

# The Manufacturing Industry

An overview of opportunities in the Manufacturing Industry in Ramsey County

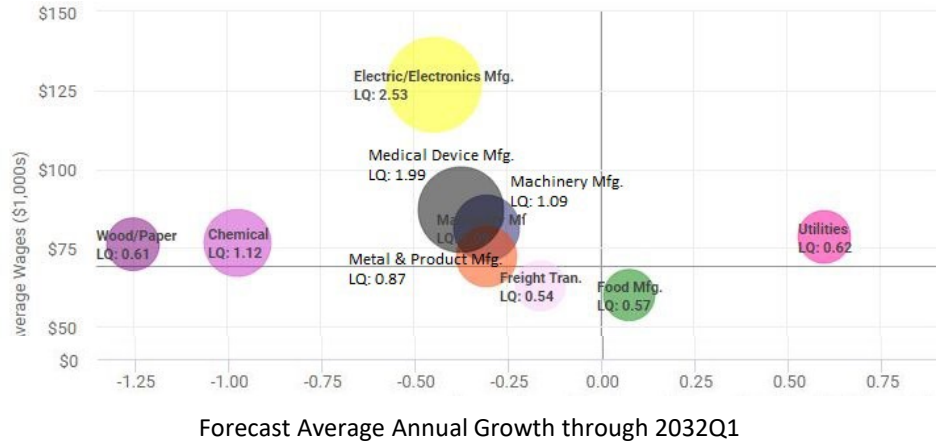
## Impacts on Employment in the Manufacturing Industry

### High Demand from Entry to Specialized

- Industry employment dropped about 0.2% from 2020Q1 to 2021Q1 and, then grew 3.3% through 2022Q1
- Industry employment projected to drop 0.7% annually, with at least 8,048 of currently-employed talent needing to be replaced by new talent by 2025

### Tight Talent Pool

- Low unemployment in production roles (3.6%)
- 25% of Production talent over the age of 54, indicating wave of likely retirements



The larger the bubble, the more concentrated the cluster is in Ramsey County than an average community (higher Location Quotient)

## Electric/Electronics Manufacturing

These careers are

**150%**

more concentrated here than average

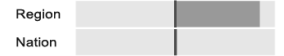
**8,876 employed**

**\$72,467 average wage**

Includes: Medical Devices, Circuits, Measuring Devices, Semiconductors, Environmental Controls, Audio and Video Equipment, Printing Machinery, and more

**0.6%** ↑

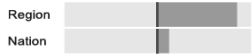
Avg Ann % Change Last 10 Years / +0.0% in the U.S.



## Machinery Manufacturing

**0.6%** ↑

Avg Ann % Change Last 10 Years / +0.1% in the U.S.



**6,567 employed**

**\$80,489 average wage**

Includes: Surgical Instruments, Pumps, Conveyors, Packaging Machines, Cutting Tools, Signs

## Chemical Manufacturing

**3,434 employed**

**\$72,467 average wage**

Includes: Adhesives, Plastics, Resins, Bags, Pottery, Plumbing, Ceramics, Films, Industrial Gas, Paint, and Ink

**4.6%** ↑

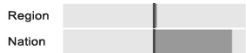
Avg Ann % Change Last 10 Years / +0.9% in the U.S.



## Food Manufacturing

**0.0%** ↑

Avg Ann % Change Last 10 Years / +1.2% in the U.S.



**1,961 employed**

**\$62,956 average wage**

Includes: Milk, Tortillas, Snacks, Meat

## Metal and Product Manufacturing

**2,084 employed**

**\$73,077 average wage**

Includes: Sheet Metal, Die-Casting, Coating, Plating, Foundries, Stamping

**-2.7%** ↓

Avg Ann % Change Last 10 Years / +0.0% in the U.S.



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## Education, Experience, and Skills in Demand in the Manufacturing Industry

Education Level <sup>?</sup>	Unique Postings	% of Total
No Education Listed	2,387	21%
High school or GED	3,032	27%
Associate degree	931	8%
Bachelor's degree	5,720	51%
Master's degree	3,026	27%
Ph.D. or professional degree	464	4%

Minimum Experience <sup>?</sup>	Unique Postings	% of Total
No Experience Listed	4,197	37%
0 - 1 Years	1,314	12%
2 - 3 Years	2,423	21%
4 - 6 Years	2,028	18%
7 - 9 Years	854	8%
10+ Years	492	4%

### Top Foundational Skills In Demand

- 1) Communications
- 2) Marketing
- 3) Customer Service
- 4) Auditing
- 5) Warehousing

### Top Technical and Digital Skills In Demand

- 1) Microsoft Office Suite
- 2) SQL
- 3) SAP Applications
- 4) Python
- 5) Data Entry

