November 15, 2021

Dear Colleagues,

The Manufacturing industry makes up about 9% of Vermont's workforce. According to Vermont Labor Market Information, manufacturers employed approximately 30,100 people in September of 2021, up 9% from one year earlier. Since the 2020 COVID pandemic, manufacturers have faced many challenges: obtaining materials within the supply chain, increasing demand for product, and difficulty hiring and retaining a front-line and middle-level workforce. Frontline workers typically comprise 40% of the economy overall and those have been among the hardest hit.

Vermont Talent Pipeline, an initiative of the Vermont Business Roundtable's Research and Education Foundation, invited Vermont manufacturers to participate in a collective impact collaboration to build a talent pipeline for shared hiring needs. Using the model of Talent Pipeline Management, developed by the US Chamber of Commerce Foundation, these manufacturers act as the "end customer" of a talent supply to provide hiring requirements. The data collected in the 2021 Manufacturing Hiring Needs Assessment is intended to inform education providers who develop and align training programs; and to inform the labor force about career opportunities. The data is not a complete representation of manufacturing jobs in Vermont.

The assessment engaged 45 Vermont manufacturers in 47 locations. Invitations for participation originated from a public call for participation via social media, Agency of Commerce, Vermont Business Roundtable, Vermont Manufacturing Extension Center, Regional and Economic Development Organizations, and Chambers of Commerce. Any Vermont manufacturer interested in joining the VTPM collaborative, is welcome to do so.

The attached is a summary of findings. We invite you to share this information with education providers, career navigators, parents, students, and job seekers, with the goal of developing awareness, exploration and preparation for excellent careers in Vermont's Manufacturing industry.

Most Sincerely,

Mary Anne Sheahan
Executive Director, Vermont Talent Pipeline
Vermont Business Roundtable

Attachment: 2021 Manufacturing Collaborative Hiring Needs Assessment Summary

Methodology

The Vermont Talent Pipeline invited Advanced Manufacturing employers to participate in a collaborative for the advancement of talent development. A forecast with a hiring needs assessment was conducted during the months of July and August 2021. 60 employers volunteered to participate in the demand planning process. 50 employers set up user ids in the web-based needs assessment survey tool. 45 employers completed the forecast with competency and credential details, two employers of which had multiple locations in state.

The collaborative was asked to forecast hiring for both new and replacement jobs over the two-year period of August 2021-August 2023. Participants were also asked to rate the importance of competencies, employability skills, educational attainment, and industry recognized credentials for each of the six critical roles identified by the collaborative. The term "critical roles" indicates the hardest to hire, and/or most needed. The following critical roles are identified:

1. Production Operators and Assemblers
2. Equipment Maintenance Technicians
3. CNC Machinists
4. Team Leaders
5. Engineers
6. Welders/Solderers

Assumptions defined by employers

- The forecast is for the two-year period of hiring between August 2021-August 2023.
- Employers will look back over the previous two years and determine future indicators related to the fulfillment of business contracts including economic drivers, retirements, labor participation rates, automation and technology advancements.
- Technology advancements, Additive Manufacturing, 3D technologies and AI will become more prevalent in the next two years.
- New jobs refer to the number of FTEs needed for anticipated business growth.
- Replacement jobs account for the number of FTEs needed to replace existing jobs due to retirements, internal promotions, transfers, and attrition.
- An increase in retirements will drive an increase in promotions from feeder positions.
- Labor participation rates are low, and are expected to increase moderately as
    - pandemic rates subside
    - unemployment benefits decline
    - schools reopen fully
    - childcare resources become more available

Survey Highlights

1. 2193 jobs are forecast in the next two years among 45 manufacturing employers (mean = 49)
2. 46% (1010) of these jobs represent new hires due to industry growth
3. 54% (1183) of jobs represent replacement hires for leaving employee positions

