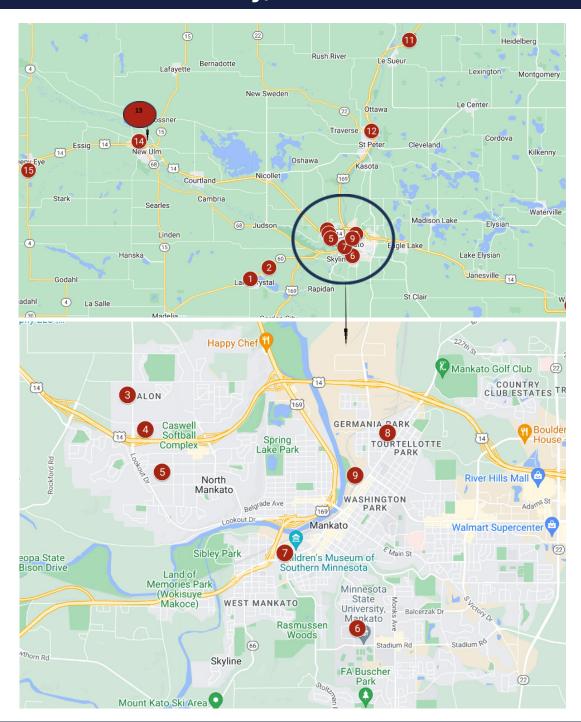
	Host Site	Address
2	TBEI - Lake Crystal	52182 Ember Road, Lake Crystal, MN 56055
16	Door Engineering a Senneca Company - Mankato	101 Power Drive, Mankato, MN 56001
17	ZF Off-Highway Solutions Minnesota Inc - North Mankato	1911 Lee Blvd, North Mankato, MN 56003



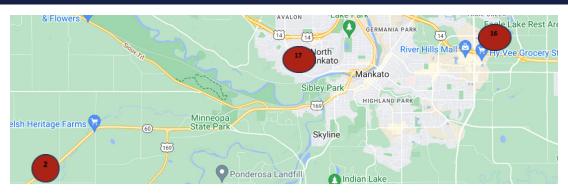
#### When touring look for this sign.



# Thursday, October 3rd



# Saturday, October 5th





## MANUFACTURING IN SOUTH CENTRAL MINNESOTA

Manufacturing is the second largest industry in South Central Minnesota, accounting for 17.5% of the region's total employment. In 2023, 351 manufacturing firms provided 18,115 jobs with an average annual wage of \$65,624, \$12,000 more than annual wages across all industries.

The Manufacturing industry in South Central Minnesota offers numerous job vacancies and abundant opportunities for jobseekers, with a range of occupations in demand that meet the cost of living. For a typical family (two parents and one child), the hourly wage needed is \$18.32, while for a single person with no kids, it is \$14.28. Occupations such as Tool and Die Makers, Machinists, Welders, Cutters, Solderers, and Brazers, Structural Metal Fabricators and Fitters, and Miscellaneous Assemblers and Fabricators offer median hourly wages between \$19.18 and \$31.42, making them attractive choices for individuals seeking rewarding careers in the region.

In 2023, Southwest Minnesota had 540 production occupation job openings, with 18% of these positions being part-time, 12% requiring post-secondary education, and 37% needing at least one year of experience. These job opportunities reflects the growing demand for skilled workers in the Manufacturing industry, creating excellent opportunities for job seekers to start or advance their careers.

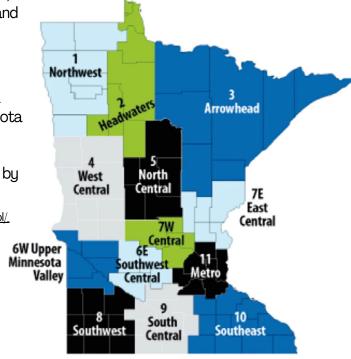
A variety of education is needed to be successful in Manufacturing, ranging from a high school diploma to a bachelor's degree or more. Gaining Manufacturing skills and

knowledge early on, such as during high school, can enhance a student's value to employers and provide access to higher-paying jobs at an earlier stage of their career.

With competitive wages and numerous job openings, the Manufacturing industry plays a pivotal role in providing South Central Minnesota with a resilient economy and a wealth of promising career opportunities. Find more in demand careers in Manufacturing and STEM by using the Career Pathways tool!

https://mn.gov/deed/data/data-tools/career-pathways-tool/\_

For more information, contact: Amanda O'Connell, Regional Analyst, DEED amanda.oconnell@state.mn.us





#### 460 Commerce Street Lake Crystal 507.726.6000 www.ifssteelfab.com

# 

#### **DIRECTIONS**

IFS is located at 460 Commerce Street (Lake Crystal), 12 miles southwest of Mankato, just off Highway 60, in the Lake Crystal Industrial Park. Parking is available on the south side of the building.

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided tours every half hour
- Accessible to people with disabilities
- Register to win door prize
- Refreshments served
- Employment applications available
- Must have closed toed shoes
- Must wear safety glasses (provided)

# APPLICATIONS AVAILABLE ONLINE: www.ifssteelfab.com/careers

# ABOUT INDUSTRIAL FABRICATION SERVICES, INC.

Founded in 1984, Industrial Fabrication Services, Inc. (IFS) in Lake Crystal, Minnesota is a custom metal fabrication facility that builds components for many bulk material-handling industries.

IFS was founded by a can-do crew of owneroperators and those roots are still found in today's team of metal-fabricating craftsmen & craftswomen. The team at IFS finds innovative ways to respond to client challenges, be it an overwhelming schedule or a complex design. Their team works with urgency and respect alongside project stakeholders to craft effective metal fabricated solutions for any client challenge. They find solutions by leveraging industry knowledge, skilled

labor and technology to design and fabricate value added solutions for their partners in the construction, processing and energy sectors. IFS ships products throughout the continental USA, Canada, Mexico, and worldwide.

IFS has been in the Lake Crystal community for over 40 years. Currently, they employ 108 people in a 85,000 square foot facility. IFS offers a variety of employment opportunities including welders, fabricators, machine operators, industrial blaster/ painter, CAD designers, project engineers/ managers, and various operations support roles.

IFS, where Impossible Finds Solutions.















52185 Ember Road Lake Crystal 507.272.2521 www.tbei.com

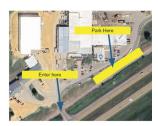
# THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM SATURDAY, OCTOBER 5, 2024 • 9AM TO 1PM

- Guided Tours every hour
- Tour is accessible for people with disabilities
- Employment applications available
- \*\*Do not touch the product\*\*
- Must have closed toed shoes
- Must wear safety glasses (provided)
- Must wear a ear protection (provided)

#### **DIRECTIONS**

When you turn off of highway 60, you'll cross the railroad tracks and stay to your right, you'll follow around until you see the flagpole and enter through that door. Additional parking for this can be along the grass/parking lot line.





