

## Warehouse Robot Operators Skills Map

	<b>Novice</b>	<b>Intermediate</b>	<b>Advanced</b>	<b>Mastery</b>
	Entry-level Merchandise Handler I	Shift Lead Area Lead	Team Lead Supervisor	Technical Expert Operations Manager
<b>Operations and Processes</b>	Able to describe the general areas of the warehouse (e.g., inbound, sortation, outbound) and the steps/tasks/technologies within each area.	Can fluidly explain the basic function of different areas of the warehouse and the connections between them. Developing skill in identifying upstream and downstream bottlenecks to effective robot usage.	Leads the removal of bottlenecks as they arise. Able to report and propose improvement. Monitors WMS and processes to predict problems before they happen.	Develops strategies, structures, and process changes that ensure continuous flow of goods through robots. Plans robot placement, staffing levels, arrangement of interoperable machines, and WMS integration.
<b>Technical</b>	Performs basic robot functions via the pre-built interfaces.	Able to classify, interpret, and remedy common robot errors.	Able to describe and propose long-term solutions which remedy complex or recurring robot errors.	Troubleshoots nearly every type of error or malfunction. Trains workers in robot usage and maintenance. Able to balance robot downtime with production needs.
<b>Supervision and Management</b>	Works well with coworkers in the robot area, upstream, and downstream. Communicates problems to coworkers and/or supervisors.	Able to carry out training for new workers on basic robot operation. Coordinates with supervisor to address changes in staffing, product volume, and processes.	Supervises the robot area. Carries out training for workers on advanced robot operation/troubleshooting. Leads adjustments when changes to staffing, product volume, and processes occur.	Develops structures, strategies and rubrics for developing growth pathways for robot operators. Contributes to permanent or semi-permanent staffing decisions. Develops training strategies at the organization-wide level.
<b>Implementation, integration, and interoperability</b>	Recognizes and classifies changes to production processes upon robot introduction or redeployment.	Can explain how upstream and downstream changes (e.g., tech, product volume) will affect robot productivity.	Designs and plans installation/implementation strategies and timelines to minimize production downtime. Provides input to robot placement, upstream/downstream adjustments, and WMS integration.	Co-manages installation and implementation processes with industrial engineers and vendors. Serves as first point of contact for software and hardware vendors.
<b>Quality</b>	Understands the definition of a product defect. Able to log and describe defects.	Able to interpret and summarize the cause of a defect. Beginning understanding of how to avoid repeat defects.	Contributes ideas for how to fix recurrent defects. Retrains coworkers where necessary.	Devises improvements for tracking, and predicting defects in the WMS or standalone systems. Designs new quality metrics. Works with vendors to produce performance reports.