## An Origin, Gateway, and Target Occupation Model for Manufacturing Function Careers

### Ramsey County, 2022Q1

**Definitions:** [1] Target occupations are high-wage (HW) (above regional average), high-skill (HS) (require a credential), and high-demand (HD) (2/4 indicators: under 3% unempl, higher than average 5-year growth, total 5-demand > 50% of current empl, high job posting volume), [2] Gateway occupations are mid-wage (\$42K to regional average), low-middle skills (HS diploma, some OJT), sufficient demand (3-5% unempl and/or high volumes of current opportunities). [3] Origin occupations are low-wage (<\$42K/year) and often low-skill (no credential), low-demand (over 5% unempl, low growth, low replacement demand, and/or low job postings) In order of volume in Ramsey County

### Target Occupations<sup>[1]</sup> (all HW, HD, HS)

Purchasing Agents (AG)  
 Industrial Engineering Techs (OG, AG)  
 Electrical & Electronic Engineering Techs (AG)  
 Mechanic Engineering Techs (AG)  
 Mechanical Drafters (AG)

### Gateway Occupations<sup>[2]</sup>

Maintenance & Repair Workers, General (HD, OG, AG)  
 Inspectors, Testers, Sorters, Samplers & Weighers (HD, AG)  
 Machinists (HD, OG, AG)  
 Production, Planning, & Expediting Clerks (HD, AG)  
 Welders, Cutters, Solderers, & Brazers (OG, AG)

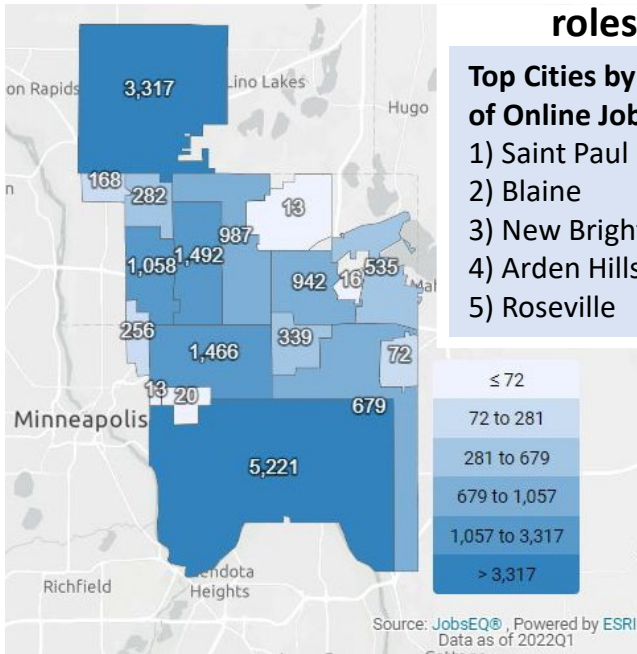
### Origin Occupations<sup>[3]</sup>

Team Assemblers  
 Electrical Assemblers, Except Coil Winders  
 Packaging & Filling Machine Operations & Tenders  
 Production Workers, All Other (HD)  
 Assemblers & Fabricators, All Other

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## Volume of Job Postings by Location, and Hiring Difficulty for Manufacturing Function roles in Ramsey County

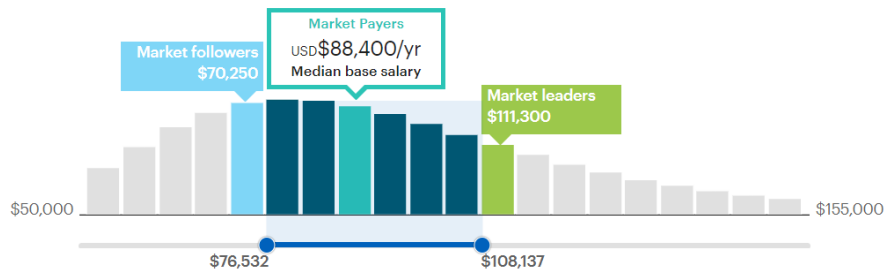


**Current Relative Supply**  
**Moderate**  
 102 candidate per opening

**Typical posting duration**  
**Average**  
 69 days

**Your competition**  
**Decreasing**  
 15.33% lower

**Competitive concentration**  
**Dispersed**  
 More minor employers



## Employers Recruiting Manufacturing Talent, by Volume of Postings in Ramsey County

### Electric/Electronics Manufacturing

- 1) Black & Veatch
- 2) Ulteig Engineers
- 3) Xcel Energy
- 4) Midcontinent Independent Syst.
- 5) META

# 11,853

Unique Manufacturing Job Postings  
 August 2021-July 2022 (+18%)

# \$35,500/year

Entry-Level Average Wage  
 (0-2 years of experience and only a HS Diploma)

### Machinery Manufacturing

- 1) 3M
- 2) Dairy Farmers of America
- 3) Boston Scientific
- 4) BTG International Inc.
- 5) TSI Incorporated