#### APPLICATIONS AVAILABLE ONLINE:

www.tbei.com/careers/

#### **ABOUT TBEI**

Truck Bodies & Equipment International (TBEI), a subsidiary of Federal Signal Corporation, encompasses thirteen leading brands of truck bodies, trailers and equipment with facilities across North America. TBEI's Lake Crystal facility manufactures the Crysteel and J-Craft, Inc. brands of dump bodies and truck equipment, and

has been manufacturing truck equipment in central Minnesota for over 50 years. Crysteel and J-Craft build the industry's leading dump bodies and hoists which serve a variety of markets, including municipal, landscaping, construction, and more. TBEI's investment in the latest manufacturing technologies, as well as a team of highly skilled

engineers and certified welders, ensures that each product is manufactured at the highest quality level possible. Over the last four years, the Lake Crystal facility has grown significantly and now includes a 55,000 sq. ft expansion, new blast and paint booths, and new truck installation facilities.











3

2025 Lookout Drive North Mankato 800.522.3558

www.taylor.com/

labelworks.zoomcustom.com/

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Student Tours Only
- Paper/Form Check In upon arrival
- Employment applications available
- No taking pictures in the facility
- Must have closed toed shoes
- No Food or Gum
- No loose clothing

#### **APPLICATIONS AVAILABLE ONLINE:**

www.taylor.com/careers

#### **DIRECTIONS**



#### **DIRECTIONS**

Label Works (A Taylor Company) 2025 Lookout Drive North Mankato, MN 56003 \*Visitor/Bus Parking is in the front of the building.

#### ABOUT TAYLOR CORPORATION

Taylor Corporation is one of the largest graphics communications companies in North America, providing a diverse set of products, services and technologies addressing the toughest communication challenges. For 50 years, Taylor has been a premier provider of powerful and innovative products, services and expertise for individuals. businesses, and distributors large and small. Taylor's 10,000+ employees spanning more than 25 states, and 9 countries work diligently to create the interactive, printing and marketing solutions that have helped build some of the world's more recognizable brands. Everything they do begins with identifying the unique priorities and needs of their customers and creating one-of-a-kind solutions...





#### **TAYLOR FACTS:**

- Glen Taylor, Owner and Founder, started his career with Carlson Wedding Services before purchasing the company in 1975 for what would become Taylor Corporation.
- Taylor has acquired 187 companies in the graphic arts industry over the past 45 years, changing the landscape of printing in America.
- We have more than 40,000 customers, 115 years of manufacturing experience, 170 active U.S. Patents, and 90 production and warehouse facilities.







www.KatoEngineering.com

← Howard Drive West –



#### THURSDAY, OCTOBER 3, 2024 **9AM, 11AM AND 1PM**

- Student Tours Only
- Must be sole US Citizen
- Waiver Required
- Must have closed toed shoes (no sandals, flip flops, or high heels)
- Must wear safety glasses (provided)
- Must wear safety vest (provided)
- Long Pants Required



#### DIRECTIONS

Located in North Mankato on Howard Drive West. Student visitors will enter on the East side of the building near the pavilion, please reference the map.

#### **APPLICATIONS AVAILABLE ONLINE:**

www.KatoCareers.com



#### **ABOUT NIDEC**

Nidec Power of North Mankato is proud of its 98year legacy of innovative design and manufacturing excellence. Their stateof-the-art facility in North Mankato, Minnesota, spans 350,000 square feet and specializes in producing Kato Engineering branded alternators, motors, and controls up to 25 MW. Renowned for their quality and reliability, their

products deliver both prime and backup power across diverse industries, including Defense, Data Centers, Prime Power, Mining, Oil & Gas, and more.

With a team of over 400 employees, our North Mankato location is expanding and currently hiring for a variety of roles, including Manufacturing, Engineering, Accounting, Sales, Purchasing, and more. For a complete list of available positions and

to learn more about the company, please visit www.KatoCareers.com

#### **Positions Available In Multiple Areas!**

Including:

- Electricians
- Machinists
- Welders
- Engineering
- Internships





#### 1920 Lee Blvd North Mankato 507.389.7233 www.southcentral.edu/

# South Central College Lee Blvd

#### **DIRECTIONS**

From US-169 or MN-22, exit on US14 West Follow 14 West into North Mankato Exit onto Lookout Drive and go south (left). Turn left onto Lee Boulevard Park in the front Visitor Lot directly off of Lee Boulevard by the Main Entrance (Door 1). Overflow parking is available in the Red Lot by Door 30.

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours every half hour
- Accessible to people with disabilities

- Must wear safety glasses (provided)
- Must have closed toed shoes





#### **ABOUT SOUTH CENTRAL COLLEGE**

Why Manufacturing? Manufacturing is a high demand career field with abundant well-paying jobs and advancement opportunities. TOday's sophisticated manufacturing environment calls for individuals with a technical education, and South Central College provides a wide variety of options that let students decide how long they want to go to college based on their career goals.

## WHY SOUTH CENTRAL COLLEGE?

South Central College (SCC) offers many certificate, diploma and associate degree options in programs including manufacturing production technology, machine tool technology, mechatronics, energy technical specialist and welding. All these

programs provide students an opportunity to earn industry-recognized credentials, which lets employers know SCC graduates have the knowledge necessary to work in today's high tech manufacturing world. In addition, students can start their career while completing their college degree. SCC's Learn-WorkEarn program lets students work part-time for an area manufacturer while going to school. On-the-job training is combined with traditional classroom instruction, allowing students to master their technical skills, gain experience in the field and earn wages to offset the cost of their education. For more information, visit www.southcentral.edu/ manufacturing.

South Central College also has a special division, Customized Workforce Education, which has a 40-year history of providing employers and employees with short-term career training in manufacturing, workplace safety and more. SCC Customized Workforce Education helps employers upskill their employees and provides individuals with an opportunity to train for a new career field or grow in their current role. Each year CWE provides training to approximately 12,000 individuals. For more information, visit www. southcentral.edu/cwe.



#### **QUICK FACTS**

- South Central College (SCC) has been offering advanced manufacturing education since the college's inception in 1946.
- SCC's Campus
   Foundations provide
   more than \$500,000 in
   student scholarships
   each year.
- The best way to see all SCC has to offer is by visiting campus during the Tour of Manufacturing or check out other visit opportunities at www. southcentral.edu/visit.
- Applying to SCC is always free at www.southcentral. edu/Admissions/.





Department of Automotive and Manufacturing Engineering Technology

# TOUR WILL BE HELD IN NELSON HALL 105 THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours every hour
- Tours are accessible for people with disabilities
- Must wear safety glasses (provided)



#### Nelson Hall Room 105 MSU, Mankato 507.389.6157

cset.mnsu.edu/departments/ automotive-and-manufacturing-engineering-technology/



#### DIRECTIONS

Vehicles can park free in the Visitor Pay Lot (Lot 4) off Ellis Ave or in Lot 21 off Stadium Road.