Manufacturing Job Forecast

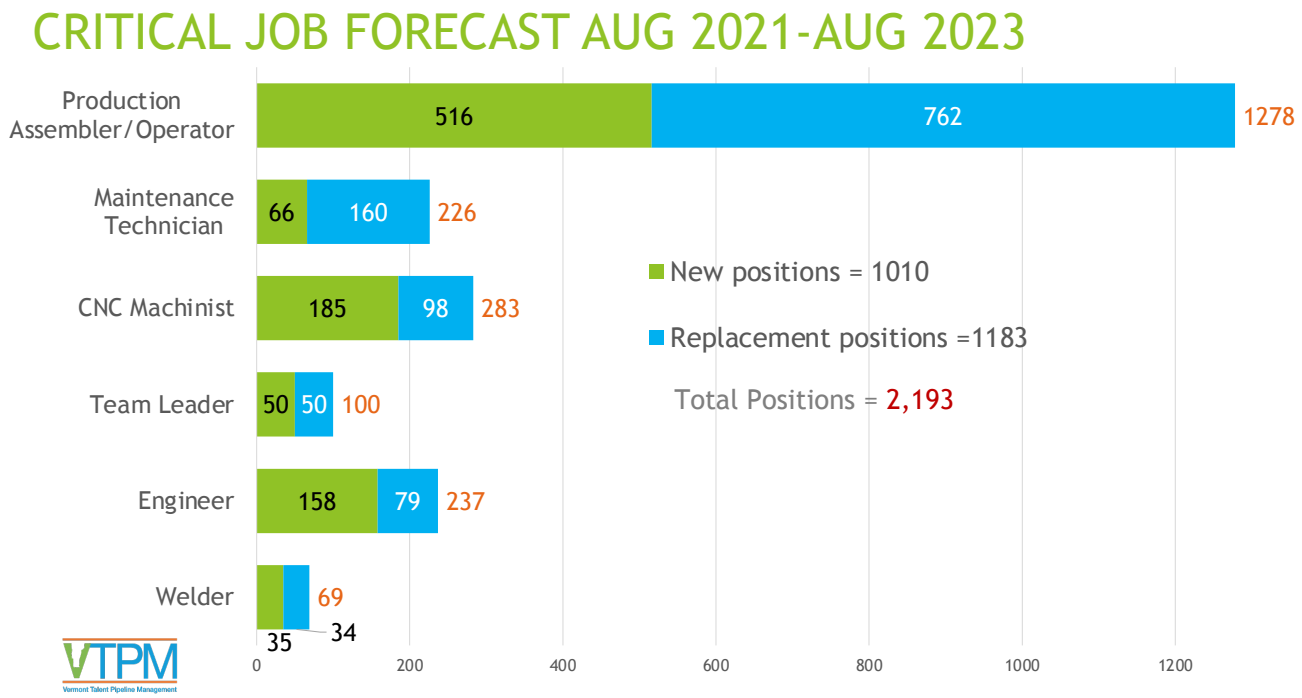


Figure 1. Manufacturing critical job forecast (Aug 2021 - Aug 2023) from 45 Vermont employers.

Table 1. Reported Vermont manufacturing positions (Aug 2021 - Aug 2023) from 45 Vermont employers.

CRITICAL ROLES	New Positions	Replacement Positions	Total Positions	% Of Total
Production Assembler/Operator	515	762	1278	58%
CNC Machinist	185	98	283	13%
Maintenance Technician	66	160	226	10%
Engineer	158	79	237	11%
Team Leader	50	50	100	5%
Welder/Solderer	35	34	69	3%
	1010	1183	2193	100%

Manufacturers' Foundational Remarks

1. There's a lack of career awareness and exploration that generates interest in high-wage skilled manufacturing careers.
2. Each critical job requires employability skills as a threshold for career entrance.
3. A pandemic combined with an aging workforce results in higher than normal numbers of retirements, leaving a gap in skills for technician- and middle-level roles.
4. The housing shortage and high cost of living makes it hard to attract new workers to Vermont. Some employers have been forced to hire temporary contracted services from outside the state.
5. Wrap around support services for entry-level workers will help attract new and diverse candidates, which is seen as a positive strategy.

6. Apprenticeships represent an opportunity to invest in employees' career entry and advancement, filling entry level roles while preparing for the next level within a career ladder.
7. Flexibility has become the leading request among new hires, yet not all employers can adjust scheduling to meet the demand particularly on the front line.

On Diversity, Equity and Inclusion

Only 30% of manufacturing respondents indicated a recruitment and retention process that currently incorporates diversity, equity and inclusion (DEI). DEI is widely seen as a promising hiring strategy, and manufacturers want to focus here and learn from peer successes. The industry has seen previous successes in hiring immigrants in the 1980s and 2000s. Open hiring practices, adult education, English Language Learning, and wrap around services for coordination of childcare, transportation, substance abuse, financial literacy and housing will help increase access and support for individuals with barriers to work. Some employers describe a willingness to purchase and renovate housing as a workforce strategy for recruitment and retention; others are providing transportation to and from work.

Job Category Summary

1. Production Assemblers/Operators

Production workers represent the highest demand, comprising 58% of the total hiring need. A shortage of labor, reduced workforce participation, coupled with a lack of career awareness presents difficulties hiring for these high-demand, semi-skilled positions. Production operators and assemblers typically require little prerequisite skill and learn most or all about the manufacturing craft (or trade) on the job. Essential skills developed on the job include electro-mechanical safety, quality, production processes and maintenance. These transferable skills apply to mid-level manufacturing roles for CNC Machinists, Equipment Maintenance Technicians and Team Leaders, which pay significantly higher wages. Courses that develop these skills command higher wages and offer career growth potential.

2. Equipment Maintenance Technicians

Equipment Maintenance Technicians are affected by retiring labor. A generation on the verge of retirement, is leaving employers with gaps of technicians and in all trades. Again, a lack of career awareness, coupled with electro-mechanical skills required provides a niche for exploration and preparation for adults and youth. Training programs in electrical, plumbing, welding, soldering and manufacturing technologies have difficulty finding instructors to teach the next generation. Where we would normally look to the career and technical education (CTE) centers for this training, some CTEs can't find skilled or practicing technicians, who are ALSO licensed to teach in schools.

3. CNC Machinists

Manufacturer's average demand for new CNC Machinists has quadrupled since the 2018 VTPM needs assessment. This is indicative of two major factors: growth in product demand and technology advancements that require higher level skills for machine operations. Skills for CNC Machinists including set up, programming, maintenance, inspection, 3D modeling/printing and additive manufacturing. STEM skills are becoming more relevant for both CNC machinists and engineers. With this high demand, temporary CNC contractors have been hired to provide set up and programming startups for new technologies. These roles, like those of traveling nurses, cost employers double (and sometimes more) to fill in temporarily or train others in-house.