### Chemical Manufacturing

- 1) 3M
- 2) Pace Analytical Services
- 3) Black & Veatch
- 4) Sanimax
- 5) H.B. Fuller Company

### Staffing and Temp Agencies

- 1) Aerotek
- 2) Randstad
- 3) ManpowerGroup
- 4) Kelly Services
- 5) Twin Cities Staffing
- 6) Actalent
- 7) Doherty Staffing Solutions
- 8) ASGN
- 9) GPAC
- 10) Volt

### Food Manufacturing

- 1) Land O' Lakes
- 2) Saputo Inc.
- 3) Mississippi Market Foods Co-Op
- 4) Ecolab
- 5) BEVSOURCE

### Metal and Product Manufacturing

- 1) Tempco Manufacturing
- 2) Quality Tool
- 3) Boston Scientific
- 4) BTG International
- 5) Pentair

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## Youth, Diverse, and Female Talent in the Manufacturing Industry

### Key Issues for Youth Employees

- Turnover rate highest among youth ages 14 to 24, ranging between 12.2% to 31.4%
- New hires between the ages of 14 to 21 earn \$0.30 to \$0.55 to the dollar of all new hire annual earnings

### Key Issues for BIPOC Employees

- Turnover rates highest among workers identifying as Black (10.3%)
- New BIPOC hires earn \$0.58 to \$0.79 cents to the dollar of all new hire earnings

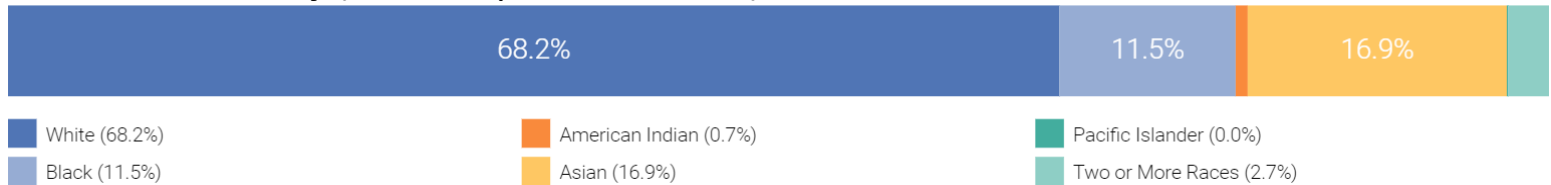
### Key Issues for Employees by Gender

- Women account for 35.3% of employment in Manufacturing industry (all occupation types)
- New female hires earn \$0.93 cents to the dollar and new male hires earn \$1.02 to the dollar of all new hire annual earnings.

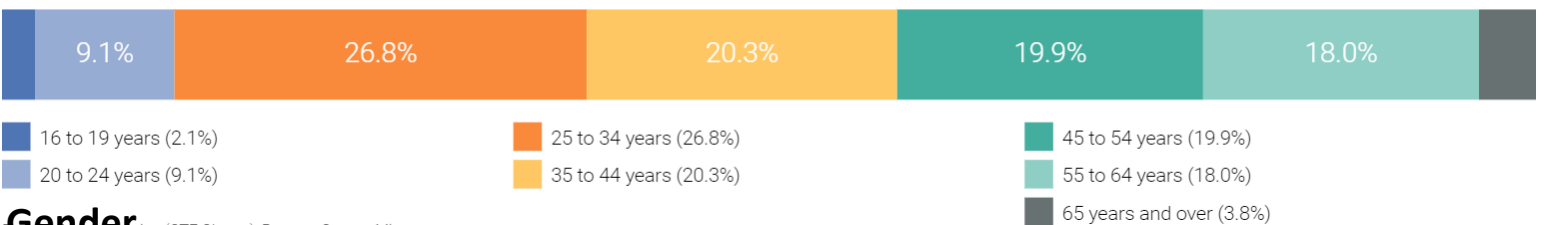
Race / Ethnicity	Avg. Turnover per Qtr.	Stable Jobs	New Stable Jobs
White	5.7%	\$106K	\$52.2
Black	10.3%	\$62.4K	\$37.2K
American Indian	6.9%	\$63.8K	\$33.7K
Asian	6.8%	\$71.1K	\$37.4K
Native Hawaiian/ Pacific Islander	NA	\$65.0K	\$35.8K
Two or more races	8.7%	\$83.8K	\$38.4K
Hispanic/Latino	8.1%	\$69.9K	\$50.1K
<b>Manufacturing</b>	<b>6.2%</b>	<b>\$75.9K</b>	<b>\$66.8K</b>
<b>All Industries</b>	<b>8.7%</b>	<b>\$46.0K</b>	<b>\$43.9K</b>

## Talent Demographics in Manufacturing Function Careers (Occupation-Based)

### Race and Ethnicity (9.5% Hispanic or Latinx)



### Age



### Gender