# ABOUT AUTOMOTIVE & MANUFACTURING ENGINEERING TECHNOLOGY (AMET) AT MINNESOTA STATE UNIVERSITY. MANKATO

Department of Automotive and Manufacturing Engineering Technology (AMET) at Minnesota State University Mankato (MSU) has been serving the students and the region since 1970s. The department offers Bachelor of Science degree in Automotive Engineering Technology and a BS in Manufacturing Engineering Technology. The department also offers master's degrees in manufacturing engineering technology and engineering management.

The AMET Department at Minnesota State University, Mankato has a strong reputation of excellence. The department attracts students from all parts of the United States and the world. Faculty and staff are dedicated to effective and innovative teaching

and individual study to maintain their professional currency. Customized partnerships with business and government create a variety of opportunities for student design projects and internships. This combination of the University's commitment, AMET's dedicated faculty, and its innovative business partnerships ensure its ability to offer the best education for AMET students now and in the future.

The department has innovative and state-of-the- art labs in the field of robotics, 3D Printing, machining, composites manufacturing and automotive diagnostics. The department works with multiple regional and statewide industries on projects which bring real

world problems in the classroom for students to work on. Students continue to work in industry through internships and jobs after they graduate. The department has a strong alumni network, and they continue to hire our students in their organizations.









209 Dewey Street Mankato 507.625.5417 www.bcofmn.com/



#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours every hour
- Must have closed toed shoes
- Must wear long pants
- Hardhat & Safety Vest will be provided

#### **APPLICATIONS AVAILABLE ONLINE:**

www.bcofmn.com/careers/

# CONTRACTOR OF THE PARTY OF THE

#### **DIRECTIONS**

209 Dewey Street,
Mankato, MN 56001
(Lewis Lofts Construction Site)
Do not park in the
construction fence.
Parking is available across the
street at the Sinclair Flats parking
lot. Use the stalls closest to the
construction site.

# ABOUT BRENNAN COMPANIES

Brennan Companies was founded in 1994 in Mankato by Cathy and Mike Brennan. Over the 30-year history, the commercial general contractor has grown to build projects across the state of Minnesota and have offices in Mankato and Minneapolis. The company excels at managing commercial construction projects to keep projects on budget, on schedule, and completed with the utmost quality. Giving back to the community

has been a long time focus of Cathy and Mike, and continues with the second generation of owners, Cathy and Mike's son Joe Brennan, and Mankato native, Mark Landgraff. The team consists of

15 employees – project managers, superintendents, accountants, and administrative staff.







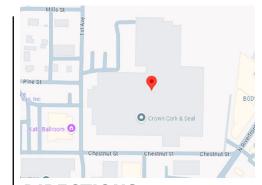






Brand-Building Packaging™

# 174 Chestnut Street Mankato 507.304.7404 www.crowncork.com/



#### **DIRECTIONS**

Take 14 to the Riverfront exit, turn right onto Chestnut Street. The plant is located right below the Kato Ballroom on Chestnut Street. Please park along the front of the building on Chestnut, or, if necessary, use the JPJ Dance Studio parking across the street.

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

APPLICATIONS AVAILABLE ONLINE: www.crowncork.com/careers

- Tours every hour
- At least 16-years old
- Refreshments will be served
- Tours are accessible for people with disabilities
- Must have closed toed and closed heel shoes
- Must wear safety glasses (provided)
- Must wear ear protection (provided)
- No Jewelry or Necklaces

#### ABOUT CROWN CORK & SEAL

Crown Cork & Seal's Mankato facility was built in 1941 and operated as Continental Can Company as a food can manufacturer until its purchase by Crown Beverage Packaging in 1987. Once owned by Crown, they transitioned from food cans to beverage ends and are one of three US end centers within Crown's beverage division. They currently produce approximately 28 million ends per day and service a wide variety of customers in the United States and Canada. They produce their ends by using a variety of presses to shape large coils of aluminum into standard can tops. Crown Cork & Seal currently employs 110 employees and maintains 24/7/365 operations. They have been a staple employer within Mankato

with career opportunities ranging from forklift operators to production technicians, machinists, and electricians.

Crown Cork & Seal recently achieved 3 years without a major safety incident; the first Crown facility to reach this milestone. They have also recently added robotic packaging centers, an additional module with four lane conversion presses, and are currently undergoing the installation

of a 7-acre solar garden. They have also partnered with state legislators regarding recycling efforts

within Minnesota and hosted a legislative tour in late 2023.









## 200 West Rock Street Mankato

507.345.5018 www.dotson.com

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours every half hour
- Refreshments served
- Employment applications available
- Must have closed toed shoes
- Must wear safety glasses (provided)
- Must wear a ear protection (provided)



#### **DIRECTIONS**

When on Rock Street, approaching MacLean Power systems, visitors will cross a set of train tracks. Visitors can then park in either the first or second lot on the right side.

#### **APPLICATIONS AVAILABLE ONLINE:**

http://dotson.com/careers/

# ABOUT MACLEAN POWER SYSTEMS - DOTSON IRON CASTINGS

MacLean Power Systems - Mankato, known as Dotson Iron Castings, is an iron foundry that produces castings for a wide range of industries - including power, agriculture and heavy trucking. They have been in Mankato for 150 years producing castings that power, move and feed the world.

MacLean Power Systems (MPS) acquired Dotson Iron Castings in May 2023. MPS supplies power system products throughout the US and products are on electrical poles and in power distribution centers. Iron castings produced in Mankato can be found securing crossbeams to electrical poles and as end fittings.

Join the MPS - Mankato team! MPS - Mankato employs 140 team members over three shifts and are hiring for entry level production team members, maintenance technicians and CNC Machinists for our 2nd (2PM to 10PM, Monday through Friday) and 3rd (10PM to 6AM, Sunday night through Friday morning). They are also hiring a Design Engineer position as well who would be involved in new casting and tooling design.











#### **Precision Machining**

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours every hour
- Refreshments served
- Employment applications available
- Tours are accessible for people with disabilities

Must wear safety glasses (provided)

# 10

1209 South State St. Waseca 507.835.3495

507.835.3495 www.winegarinc.com



#### DIRECTIONS

1209 South State Street Southern end of Waseca on MN Highway 13 East side of the road.

**PARKING:** Parking available in front of the plant. Entry for the tours will be through the office entrance on the west side of the building closest to the highway

# ABOUT WINEGAR, INC

Winegar, Inc is located on MN Highway 13 in Waseca MN. and provides machining and assembly services to OE manufacturers and other quality conscious commercial interests throughout the continental United States.