4. Team Leaders

While team leaders posess supervisory skills and are responsible for meeting production targets, this is the only role where the demand for hiring has decreased since 2018. This may be due to pressures for STEM skills in other critical roles with transferable skills.

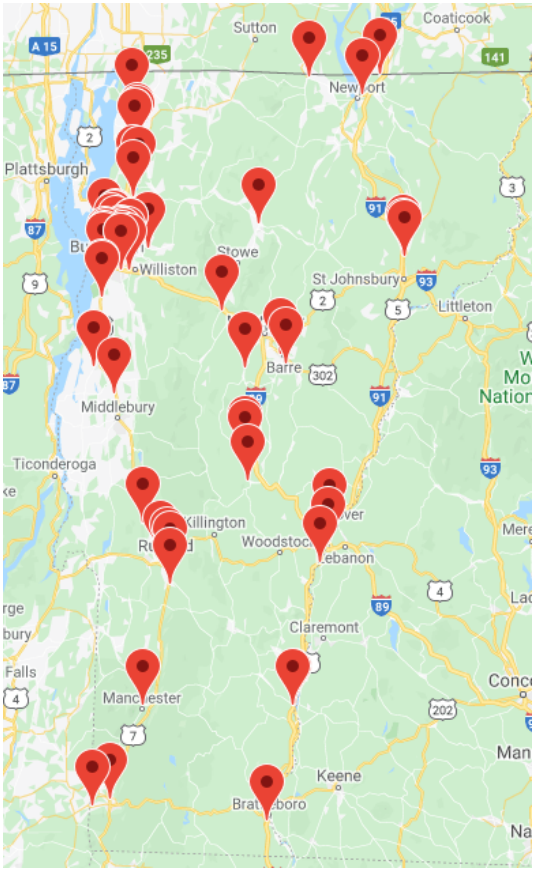
5. Engineers

Engineers who design products to specifications and oversee production efficiencies, are among the highest priority. Engineers with specialized *design skills* are becoming increasingly more difficult to hire, particularly in an in-person work environment. Employers describe challenges of finding engineers with the right combination of skills. Businesses willing to hire engineers with basic transferable engineering skills, expect a higher level of in-person engagement and a need for mentorship. Those who have specific "unicorn" skills are likely to find work regardless of location. Moving engineers (or any job) to Vermont has proved difficult with the shortage of housing and high cost of living. Remote work provides the flexibility many workers seek. Remote work comes with challenges for retention, engagement and integration into organizational culture.

6. Welders and Solderers

Welders are in short supply in manufacturing, construction mechanicals, plumbing, heating and many other infrastructure-related jobs. Some welding can take advantage of new technologies, but employers describe welding as both an art and a science, requiring human skill and attention to detail. Safety and quality are seen as the two most important employability skills required for welders. Solderers need fine motor skills, patience and attention to small details and inspection. Assemblers with these skills are hard to hire and most are taught on the job using mentorship as a primary training strategy.

Employer Locations



Vermont Talent Pipeline Manufacturing Employer Collaborative members who responded to the Hiring Needs Assessment:

- 60 volunteered to participate in the Manufacturing Collaborative
- 50 Setup user ids in the Talent Pipeline Management research system
- 45 Forecasted hiring needs (2 with multiple VT locations, totaling 47 locations)

Figure 2. VTPM 2021 Manufacturing Needs Assessment participant locations.

Regional Distribution

Region	Description	Percent of total vacancies	N
Central Vermont	Along Rt 4; North of Rt 4 and South of interstate 89	18%	6
Southern Vermont	South of Rt 4 corridor	14%	11
Northeast Vermont	East side of Northern Vermont including North of interstate 89	11%	7
Northwest Vermont	West side of Northern Vermont including Chittenden County and along i-89	57%	23

Table 2. Projected manufacturing job vacancies (Aug 2021 - Aug 2023) distribution in four Vermont regions.

New vs Replacement Jobs

The number of new workers as a percent of the total demand for hiring has gone from 33% in 2018 to 46% in 2021. This is a 13% increase in hiring for new jobs. Figure 3 (below) compares the average number of "new" workers needed per Vermont employer for critical manufacturing positions between 2018 and 21021. New jobs are added due to business growth. We see the largest growth in new jobs for higher skilled positions of CNC Machinists and Engineers.

54% of all hiring demand is for replacement positions, representing retirements, internal promotions, transfers, and attrition. Manufacturers describe a retiring skill set at middle level roles that has never been replaced by training programs, specifically for equipment maintenance technicians and CNC machinists.

