



Geared Toward The Future

NORTHWEST CENTRAL ILLINOIS

WORKS

# Manufacturing Technology

- **Manufacturing is investing more in technology than ever before.**
- **Because of the increase in technology and the need to reduce costs, companies will be looking for those with very specialized skill sets including planning and management skills.**
- **Many manufacturing environments have transformed over the years to a cleaner, environmentally controlled, and health conscious workplace.**

## Basic Facts:

1. What skill sets are companies looking for?

**Answer:** (Machine Shop) Mechanical Comprehension and Aptitude, Math for entry-level and job shop Math, PC skilled Machine Operators, line workers, maintenance (Multicraft), tool and die makers, truck drivers, warehouse workers, forklift operators, engineers, and front line supervisors.. More advanced would have experience with blueprint reading, measuring tools like micrometers, machining to tolerances. Dependability, Positive Attitude, Strong Vocabulary, Peer Capability, Problem-Solving, Working on teams, Learning Agility, and Adaptability.

2. What education and training would one need to get started in manufacturing technology?

**Answer:** High School Diploma or GED a good start, computer related skills, vocational math, measuring instrument basics, and basic drawing interpretation. BorgWarner works in parallel with those who are committed to completing an Associate's Degree. The interest and willingness to learn can earn an Associate-level Internship leading to entry-level Technician positions. Outside of Internship portals, we normally require an Associate's Degree. For some occupations a background in Chemistry is important.

3. What are the positions companies are hiring for the most?

**Answer:** Varies but seems to be production line workers, skilled machine operators, entry-level machinists, welders (TIG), and engineers. Everything in Manufacturing- Production Associates, Material Handlers, Manufacturing Technicians, Electronic Technicians, Engineers, Production Schedulers, Accountants. There is a world of opportunity in manufacturing throughout the Stateline area, and plenty of career growth for those willing to continue their education. As technology changes there will always be a need for those that understand it and can repair it. There is a great deal of variability in manufacturing from very repetitive work at one of the spectrum to the very highly sophisticated instrument controlled work at the other end.

4. Will I like the work and how can I find out before I invest in the training?

**Answer:** In a machine shop, you would have to enjoy variety, problem solving and team work. It is physical work and you would get a little dirty. Do your research-talk to people, tour plants, try an Internship or Co-Op, talk to others in similar roles. Most will be more than willing to share this type of information with anyone who is curious. Find a company that aligns with your interests and goals. Understand their core values and mission statements to get a feel for the work environment and their vision going forward. Challenge employers to hold simulation or shadowing days.

5. What are the challenges facing manufacturing today?

**Answer:** Currently, the talent pool is shallow. Wages for some manufacturers are finally rising, so that is placing wage pressure on employers which pressures profits and/or limits capital reinvestment. The faster pace of change and changing technology. Finding the right people to support the business. Replacing a retiring and very knowledgeable, skilled and dedicated workforce. Whether it is highly trained skilled workers, or simply line workers, finding the people to fill these positions is one of the larger hurdles. Part of this could be driven by the negative view some have of manufacturing, or simply that they just have not been exposed to the opportunities available. Either way this manpower shortage impacts the ability to grow to some extent. It is important to understand that part of the hiring process often includes passing a drug test. For many applicants this is a challenge.

Northwest Central Illinois Works (NCI Works) is a locally appointed workforce board that oversees workforce development programs that are funded by millions of federal tax dollars for an eight-county area (Bureau, Carroll, Jo Daviess, LaSalle, Lee, Ogle, Putnam and Whiteside Counties).

[www.nciworks.org](http://www.nciworks.org)

### Top 10 Companies by Number Employed in NCI Works Area

Company Name	Primary County	Mailing City	Mailing State	Line Of Business	Revenue (US Dollars, million)	Total Employees
Wahl Clipper Corporation	Whiteside County	Sterling	IL	Manufacturing industries, nec, nsk	421.754699	2000
Raynor Mfg. Co.	Lee County	Dixon	IL	Metal doors, sash, and trim, nsk	311.819902	1800
Neisewander Enterprises Inc.	Lee County	Dixon	IL	Metal doors, sash, and trim, nsk	296.957291	1800
Vactor Manufacturing Inc.	LaSalle County	Streator	IL	Industrial trucks and tractors, nsk	228.86974	1500
4I Technologies Inc.	LaSalle County	Ottawa	IL	Printing trades machinery	698.488057	1280
Genwoods Holdco LLC	Ogle County	Oregon	IL	Farm machinery and equipment, nsk	49.032097	1250
Martin Engineering Company	Bureau County	Neponset	IL	Measuring and controlling devices, nec	171.028935	930
Rochelle Foods, LLC	Ogle County	Rochelle	IL	Sausages and other prepared meats	90.73505	700
Timken Drives, LLC	Whiteside County	Fulton	IL	Iron and steel forgings, nsk	65.790496	400
United Animal Health, Inc.	Whiteside County	Rock Falls	IL	Prepared feeds, nec, nsk	66.088397	390

### Industry Snapshot of Manufacturing in BEST, Inc, 2018q2

NAICS	Industry	Current		5-Year Forecast Separations		
		Empl	Avg Ann Wages	Total New Demand	Exits	Transfers
311	Food Manufacturing	3,173	\$58,507	1,702	729	1,127
312	Beverage and Tobacco Product Manufacturing	34	\$18,409	19	7	12
313	Textile Mills	69	\$52,433	25	15	20
314	Textile Product Mills	6	\$29,628	2	1	2
315	Apparel Manufacturing	18	\$21,410	8	5	5
316	Leather and Allied Product Manufacturing	27	\$34,299	11	6	8
321	Wood Product Manufacturing	206	\$36,754	97	41	69
322	Paper Manufacturing	49	\$67,777	19	9	16
323	Printing and Related Support Activities	605	\$57,828	225	125	184
324	Petroleum and Coal Products Manufacturing	97	\$145,652	39	15	30
325	Chemical Manufacturing	1,187	\$67,925	418	191	361
326	Plastics and Rubber Products Manufacturing	1,747	\$51,720	731	319	577
327	Nonmetallic Mineral Product Manufacturing	1,507	\$82,733	664	286	484
331	Primary Metal Manufacturing	400	\$62,315	148	67	126
332	Fabricated Metal Product Manufacturing	3,888	\$48,801	1,650	673	1,265
333	Machinery Manufacturing	3,105	\$56,732	1,305	527	970
334	Computer and Electronic Product Manufacturing	813	\$68,508	246	122	220
335	Electrical Equipment, Appliance, and Component Manufacturing	1,416	\$64,620	528	255	431
336	Transportation Equipment Manufacturing	1,084	\$48,114	456	186	337
337	Furniture and Related Product Manufacturing	88	\$40,014	41	18	27
339	Miscellaneous Manufacturing	486	\$43,872	189	90	147
31	Manufacturing	20,005	\$58,117	8,464	3,711	6,329
	Total - All Industries	127,666	\$41,932	64,903	29,420	39,238

Source: JobsEQ®, 2018 Q2