The company was incorporated in 1979 and has grown from a shop with 10 employees to 80 employees, and utilizes 120,000 square feet of manufacturing and warehouse facilities.

Winegar, Inc. provides a wide variety of contract machining services including machining intermediate size steel and iron ductile castings, aluminum castings and bar stock, stainless steel, and other materials. Other services provided include screw machine products, precision cylindrical grinding, some assembly of components for various applications.











## 11

31496 Cambria Ave Le Sueur 507.262.0233 www.cambriaUSA.com

# THURSDAY, OCTOBER 3, 2023 • 9AM TO 3PM

- Guided Tours every half hour
- Tour is accessible for people with disabilities
- Refreshments served

- Employment Applications available
- Signed Waiver Needed
- Must have closed toed shoes



#### **DIRECTIONS**

We are located on the Northside of HWY 169. Exit onto Forest Prairie Road, and then turn right onto Cambria Dr.

#### **APPLICATIONS AVAILABLE ONLINE:**

www.cambriaUSA.com/careers

#### ABOUT CAMBRIA

Cambria is the leading American-made, family-owned producer of quartz surfaces. Every countertop and surface we create is handcrafted in Minnesota where our skilled craftsmen and women maintain the highest standards of quality. It's our hands-on attention to the smallest details from start to finish that enables us to create the world's finest quartz surfaces.

At Cambria there are no small jobs. Only big opportunities. Take charge of your career at an industry-leading company where quality, teamwork, and respect are always business as usual.

### Employment Opportunities:

- Production Operations
- Warehouse Operations
- Process Engineering
- Quality Control
- Maintenance

Cambria offers health insurance, dental insurance, life insurance, companypaid short-term disability, long-term disability, profit sharing, and 401(k) with employer match.

We are always looking for smart, motivated, and talented people. If you're looking to thrive in an environment that recognizes and rewards creativity, ingenuity, and a dedication to excellence, visit us at <a href="https://www.cambriaUSA.com/Careers">www.cambriaUSA.com/Careers</a>.











1730 North Gault St. St. Peter
1.800.767.7112
VM.PRINOTH.COM

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Guided Tours will run approximately every 20 minutes and last 30-45 minutes
- Accessible to people with disabilities
- Must wear safety glasses (provided)



# **DIRECTIONS**1731 N Gault Steet St. Peter, MN 56082 Check-in at the welcome tent.

#### **ABOUT JARRAFF**

Since 1979 Jarraff by Prinoth has provided high-quality, specialized right-of-way maintenance, land clearing and tree care equipment. Jarraff combines state-of-the-art technologies and expert know-how to develop industry-leading vehicles and equipment renowned for their safety, reliability, productivity and performance.

Jarraff products are engineered, manufactured and supported from St. Peter, MN in addition to a regional sales team. With a team of over 80 employees, career fields include assembly, fabrication, R&D, engineering, sales, accounting, and more. Their team manufactures Jarraff Mechanical Tree Trimmers, the Mini Jarraff Mechanical Tree Trimmer and the T-Rex forestry mulcher.

Jarraff proudly

manufactures products that benefit their local community in St. Peter, as well as communities worldwide. They design products to make vegetation management more efficient, cost-effective, and environmentally friendly. For example, Jarraff's mechanical tree trimmers and mulching equipment are crucial in maintaining power line rights-ofway, which ensures safe infrastructure, prevents power outages, and reduces wildfire risk.

Not only do communities benefit from using Jarraff's equipment, but their customers also reap rewards. Jarraff's innovative technology increases safety and productivity, reduces costs, and minimizes environmental impact. This enables businesses to operate sustainably and profitably, freeing up resources that can be directed elsewhere. By using Jarraff's equipment, vegetation management companies can complete tasks faster and more efficiently, resulting in less disruption for residents and businesses. Overall, Jarraff's products exemplify how innovation and sustainability can successfully intertwine to reap rewards for both businesses and communities alike.

Acquired by Prinoth in 2021, Jarraff works seamlessly with the Vegetation Management division. Prinoth is part of the HTI Group (High Technology Industries), which specializes in the fields of winter sports, urban mobility, material transport, construction, vegetation management and clean energy. With over 21 locations, 108 branches and 4,650 employees

worldwide, HTI is able to meet the needs of its customers at their local level.





# Science. Applied to Life.™

1617 North Front Street
New Ulm
507.359.0162
www.3m.com
www.3m.com/3M/en\_US/plantlocations-us/new-ulm/

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Student Tours Only
- Must be 16-years-old
- Waiver needed
- Safety video will need to be completed prior to student tours.
- Must have closed toed shoes (no sandals, flip flops, or high heels)
- Must wear safety glasses (provided)
- Must wear long pants, no bare legs
- Hair pulled back (above shoulders)



**Special Instructions for Parking:** Check in at the Building 10 visitor entrance upon your arrival.

#### APPLICATIONS AVAILABLE ONLINE:

www.3m.com/3M/en US/careers-us/

#### **ABOUT 3M**

3M is a global innovation company that never stops inventing. Over the years, we have worked to improve daily life for hundreds of millions of people all over the world. We have made driving at night easier, made buildings safer, and made consumer electronics lighter, less energy-intensive and less harmful to the environment. We even helped put a man on the moon.

Every day at 3M, one idea always leads to the next, igniting momentum to make progress possible around the world.

The first production line at this site made electrical connectors. The 3M New Ulm Plant is a diversified manufacturing operation that provides products for a wide variety of markets and customers. Our customers value our responsiveness

to their needs and the quality we build into every product. We do this with a highly skilled and dedicated workforce that continuously seeks out opportunities to grow and make improvements.

Over the years, we have constructed several additions to the facility and product lines have come and gone. Some of the products with a history in New Ulm (but no longer produced here) include copy machines, medical MRI imagers, medical bone saws and infusion pumps, audio and video tape recorders, and powdered epoxy resins.

3M New Ulm employees are actively involved in many organizations and volunteer groups in the surrounding communities. In addition to employee involvement, the plant and 3M Foundation partner to provide financial and product donations to dozens

of local organizations.

#### 3M New Ulm Facts

- Plant Established: 1962
- Current Plant Size: 532,000 sq. ft.
- Land Area: 60 acres
- Number of 3M Divisions Served: 15
- Number of Finished Product SKU's: 13,000/year









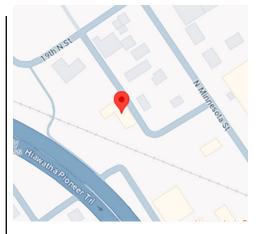


14

520 18th North
New Ulm
507.382.2399
www.booth-innovation.com/

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 3PM

- Tours every half hour
- Tour is accessible for people with disabilities
- Must have closed toed shoes (no sandals, flip flops, or high heels)
- Must wear safety glasses (provided)
- Must wear ear protection



**DIRECTIONS**Feel free to park anywhere around the building.

#### **ABOUT BOOTH WELDING & FABRICATING**

Booth Welding and Fabricating, LLC, Is a family owned company that specializes in product design, fabrication and installation. Their experienced design team provides service from on-site consultations and ideation through to the engineering and drafting process, From artistic pieces to industrial construction, they have diverse capability and proven quality. With a full machine shop, including a CNC wateriet, CNC press brake, CNC tube and pipe Plasma cutter, their fabricators can cut, shear, bend, punch, roll and weld various materials to create precision products. They do quality TIG, MIG, arc, and stud welding.