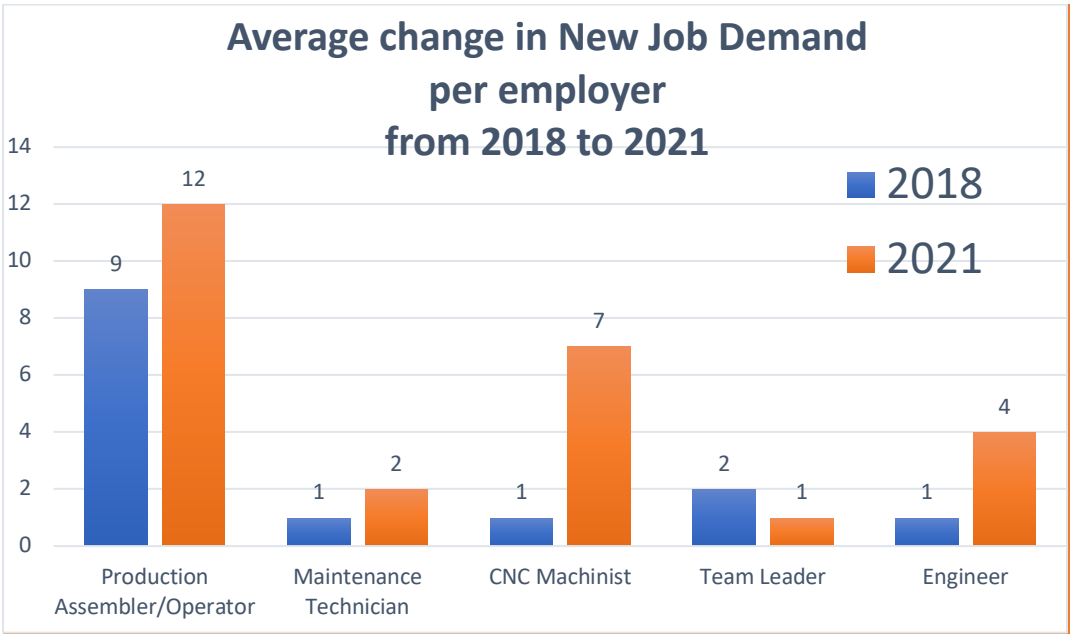


Figure 3. Average number of new workers needed for critical manufacturing positions, compared between 2018 and 2021.

Other Hiring Questions

1. In the past two years, has your business turned down contracts or work because of a lack of workforce?

2. Do your employees require security clearance as a condition of hire?

3. Do your employees require drug testing as a condition of hire?

4. Has your business set Diversity and Inclusion Goals?

Examples of DEI Goals from manufacturers:

"Increase diversity on leadership team to reflect diversity of the factory floor"
"Post all roles in diverse job posting locations to increase diverse candidate applicants"
"Evaluate internal annual programs and practices to identify/remove biases"
"Focus on communication and interpersonal relationship around inclusion, including policy practices, and updating handbook to have inclusive language"

5. Does your business require engineers with additive manufacturing and 3D printing skills?

6. What % of your engineers require product design skills (electrical, mechanical, computer or industrial design)?
   - 28% said none
   - 21% said less than 10%
   - 3% said between 10-25%
   - 24% said about half
   - 28% said more than half

Manufacturing Career Ladders

An Advanced Manufacturing Career Ladder (Figure 4) demonstrates how some manufacturers are investing in training to promote employees from feeder positions. The salaries below represent the Vermont averages as of May 2020, provided by the Bureau of Labor Statistics. Employers recognize that hiring demand has increased since May 2020, driving entry- and mid-level wages up, in some cases 20% above 2020 averages.

