Minnesota Dual-Training Pipeline Competency Model for Advanced Manufacturing Occupation: Logistics and Supply Chain Manager

Employer Require	-Specific ements	Occupation-Specific Competencies*
		Warehouse operations Business ethics Customer service procedures Purchasing Negotiations Tracking systems Logistics design Production control capacity Production and materials required planning
	Industry-Secto	r Technical Competencies*
Inventory mgt. Bu	usiness math/accour	nting Comp. info systems Warehousing
Demand planning	Cust. service/ful	Ifillment Procurement Logistics strategy
Global business	Distribution	n Continuous improvement, LEAN processes
	Industry-Wide	e Technical Competencies
Name		Safety, Safety
rocess Quality assurance	Production cha logis	improvement and green security and cause
orocess Quality assurance	Production cha logis	improvement Sustainable health cause analysis
ess Teamwork Adapt	Production cha logis	Continuous improvement improve
process Quality assurance velopment Adaptiness Teamwork a	Production challogis Workp tability Customer service bility focus	Continuous improvement improve
ness Teamwork assurance	Production challogis Workp tability Customer service focus Acade	Continuous improvement manufacturing leading security and environment leading security and environment leading security and environment leading leading security and environment leading leadi
process esign and velopment Quality assurance velopment Adapt a flexi	Production challogis Workp tability Customer service focus Acade Basic and technical mathematics	Continuous improvement improve

Based on: Advanced Manufacturing Competency Model Employment and Training Administration, U. S. Dept. of Labor, April 2010.

^{*}Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.



Competency Model for Logistics and Supply Chain Manager

Logistics and Supply Chain Manager – An individual who plans, directs, and coordinates purchasing, warehousing, distribution, forecasting, customer service, or planning services for an advanced manufacturing company. The individual also manages logistics personnel and logistics systems and directs daily operations of the logistics priorities at the manufacturing facility.

Industry-Sector Technical Competencies

Related Instruction for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Inventory management** Demonstrate the ability to manage a warehouse or storage facility of inventory for a manufacturing production facility.
- **Computer information systems** Understand and demonstrate proficiency in various computer information systems used in manufacturing.
- Business math/ accounting Know how to do the basic functions of math to track orders, purchases, shipments, etc. and potentially use accounting software to assist in this process as well.
- **Warehousing** Demonstrate proficiency with efficient storage and control of the environment within a warehouse or other storage facility in a manufacturing setting.
- **Demand planning** Demonstrate proficiency with planning to fill existing and future demand for product.
- **Customer service/fulfillment** Demonstrate proficiency in high quality customer service, both in written and oral communication.
- **Procurement** Understand the methods for ensuring resources are available to purchase resources to have success in meeting orders and needs of the manufacturing production facility.
- **Logistics strategy** Understand the theory and application of on-the-ground approaches to ensuring adequate materials are available to meet demand.
- Global business Demonstrate proficiency with the customer base, be it local, statewide, nationwide, or
 international manufacturing businesses.
- **Distribution** Understand all transportation systems comprising the movement of goods and services from within the manufacturing production site to the product delivery to the customer to ensure job completion.
- **Continuous improvement, LEAN processes** Means and practices by which an organization can decrease the time required or improve efficiency in production, quality work environment, and reduction of waste.

Occupation-Specific Competencies

On-the-Job Training (OJT) is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- Purchasing Understanding of the acquisition of goods or services to achieve manufacturing organization goals.
- **Negotiations** Demonstrated ability to research and communicate about the costs of goods and services to secure the most cost-effective option to meet the needs of the manufacturing facility.
- Warehouse operations Understanding of warehouse operations, unique to organization, and practice throughout field for manufacturing production facilities.
- **Business ethics** Applied ethical practices that ensure fair business operations for the manufacturer.
- **Customer service procedures** Clear communication, both written and oral, to ensure a content customer.
- Tracking systems Understanding of individual tracking systems for the production facility.
- **Logistics design** Understand how to develop and interpret logistics designs both within the field and unique to a manufacturer.
- **Production control capacity** Demonstrated understanding of organizational need to produce inventory to have on hand, without creating waste for the manufacturer.
- **Production and materials required planning** Managing the ability to meet product orders by first ensuring facility has systems, tools, and employees to take on new product and ensuring that enough raw materials are available to go forward with production.

Updated March 2025