Booth Welding and Fabricating does installations including structural steel, plant equipment, production line and workstation installations. They are proficient at core drilling and anchoring in diverse materials. Additionally, this team has experience repairing trailers, farm/ heavy equipment, railings, holding tanks...If it's broke, they can probably fix it! Additionally, they have their own line of quality products for home and travel.

In 2006, after 30 years fabrication experience, Leonard Booth founded Booth Welding and Fabricating. In 2008 Troy Booth joined his father in the operation of the family business. The company has grown much over the years and now includes machinists, welders, CAD draftsmen, a commercial artist and support staff.

Throughout New Ulm one can see evidence of the contribution this company has made to

the community. The red bicycle racks with the heart design were constructed by Booth Welding and Fabricating as was the eagle sculpture located at the high school and a lighted memorial sculpture located at the New Ulm Medical Center. There are numerous residential and commercial railings throughout the area and many industrial projects at local manufacturing plants, including process pipe jobs, that have been done by this diverse company. From the artistic to the industrial, Booth Welding and Fabricating provides a wide range of capabilities to our community.











## A Part of the Afinitas Family

#### THURSDAY, OCTOBER 3, 2024 • 9AM TO 10AM

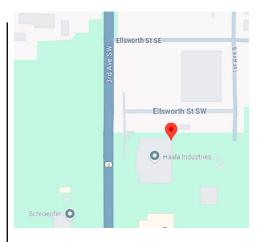
- Guided tours from 9-10am
- Must have closed toed shoes
- Must wear safety glasses (provided)
- Must wear a safety vest (provided)

#### APPLICATIONS AVAILABLE ONLINE:

www.afinitas.com/careers/

#### 22076 State HWY 4 Sleepy Eye 507.794.5821

www.afinitas.com/brands/ haala-industries/



#### DIRECTIONS

May park anywhere in the parking lot and enter through the door that says "Office".

#### **ABOUT HAALA INDUSTRIES**

The company started as Haala Industries and was founded back in 1974 and grew its first roots servicing the metal fabrication and repair needs of the local Sleepy Eye, MN community. It has since developed into a leading innovator and manufacturer in metal fabricated products serving a diverse range of customers. They work closely with many

**Grates and Guards** 

engineering firms, state DOTs, DNRs, and Ducks Unlimited in both product development and design. They continually look for ways to improve the utilization and application of all products. Haala Industries strives to be competitive in the market by using the latest technology of fiber lasers, high-definition plasma cutters, high - precision press brakes with laser angle measuring, and robotic welders to provide

customers with specialized products. They provide quotes on new designs and drawings provided by any customer. Some products they offer are wire cone cages, flared end cages, trash guards, safety grates, pipe ties, pond skimmers, custom grates and guards, fabricated rebar products, and stud welding to name a few.

Haala Industries became a part of the Afinitas Concrete Accessories Division back in 2022 and is still growing to this day. They currently have 65 employees at the Sleepy Eye location. There are many career

opportunities at Afinitas -Sleepy Eye, such as welding positions, assembly, shipping/receiving, machine operators, and much more! Please check out our website at www.afinitas. com for all employment opportunities and to submit an application.











— A SENNECA COMPANY –

# 101 Power Drive Mankato 507.931.6910

www.doorengineering.com/

#### SATURDAY, OCTOBER 5, 2024 • 9AM TO 1PM

- Guided tours every half hour
- Tour is accessible for people with disabilities
- Refreshments served

- Employment Applications available
- Must have closed toed shoes

# 

#### **DIRECTIONS**

Our building is located ½ mile east of Hwy 22 & Victory, on the south (right) side of the road. Take the first left into the parking lot, and please park in the Visitor Parking area at the north (left) end of the building as you face it.

#### **APPLICATIONS AVAILABLE ONLINE:**

https://vizi.vizirecruiter.com/Senneca-Holdings-3828/#?location=%5B%22Mankato,%20MN%22%5D

# ABOUT DOOR ENGINEERING A SENNECA COMPANY

Door Engineering and Manufacturing, Inc. was founded in 1966 by Otis Olson in Minneapolis, MN. initially specializing in fourfold door systems for the industrial and commercial markets. The company soon expanded into the aviation and specialty door industries. In 1979, Door Engineering relocated to Kasota, MN, and later moved to its current location in Mankato, MN. The product line further expanded in 2003 to include fire-rated door systems following the acquisition of American Metal Door.

In 2004, an investment consortium purchased Door Engineering and Manufacturing, Inc. from the Olson family, rebranding it as Door Engineering and Manufacturing, LLC. Today, with nearly 10,000

door systems installed worldwide and over 60 years of experience, Door Engineering remains an industry leader in industrial, commercial, aviation, and specialty door solutions.

Now operating as part of Senneca Holdings in Mankato, the company continues to manufacture doors under the Door Engineering brand. Their experienced team ensures superior engineering and design, along with quick and seamless installation. Built for long-lasting durability, low maintenance, speed, and safety, their door systems offer architects immense design flexibility, with both customized and pre-engineered options available, along with a variety of aesthetically pleasing fabrication and finishing alternatives.

With extensive experience across multiple industries, Door Engineering understands the unique challenges customers may face and creates doors that stand out in both form and function.













### 17

1911 Lee Boulevard North Mankato 507.386.4032

www.mico.com

#### SATURDAY, OCTOBER 5, 2024 • 9AM TO 1PM

- Guided Tours every half hour
- Refreshments Served
- Must wear safety glasses (provided)

#### https://jobs.zf.com

APPLICATIONS AVAILABLE ONLINE: https://jobs.zf.com



#### **DIRECTIONS**

Located in Upper North Mankato. We are right across the street from South Central College.

TE ©

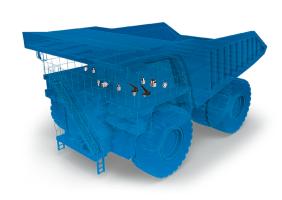
**Parking:** Park anywhere in the parking lot and enter through the front door.