Figure 4. VTPM Manufacturing career ladder

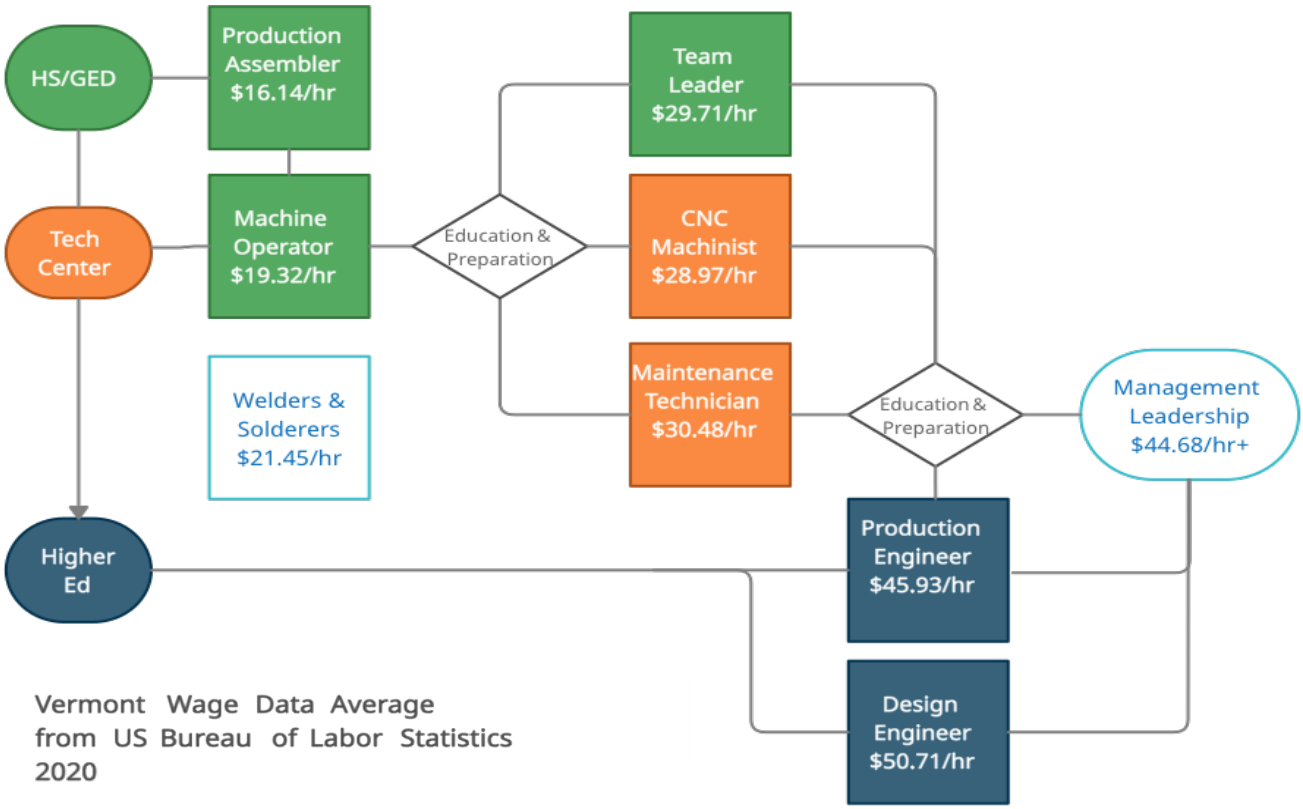
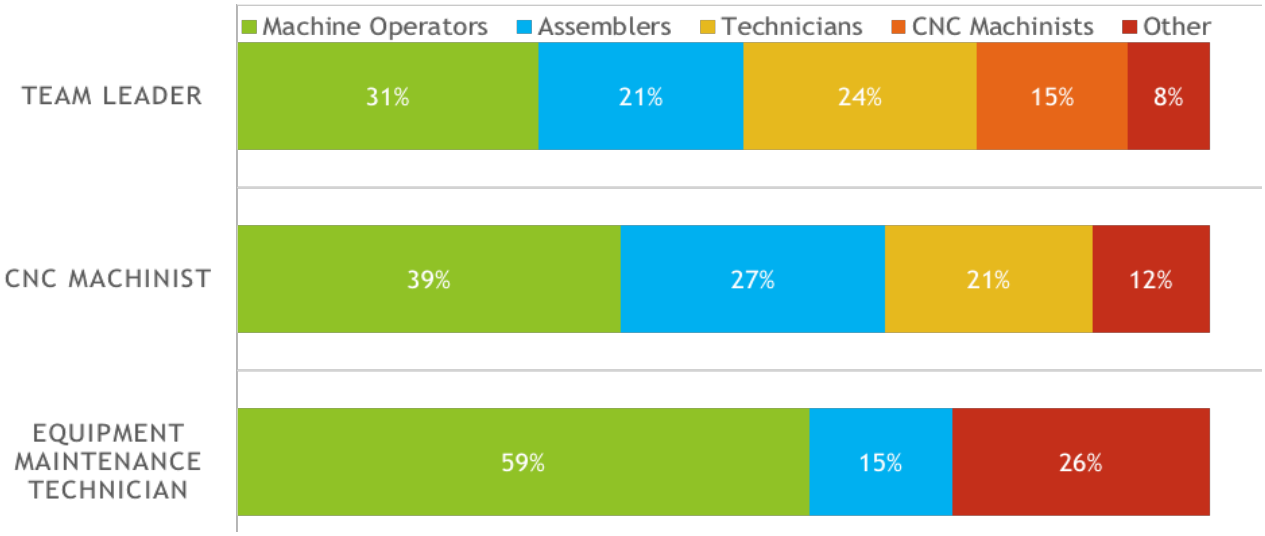


Figure 5. Middle-level critial jobs and their reported feeder positions



Industry Recognized Credentials

The following are the leading credentials recognized by manufacturers for each critical role:

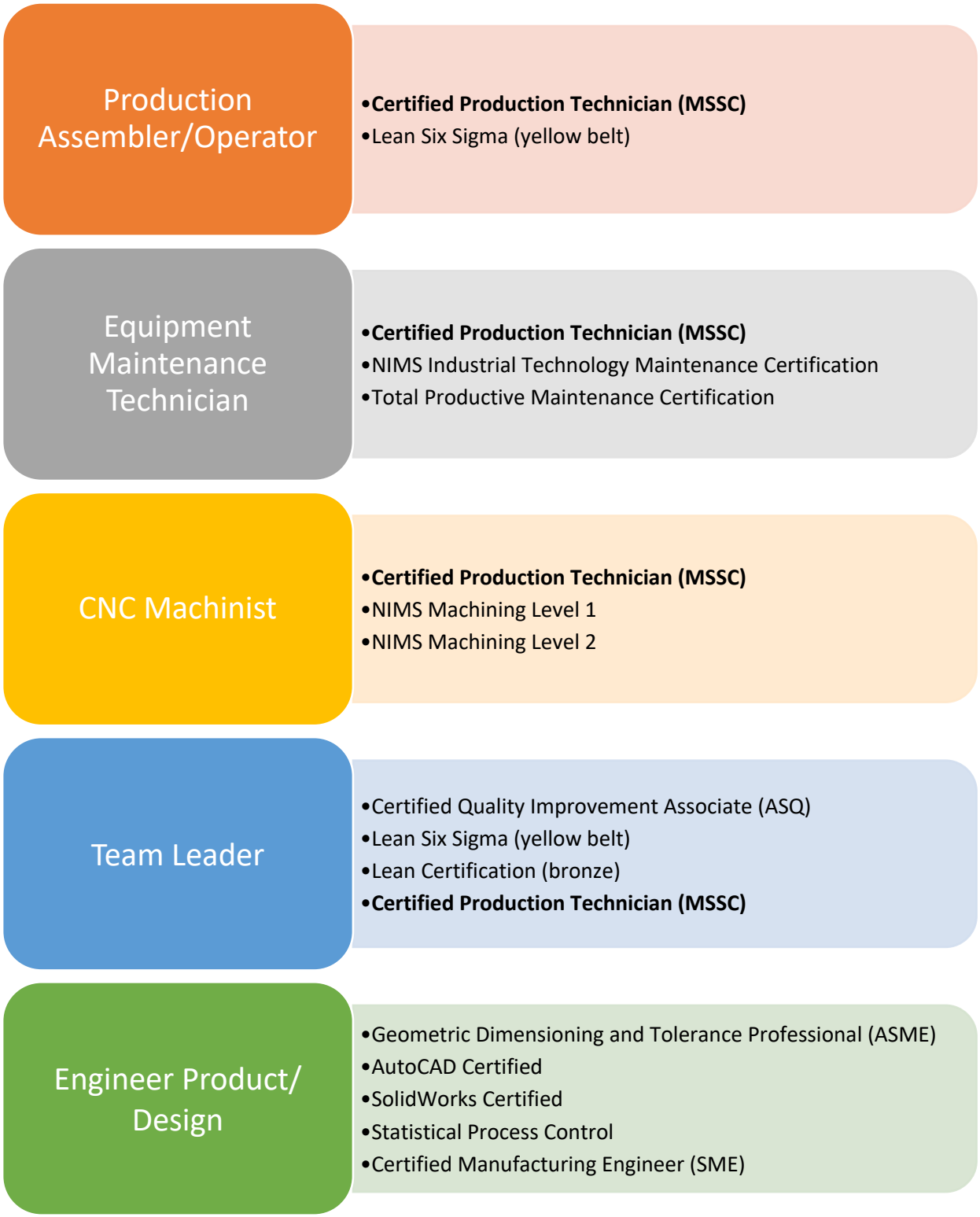


Figure 6. Leading Credentials recognized by respondents for critical manufacturing positions.

Competencies and Credentials of Value

The following data represents the value Vermont manufacturing respondents place on competencies and credentials for each role. This data is intended for alignment and development of training programs. It will also help employers develop a common job description for their roles.

Table 3. Relative Importance of each feature of the Production Assembler/Operator position. This role assembles or fabricates mechanical parts, pieces or product using tools and equipment to meet specifications.

Production Assembler/Operator Requirements			
Competency	1-5 Rank	Employer Value	
Understands the importance of safety on the job	4.93	99%	
Follows detailed assembly procedures with accuracy	4.81	96%	
Possesses Manual dexterity to handle and move products	4.52	90%	
Performs in-process inspections	4.5	90%	
Detects and troubleshoots non-conformities	4.36	87%	
Use hand and bench tools properly	4.33	87%	
Exhibits Knowledge of Quality Control processes	4.24	85%	
Analyzes information to solve problems	3.93	79%	
Displays Mechanical Knowledge of Machines and Tools	3.71	74%	
Inspects equipment, structures and materials	3.6	72%	
Understands basics of Lean manufacturing	3.17	63%	
Performs acceptance test procedures	3.17	63%	
Exhibits skills in Mathematics, including Algebra and Geometry	2.71	54%	
Utilizes robotics and additive manufacturing technologies	2.52	50%	
Employability Skill	1-5 Rank	Employer Value	
Positive in attitude and behavior	4.86	97%	
Accountable for work products	4.76	95%	
Respectful and patient	4.62	92%	
Detail oriented and accurate	4.6	92%	
Collaborative and flexible	4.57	91%	
Process oriented	4.24	85%	
Uses appropriate strategies for dealing with conflicts	4.21	84%	
Lifelong learner	3.88	78%	
Education Level	Preferred	Required	Neither
High School General Education	43%	50%	7%
High School Technical Education	64%	7%	29%
Post-secondary Technical Education	33%	0%	67%
Credentials Recognized	Preferred	Required	Neither
Certified Production Technician	39%	0%	61%
Lean Six Sigma (yellow belt)	29%	0%	71%
Mechatronics Certification	24%	0%	76%
Lean Certification (Bronze)	20%	0%	80%

Table 4. Relative Importance of each feature of the Equipment Maintenance Technician position. This role performs preventive maintenance tasks and repairs to keep production operational, using electrical and mechanical skills and safety precautions..

Equipment Maintenance Technician Requirements			
Competency	1-5 Rank	Value to Employer	
Uses safe and effective methods for diagnosing problems	4.82	96%	
Maintains high quality standards for production equipment	4.71	94%	
Exhibits mechanical abilities to perform mechanical and electrical maintenance and troubleshooting	4.63	93%	
Identifies and defines problems	4.5	90%	
Generates and evaluates possible solutions	4.5	90%	
Runs physical inspections and calibrations on a documented schedule	4.42	88%	
Runs tests to diagnose problems and develop potential solutions	4.34	87%	
Utilizes Total Productive Maintenance methods	3.84	77%	
Applies scientific principles to solve problems and complete tasks	3.68	74%	
Measures performance and conversions to generate threshold tolerance	3.61	72%	
Employability Skill	1-5 Rank	Value to Employer	
Attention to detail	4.79	96%	
Will communicate the problem to appropriate personnel.	4.79	96%	
Interact professionally and respectfully with others	4.68	94%	
Proactive and positive	4.58	92%	
Accountable for work products and outcomes	4.5	90%	
Read and comprehend documents ranging from simple and straightforward, to more complex and detailed	4.42	88%	
Uses appropriate strategies for dealing with conflict	4.13	83%	
Use scientific method to identify problems, collect information, form opinions and draw conclusions	3.97	79%	
Education Level	Preferred	Required	Neither
High School General Education	32%	61%	8%
High School Technical Education	82%	8%	11%
Post-secondary Technical Education	76%	0%	24%
Associates	39%	0%	61%
Credentials Recognized	Preferred	Required	Neither
Certified Production Technician	49%	5%	46%
Mechatronics Certified	38%	3%	59%
Certified Control Systems Technician	35%	3%	62%
NIMS Industrial Technology Maintenance Certification	51%	0%	49%
Total Productive Maintenance Certification	51%	0%	49%
Lean Certification (Bronze)	30%	0%	70%
Lean Six Sigma (Green Belt)	24%	0%	76%