# ABOUT ZF OFF-HIGHWAY SOLUTIONS MINNESOTA, INC."

**ZF Off-Highway Solutions** Minnesota, Inc., designs and manufactures hydraulic and electrohydraulic components, controls and brake systems for heavy-duty off-highway machines, including mining haul trucks, wheel loaders, articulating dump trucks, agriculture equipment, etc. ZF is a global technology company supplying advanced mobility products and systems for passenger cars, commercial vehicles, and industrial technology. With our products, ZF contributes to reducing emissions and protecting the climate, as well as enhancing safe mobility. Join our team of 169,000 employees at 162 production locations in 31 countries. ZF offers diverse and

international opportunities

to advance your career. Become part of a global technology company with a wide range of employment opportunities in development, research, IT, production, and administration. At ZF, you will have the opportunity to work on the forefront of innovation and help transform the mobility of tomorrow!









# 299 Johnson Avenue SW ■ Waseca

**507-833-8822** ■ <u>www.belfuse.com/cinch</u>



#### **Company Description**

Cinch is a leading provider of high-quality copper and optical fiber interconnect products primarily used in high speed and harsh environment applications within the Aerospace, Defense, Space, and Industrial Markets.

Cinch has a broad portfolio of custom interconnect products including, RF connectivity, Mil / Aero connectors, Ethernet Connectivity, high speed industrial interconnects, optical technology, headers, and enclosures.

#### **Why Work Here**

Cinch Connectivity Solutions offers career opportunities in the Engineering, Finance, IT, HR, Customer Service, Procurement and Production areas such as Machining, Plating, Quality, Warehouse and Assembly. They also offer Job Shadow and a paid CNC Machinist Apprenticeship Program.



#### **QUICK FACTS**

The Waseca business has been an active employer in the Waseca community for over 75 years. Once part of the original E.F. Johnson business, E.F. Johnson began manufacturing radio components in 1923, becoming well-known 20 years later for its radios installed inside WWII military vehicles.

After a series of acquisitions, the business was eventually sold to Bel Fuse, the parent company of Cinch Connectivity Solutions. Bel Fuse is a headquartered in West Orange, NJ with a global footprint which covers the Americas, Europe and Asia.

The Waseca plant is a vertically integrated facility that employs 220 associates.

Cinch provides design solutions to customers for unique operational challenges in a global environment.

Machine Shop tolerances include 100th thickness of a human hair. Their machining capabilities also include a high precision turning machine capable of machining down to 1 micron. This machine is one of only two that exist in the world.

They are proud to be a member of the Waseca Chamber of Commerce, and annually provide assistance to the community in the form of charitable giving and generous paid time off for employee volunteers.



**Directions** 

**Cinch Connectivity** Solutions is located at 299 Johnson Avenue S.W. Suite 100. From Highway 14, travel North on Highway 13 and take left onto Johnson Avenue. Parking is available in visitor's parking, on the street and in lot across the street.



# OCTOBER IS MANUFACTURING MONTH

BE PART OF THE SOLUTION

- Find a tour
- Host a tour
- Tour Resources
- Sponsor a tour

**MOST A TOUR AND JOIN THE 音呼の取す** mnmfg.org/statewidetour









# MINNPOLY

The Minnesota Polytechnic & Applied Learning Institute



Big ideas. Real-world thinking. Inspired action.

#### Become a Leader in Emerging Technologies!

Earn a bachelor's degree through MinnPoly's unique work-based learning programs 
Mentored by faculty and industry experts, graduate with 2 years experience to lead in

Technology Management, Automation Engineering, Analytics, or Software Engineering.

For more information, visit minnpoly.org

# Experience the Future of Engineering at the Minnesota State Engineering Center of Excellence!

As part of the Southern MN Tour of Manufacturing, the Minnesota State Engineering Center of Excellence is thrilled to welcome secondary students and educators to our stop for an unforgettable experience in engineering. This year, we are offering two exciting hands-on activities designed to engage students in real-world engineering while showcasing how cutting-edge technologies are shaping the future of the industry.

#### Unleash Your Inner Engineer with the Reverse Engineering Challenge

At the heart of our tour stop is the Reverse Engineering Challenge, where students get to become engineers for the day. In this engaging activity, teams of 2-5 students will take apart a mystery device, uncover its inner workings, and use the technology they find to solve a real-world challenge. This exercise mimics the work that engineers do every day—dissecting complex systems, finding solutions, and applying critical thinking skills.

It's more than just problemsolving; it's about sparking





creativity and fostering teamwork. The students will present their findings and solutions to their peers, practicing communication and collaboration in a fun, dynamic environment. This challenge brings STEM (Science, Technology, Engineering, and Math) to life and gives students a taste of the exciting careers they could pursue in engineering and manufacturing.

# Step Into the Future with Virtual Reality

In addition to the Reverse Engineering Challenge, students will have a unique opportunity to experience how **Virtual Reality (VR)** is revolutionizing the engineering world. At this stop, students can step into a virtual environment and see firsthand how engineers are using VR to design, prototype, and train in ways that were once unimaginable.

This immersive activity allows students to interact with virtual models and explore the same tools used by professionals in manufacturing and engineering. It's a glimpse into how new technology is changing the way we innovate and problem-solve, giving students a real sense of the future of engineering.

#### About the Minnesota State Engineering Center of Excellence

The Minnesota State **Engineering Center of** Excellence is dedicated to preparing the next generation of engineers by connecting students with industry and offering hands-on educational experiences. Through innovative programs like the Reverse Engineering Challenge, the Center supports STEM education for students from K-12 to post-secondary, ensuring they gain the skills they need to succeed in a rapidly evolving job market.

Committed to workforce development, the Center partners with businesses to provide students with relevant, real-world learning experiences. It also focuses on fostering diversity in STEM, helping to recruit and retain students from underrepresented groups in engineering and related fields.

### **Uniquely Abled Academy**

# First CNC Program in MN for Young Adults with Autism

The Uniquely Abled Academy at South Central College (SCC) is a program designed to provide individuals with autism the hands-on training and hightech skills needed to prepare for a career as a computer numerical control (CNC) operator. SCC was the first college in Minnesota to offer Uniquely Abled Academy, a nationally-developed program through The Uniquely Abled Project.

## What is Uniquely Abled Academy?

In 10 weeks, the Uniquely Abled Academy (UAA) teaches a group of young adults with autism to be entry-level CNC machine operators and provides job placement support. Participating students receive over 200 hours of inclass instruction (classroom and hands-on), plus 60 hours of job readiness soft skills training tailored to young adults with autism. The final week of the program consists of mock interviews with local employer partners who are also looking to hire for their companies.

### Career Pathways for Graduates

South Central College has graduated 21 students from the Uniquely Abled Academy since its launch in 2022. Upon completion UAA graduates have the opportunity to test for industry-recognized credentials (NIMS) qualifying them for in-demand, well paying, high skill jobs in advanced manufacturing.

Graduates may also choose to continue expanding their skills with additional machining courses as part of SCC's Machine Tool Technology program. Some choose to start in job in the field and then return to SCC later, with employers sometimes willing to pay for their additional education.

## Sparking the Interest in Manufacturing

This summer's class included two past UAA graduates, Luke Desmarais and Gus Lennartson, who came back to mentor and serve as lab assistants to the current students. Watching the program come full circle, with these two 2022 graduates transitioning from UAA students just discovering manufacturing to now being able to share their

enthusiasm and expertise for CNC Machining with new students was powerful.

"Overall, I would say the UAA is an extremely useful program that I am really happy to have gone through as it's helped me in quite a few ways." Said Luke. It has prepared me to get a job in a field I had zero experience in prior, how to create a resume, as well as how to act in interviews."

"For me, this program cemented an interest in machining that I already had, and gave me a clearer view of what my future will look like and the skills I need to get there," said Gus. "I'm grateful for the opportunity that I otherwise wouldn't have had." Gus is finishing up his 2nd year in the MTT program this year."

Learn more and apply for the next cohort at: southcentral.edu/uaa





Left: Gus Lennartson (left), who graduated from the UAA in 2022 and is currently in his second year of SCC's Machine Tool Technology program helps Reid Krengel, enrolled in this summer's UAA. Right: Luke Desmarais receiving his [Machine Tool Technology degree at South Central College Graduation with President Dr. Parker.

# SCC CONNECTS

Get ready to start a South Central College Manufacturing Program:

- Machine Tool Technology
- Mechatronics
- HVAC/R
- Auto Body and Collision
- Welding

# **FALL**

SCC Connects Class Schedule:

Tuesdays & Thursdays

October 29 – December 12 Noon – 3 p.m.

South Central College North Mankato Campus

# **Manufacturing CAREERS**





# SCC Connects is a FREE program that connects future SCC students to:

- A course to get you ready for college (computer use, reading and career exploration)
- College application and registration assistance
- Guidance navigating the college computer system
- Financial Aid/FAFSA
- Grants and Scholarships
- College classroom support (Tutoring)
- Financial help with books, tuition, supplies and equipment

**Questions?** 

Drea Calderon, SCC Adult Learner Transition Coordinator 507-389-7450 | andrea.calderon@southcentral.edu

Attend an **Information Session** to learn more! **Tuesday, October 1,** 12 - 3:30 pm *OR* 5 - 8:30 pm **Tuesday, October 8,** 5 - 8:30 pm **Thursday, October 10,** 12 - 3:30 pm South Central College, North Mankato Campus

Scan the QR code to register for an Information Session and learn more about SCC Connects!





www.southcentral.edu/connects



The State of Minnesota Department of Employment and Economic Development (DEED) funded (or funded in part) this training through a grant. The grant recipient created this training. DEED does not endorse this publicity or training or make guarantees, warranties, or assurances of any kind, express or implied, regarding the accuracy, completeness, timeliness, usefulness, adequacy, continued availability or ownership of the information herein or elsewhere.









Minnesota's Career Resource

# 5 Great Reasons To Consider Manufacturing



#### #1: It pays well.

Manufacturing offers stable, dependable, familysustaining jobs that pay well.

- \$70,865 is the average annual manufacturing wage in Minnesota 10% above the average for all jobs.
- \$25.21 is the median hourly wage almost 14% higher than the total of all other industries.

#### **#2:** There are lots of jobs.

This is a terrific time to start a job in manufacturing.

- **86,500 job openings** are expected by 2028 as older workers retire.
- Manufacturing jobs are located across the state and are 11.4% of all jobs.
- Beyond production, employers need people in information technology, human resources, sales, accounting and more.

# #3: It's important work in a safe, clean, high-tech environment.

You can take pride in making things people need in a work environment that is safe and clean.

- Some plants are among the **most state-of-the-art** and sanitary environments you can find.
- High-tech machinery and workplace standards are designed to protect safety and well-being.
- Robotics/automation, artificial intelligence and 3D printing are among the technologies being used.
- Manufacturers make everything from life-saving biomedical/biotech products to food and countless other useful products.

#### #4: Employers want you.

Manufacturing is a great career for everyone.

- Manufacturing workplaces are increasingly diverse and welcoming.
- Employers are actively seeking to hire men and women of all races, ethnicities and backgrounds.
- Older workers and people changing careers are welcome.
- Manufacturing needs people with all levels of education, from a high school diploma or equivalent to advance degrees in science, math or engineering.

# **#5:** You'll have opportunities for growth.

Many employers offer free on-the-job training and other continuous learning opportunities.

- Entry-level jobs can be a stepping-stone to higher level positions.
- Problem-solving skills, math skills, and mechanical aptitude are valued.
- From handson production

jobs to executive leadership roles, anyone can **find interesting work with high-earning potential** in manufacturing.





# Incumbent Worker Training Grants

The Minnesota Department of Employment and Economic Development (DEED) and CareerForce, in partnership with South Central Workforce Council and Minnesota Valley Action Council, is soliciting grant proposals from area businesses for Incumbent Worker Training.

Incumbent Worker Training Grants are designed to provide direct financial assistance to businesses to train current employees.

#### **Employer Eligibility**

- Minnesota businesses located within the nine-county area of South-Central Workforce Council (Faribault, Martin, Watonwan, Blue Earth, Waseca, Nicollet, Brown, Sibley, or Le Sueur Counties)
- Have been in business at least 18 months
- Are not pending or in the midst of laying off employees
- Fall into the sector-based occupations of Manufacturing, Health Care, Transportation, Agriculture and Construction.
- Priority of approval given to employers not previously awarded Incumbent Worker Training funding.
- Preference will be given to applicants that demonstrate an increased wage for Incumbent Worker trainees and training that results in an industry recognized certification.

#### **Employee Eligibility**

- Directly employed by the company at a facility located within Minnesota
- At least 18 years of age
- Work 32 or more hours weekly
- Earn an hourly wage above the state minimum wage.
- Employed with the company 6 or more consecutive months.
- Agree to share copies of ALL of the following documents: Driver's License | Social Security Card | Veterans: DD214.

#### **Qualifying training**

#### Can be provided by:

- Educational institutions (not to include secondary schools for academic credit, diplomas or degrees)
- Trade associations
- Private companies
- Economic development agencies

#### Training may be used to:

- Gain or maintain certifications
- Enhance process efficiency
- Upskill for new equipment or software

#### Training not covered includes:

- Required/regulatory training
- Training already reimbursed by another state/federal program

#### How to apply

Interested Employers should email their CareerForce Office to express interest and receive an electronic grant proposal application:

- CareerForce.Fairmont@state.mn.us
- <u>CareerForce.Mankato@state.mn.us</u>
- CareerForce.NewUlm@state.mn.us

Applications may be reviewed for completeness prior to submission. Incomplete applications may be disqualified from consideration.