Table 5. Relative Importance of each feature of the CNC Machinist position. CNC machinists produce high quality parts and materials using programmable machines to model them according to specification details, with safety and accuracy.

CNC Machinist Requirements			
Competency	1-5 Rank	Value to Employer	
Maintains safe machine operations and environment	4.77	95%	
Controls machines and processes	4.69	94%	
Measures dimensions and conformance to specifications	4.5	90%	
Develops constructive and cooperative working relationships	4.35	87%	
Inspects equipment, structures and materials	4.15	83%	
Analyzes quality control and make adjustments	4.15	83%	
Handles, moves and manipulates objects	4.12	82%	
Obtains information from relevant sources	4.08	82%	
Identifies, selects and uses appropriate tools and technological solutions	4.08	82%	
Ability to determine part measurement and angles using algebra, geometry and trigonometry	3.5	70%	
Utilizes manufacturers technical data references	3.5	70%	
Use Computer Technologies - CAD, CAM, Solidworks	3	60%	
Employability Skill	1-5 Rank	Value to Employer	
Attention to detail	4.65	93%	
Accountable for product outcomes	4.54	91%	
Dependable and ethical	4.54	91%	
Demonstrate respect for people, property and time	4.46	89%	
Interacts positively with peers and supervisors	4.42	88%	
Comprehension of relevant materials and policies	4.31	86%	
Uses appropriate strategies for dealing with conflict	4.12	82%	
Education	Preferred	Required	Neither
High School General Education	38%	54%	8%
High School Technical Education	85%	4%	12%
Post-secondary Technical Education	69%	0%	31%
Associates	31%	0%	69%
Credentials	Preferred	Required	Neither
NIMS Machining Level 1	41%	7%	52%
NIMS Machining Level 2	37%	7%	56%
Certified Production Technician	44%	4%	52%
Mechatronics Certified	33%	4%	63%
Lean Six Sigma (yellow belt)	22%	0%	78%
Lean Certification (Bronze)	22%	0%	78%

Table 6. Relative Importance of each feature for the Team Leader position. A team leader oversees the production processes for a product or set of products. Elements of planning, supervising, scheduling, and inspection are required.

Team Leader Requirements			
Competency	1-5 Rank	Employer Value	
Enforces safety in production	4.74	95%	
Coordinates activities of production and operations	4.63	93%	
Communicates with all levels of workers (top to bottom)	4.61	92%	
Develops and trains staff members	4.45	89%	
Monitor processes, materials and surroundings	4.39	88%	
Ensures sanitation/Clean in Place of workspaces	4.34	87%	
Plans work schedules and assignments to meet production goals	4.34	87%	
Plans production sequences to meet production goals	4.21	84%	
Inspects materials and products to detect defects	4.21	84%	
Documents processes	4.08	82%	
Inspects equipment for proper use and maintenance	4.03	81%	
Exhibits Lean Manufacturing expertise	3.53	71%	
Enforces Total Productive Maintenance methods	3.53	71%	
Employability Skill	1-5 Rank	Employer Value	
Accountable for work product outcomes	4.58	92%	
Active listening	4.5	90%	
Understanding the organization and culture	4.47	89%	
Use of appropriate strategies for dealing with conflict	4.47	89%	
Critical thinking and problem solving	4.34	87%	
Demonstrated leadership qualities	4.34	87%	
Coordination of logistics and activities	4.24	85%	
Human resource management of personnel	3.71	74%	
Education	Preferred	Required	Neither
High School General Education	32%	61%	8%
High School Technical Education	58%	5%	37%
Post-secondary Technical Education	71%	0%	29%
Associates	55%	3%	42%
Bachelors	32%	0%	68%
Credentials	Preferred	Required	Neither
Geometric Dimensioning and Tolerance Professional	26%	5%	68%
CIP - Clean in Place	21%	5%	74%
Mechatronics Certification	24%	3%	74%
Certified Quality Improvement Associate (ASQ)	39%	0%	61%
Lean Six Sigma (yellow belt)	39%	0%	61%
Lean Certification (Bronze)	39%	0%	61%
Certified Production Technician	39%	0%	61%
Certified Quality Inspector (ASQ)	29%	0%	71%

Table 7. Relative Importance of each feature of the Engineer Production/Design position (continued next page). Production engineers improve production processes for efficiency in quality, cost and time. Design engineers possess specific skills in the development and modification of products to meet customer specifications using electrical, mechanical, industrial and software skills.