#### **Direct contacts:**

Jeanna Faber 507 - 618 - 5610

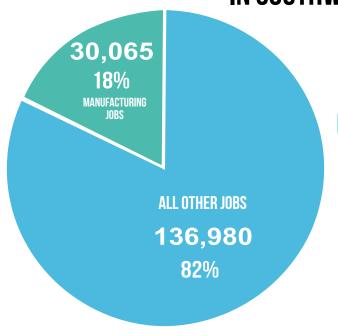
Mary Shumski 507 - 618 - 5610

LeRoy Kiecker 507 - 344 - 2622



# MANUFACTURING CAREERS

### IN SOUTHWEST AND SOUTH CENTRAL MINNESOTA



#### MANUFACTURING IS THE LARGEST INDUSTRY IN THE REGION.

1-in-5 jobs are at manufacturers in Southwest & South Central Minnesota.

There are numerous non-traditional manufacturing occupations for women, including maintenance and repair workers, machinists, industrial machinery mechanics, CNC machine operators and mechanical engineers.

#### 1 IN 3 MANUFACTURING JOBS ARE HELD BY WOMEN.



#### MANUFACTURING CAREERS FOR WOMEN IN SOUTHWEST AND SOUTH CENTRAL MINNESOTA

Industrial Engineers	Mechanical Engineers
\$39.41/hr	\$38.15/hr
Electricians \$27.60/hr	Industrial Machinery Mechanics \$25.32/hr
Maintenance and Repair	Industrial Engineering
Workers	Technician
\$22.15/hr	\$24.87/hr
Truck Drivers	Machinists
\$21.89/hr	\$23.08/hr
Computer Controlled Machine Tool Operators \$18.92/hr	Laborers \$18.08/hr











# CAREER PATHS IN MANUFACTURING IN SW/SC MN

#### 4-YEAR OR MORE COLLEGE DEGREE AND/OR EQUIVALENT EXPERIENCE

Industrial Engineers \$39.41 Mechanical Engineers \$38.15 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products \$25.97

# 1-2 YEAR COLLEGE DEGREE (OR CREDENTIAL)

Machinists \$23.07

Industrial Machinery Mechanics \$25.32 Industrial Engineering Technicians \$24.87

# HIGH SCHOOL DIPLOMA OR GED / ON-THE-JOB TRAINING

First-Line Supervisors/
Managers of
Production and
Operating Workers
\$30.45

Packaging and Filling Machine Operators and Tenders \$17.55

Welders, Cutters, Solderers, and Brazers \$20.77

# WHY CHOOSE A CAREER IN MANUFACTURING?

Manufacturing provides just shy of 20 percent of all total employment in the region, making it the largest industry in the region just ahead of health care and social assistance. Southwest and South Central is the only region in the state where manufacturing is the largest employing industry. Average wages in manufacturing are 20.5 percent higher than the total of all industries.









It's your state of success



View videos of career paths in transportation: www.careeronestop.org/Videos/CareerVideos/career-videos.aspx

These jobs are in demand in Southwest and South Central Minnesota and these are SW/SC Minnesota Median wages. Data collected from Department of Employment and Economic Development.

In Demand Manufacturing Careers

# MECHANICAL INDUSTRIAL **ENGINEERINGTECHS** ENGINEERS

#### **EDUCATION**

Most employers prefer to hire candidates with associate's degrees or other postsecondary training in mechanical engineering technology.

**Industrial Engineers** typically need a bachelor's degree in mechanical engineering or mechanical engineering technology.

## **IMPORTANT QUALITIES**

- Project Management
- Work independently
- Manufacturing process
- Problem solving
- Troubleshooting
- Process Improvement
- Risk Management
- Detail oriented
- Creativity

- Project Management
- Problem solving
- Data Analysis
- Product development
- Work independently
- Management skills





Mechanical engineering technicians help mechanical engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings.

Develops and documents the required parameters for machines and tools used to produce products.

Analyze problems to see how mechanical and thermal devices might help solve a particular problem. Investigate equipment failures or difficulties to diagnose faulty operation and to recommend remedies. Analyze the test results and change the design or system as needed. Oversee the manufacturing process for the device.

#### **EMPLOYMENT OPPORTUNITIES**

MEDIAN® \$14.00 HOURLY \$ \$26.38

Employment of industrial machinery mechanics and machinery maintenance workers is projected to grow 6.3 percent from 2018 to 2028

MEDIAN#\$31.95 Employment of industrial engineers

is projected to grow 6.2 percent from 2018 to 2028.

These jobs are in demand in Southwest and South Central Minnesota and these are SW/SC Minnesota Median wages. Data collected from Department of Employment and Economic Development.

#### **WORK ENVIRONMENT**

Mechanical engineering technicians assist with manufacturing processes in factories or with development phases in research and development labs before manufacturing takes place.

**Industrial Engineers** generally work in offices. They may occasionally visit worksites where a problem or piece of equipment needs their personal attention.

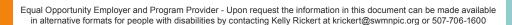






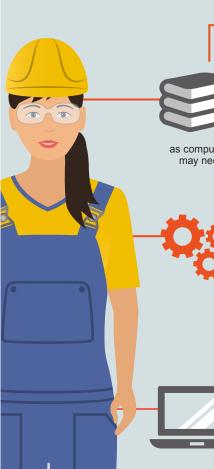






## In Demand Manufacturing Careers

# CNC PROGRAMMER WELDERS **AND MACHINIST**



#### **EDUCATION**

Some operators are trained on basic machine operations and functions in a few months. Other workers, such as computer-controlled machine tool operators, may need up to two years to become trained.

High school diploma or equivalent, combined with technical training and on the job training, welding certificate



- · High degree of autonomy
- Troubleshooting
- IntegrityIndustrial automation Process management
- Data entry

- Detail oriented
- Self-starting / Self-motivated
- Problem solving
- Integrity
- Dependability
- Team player
- · Work independently
- · Basic computer skills

#### WHAT THEY DO

Operate programming software to generate computer numerically controlled (CNC) programs used to control CNC machine tools that drill, mill, rout, grind, or notch.

Responsible for assembling structural metal products using tools, welding equipment, and their own hands.

#### **EMPLOYMENT OPPORTUNITIES**

MEDIAN® \$18.39 HOURLY \$25.62

Demand is expected to be strong, as many firms are adopting technologies such as machine tools and robots.

Types of welders in demand: arc and gas welding

These jobs are in demand in Southwest and South Central Minnesota and these are SW/SC Minnesota Median wages. Data collected from Department of Employment and Economic Development.

#### WORK ENVIRONMENT



These workers often operate powerful, high-speed machines. Operators usually wear protective equipment, such as safety glasses, earplugs, and steel-toed boots to protect them from flying particles of metal or plastic, machine noise, and heavy objects.

Welders and cutters may work outdoors, or indoors, sometimes in a confined area designed to contain sparks and glare.

Most welders work full time, and overtime is common.