Engineer Production/Design Requirements			
Competency	1-5 Rank	Employer Value	
Applies structured problem-solving and decision-making tools and methods	4.59	92%	
Interfaces with collaborating groups to prototype designs	4.51	90%	
Designs and develops products to specifications	4.49	90%	
Applies math skill to analyze performance data	4.49	90%	
Produces assembly design and layout from concept through completion	4.44	89%	
Measures and improves quality of products and systems	4.44	89%	
Reads and applies complex technical regulatory design and performance reqs	4.38	88%	
Develops and verifies compliance test plans and procedures	4.26	85%	
Documents processes through fabrication	4.13	83%	
Interfaces with suppliers on component specification and selection	3.97	79%	
Creates 3D CAD models, bills of material and engineering drawings	3.97	79%	
Uses knowledge of LEAN fundamentals	3.87	77%	
Trains production staff to build new products and use new processes	3.69	74%	
Utilizes robotics and additive manufacturing technologies	3.33	67%	
Analyzes financial information to develop and support conclusions	3.26	65%	
Utilizes artificial intelligence for decision-making	2.79	56%	
Employability Skill	1-5 Rank	Employer Value	
Prioritizes multiple tasks and projects	4.62	92%	
Diligent, thorough, and goal-oriented	4.62	92%	
Proficient in computer technologies, including office software	4.56	91%	
Mechanical aptitude	4.54	91%	
Team contributor	4.54	91%	
Positive attitude	4.51	90%	
Written and verbal skills	4.49	90%	
Cost conscious, weighing quality, value and risk	4.44	89%	
Proficient in Computer Aided Design Technologies	4.23	85%	
Proficient in Enterprise Resource Planning (ERP) software	3.77	75%	
Education Level	Preferred	Required	Neither
High School General Education	13%	79%	8%
High School Technical Education	38%	13%	49%
Post-secondary Technical Education	31%	31%	38%
Associates	28%	26%	46%
Bachelors	31%	62%	8%
Masters	28%	0%	72%

Continued on next page with Credentials

Continued from previous page, Credentials for Engineers

Credentials Recognized	Preferred	Required	Neither
Geometric Dimensioning and Tolerance Professional (ASME)	50%	13%	37%
AutoCAD Certified	53%	8%	39%
Certified Manufacturing Engineer (SME)	50%	8%	42%
SolidWorks Certified	55%	5%	39%
Statistical Process Control	55%	3%	42%
Lean Six Sigma (Green Belt)	47%	3%	50%
Lean Certification (Bronze)	55%	0%	45%

Table 8. Relative Importance of each feature of the welder/solderer position. Welders read plans, take measurements, determine methods, and set up components to joining parts together, safely and with attention to detail. Solderers use specialized equipment and prepare components to join pieces together.

Welder/Solderer Requirements			
Competency	1-5 Rank	Employer Value	
Operate safety equipment and use safe work habits	4.25	85%	
Weld or solder using aluminum, stainless steel, cast iron, and other alloys	4.12	82%	
Recognize, set up, and operate hand and power tools	4.06	81%	
Examine workpieces for defects to ensure conformance with specifications	4	80%	
Prepare all material surfaces	3.75	75%	
Determine required equipment and methods, applying knowledge of metallurgy, geometry, and techniques.	3.56	71%	
Develop templates and models using mathematical calculations based on blueprint information	3.31	66%	
Employability Skill	1-5 Rank	Employer Value	
Detail oriented and accurate	4.12	82%	
Accountable for work products	4.12	82%	
Process oriented	4	80%	
Positive attitude and behavior	3.88	78%	
Education	Preferred	Required	Neither
High School General Education	31%	50%	19%
High School Technical Education	63%	13%	25%
Post-secondary Technical Education	44%	13%	44%
Credentials	Preferred	Required	Neither
AWS Certified Welder	35%	24%	41%
J Standard Soldering Certification	29%	6%	65%

To learn more about Vermont Talent Pipeline Management, visit our website at www.vermonttpm.org or reach out to maryanne@vtroundtable.org.

VTPM Advanced Manufacturing Collaborative Members

Weidmann Electrical Technology	Kaman Composites
Vishay Americas Inc	Kalow Technologies
Vermont Teddy Bear Factory	Isovolta Inc
Vermont Precision Tools	Husky Injection Molding Systems
Vermont Creamery	Hearth & Home Technologies
Vermont Aerospace Industries	Hazelett Strip-Casting Corporation
Velan Valve Corporation	Hayward Tyler Inc
Tivoly Inc	GS Precision, Inc
Teknor Apex Company	GS Blodgett Corporation
Super Thin Saws Inc	GlobalFoundries
Semiprobe	GE Aviation
Rhino Foods	FoodScience Corporation
Revision Military	Fairbanks Scales
Perrigo Nutritionals	Fab-Tech, Inc
Paragon-Identification	Ellison Surface Technologies
Orvis	Edlund Company
Onlogic	Dynapower
OMYA	Dairy Farmers of America
Omega Optical Inc	Collins Aerospace
NSA Industries	Chroma Technology Corporation
Northern Digital Inc	Champlain Precision
North Hartland Tool Corporation	Champlain Cable Corp
Nolato GW Plastics	CeresMed
New England Precision	Carris Reels
Mylan Technologies Inc	Cabot Hosiery Mills Inc
Manufacturing Solutions Inc	Beta Technologies
Liquid Measurement Systems	Ben and Jerry's
Lake Champlain Chocolates	Barry Callebaut
King Arthur Baking	Appalachian Engineered Flooring
89 North	Agilent Technologies