# Skills Transferability Matrix



### Mechanical Assembler and Inspectors







Mechanical Assemblers and Inspectors produce subassemblies, components and completed goods and inspect finished products for compliance with standards. Success in mechanical assembly and inspection can be attributed to strong understanding of mechanical design, good quality control and analysis skills and being able to interpret instructions to carry out proper procedure. These skills are multipurpose, and can be good to possess in other roles within the manufacturing sector.

#### **Skills**

Skills are developed through training and experience, and are the practical proficiencies someone possesses. The following are top key skills mechanical assemblers and inspectors employ in their work:

- 1. Quality Control Analysis
- 2. Active Listening
- 3. Operation Monitoring
- 4. Critical Thinking
- 5. Reading Comprehension

#### **Tasks**

Tasks are the assigned duties that an occupational group performs in their daily work. The following are some of the tasks mechanical assemblers and inspectors most regularly encounter:

- Review blueprints or other instructions to determine operational methods or sequences.
- 2. Mark products, workpieces, or equipment with identifying information.
- 3. Align parts or workpieces to ensure proper assembly.
- 4. Inspect installed components or assemblies.
- 5. Set equipment guides, stops, spacers, or other fixtures.

### **Technical Knowledge**

Technical Knowledge is the understanding of theory and utility of modern tools in a work environment. The following tools are used by mechanical assemblers and inspectors regularly:

- 1. Computer-aided design and manufacturing software
- 2. Label making software
- 3. Industrial control software
- 4. Analytical or scientific software
- 5. Content workflow software

#### **Abilities**

Abilities refer to the innate faculties that allow workers to carry out tasks and activities. The following are the top abilities that mechanical assemblers and inspectors possess:

- 1. Deductive and Inductive Reasoning
- 2. Information Ordering
- 3. Problem Sensitivity
- 4. Written Expression and Comprehension
- 5. Oral Expression and Comprehension

## Skills Transferability Matrix



FOCAL's Skills Transferability Matrices analyze the transferability of an occupation across a multitude of other occupations on the basis of similarities in **skills**, **technical knowledge**, **tasks**, and **abilities** as outlined by the O\*Net database. It aims to show workers how to leverage their skill set in changing occupations, planning a career path, and transitioning to other industries. It also assists policy makers and educators address changing skill sets and areas of opportunity for workforce entrants in developing industries. Employers can also use this tool in reskilling or upskilling workers to circumvent skills shortages, and reduce the hiring and training challenges.

Mechanical Assemblers and Inspectors					
Occupations	Skills	Technical Knowledge	Tasks	Abilities	Total
Assemblers and inspectors, electrical appliance, apparatus and equipment manufacturing	96%	100%	86%	93%	94%
Assemblers, fabricators and inspectors, industrial electrical motors and transformers	93%	100%	85%	93%	93%
Boat assemblers and inspectors	95%	100%	80%	96%	93%
Plastic products assemblers, finishers and inspectors	95%	100%	77%	95%	92%
Motor vehicle assemblers, inspectors and testers	94%	100%	77%	94%	91%
Electronics assemblers, fabricators, inspectors and testers	94%	100%	68%	91%	88%
Machine operators and inspectors, electrical apparatus manufacturing	94%	100%	65%	91%	88%
Furniture and fixture assemblers and inspectors	93%	100%	61%	91%	86%
Inspectors and testers, mineral and metal processing	92%	100%	61%	89%	85%
Inspectors and graders, textile, fabric, fur and leather products manufacturing	92%	100%	61%	89%	85%
Plastics processing machine operators	90%	45%	52%	88%	69%
Industrial painters, coaters and metal finishing process operators	90%	23%	22%	89%	56%
Machining tool operators	88%	64%	30%	87%	67%
Metalworking and forging machine operators	88%	55%	45%	85%	68%
Supervisors, other products manufacturing and assembly	67%	59%	9%	78%	53%

After scanning over 2,600 skills, technical competencies, tasks, and abilities of each of the 500 occupations as defined by the National Occupational Classification (NOC) system, a skills transferability matrix for mechanical assemblers and inspectors is produced. In the matrix above, a high score is highlighted in green and indicates the high transferability potential of an attribute of an occupation with that of mechanical assemblers and inspectors. Lower or no transferability areas are marked in red. Mechanical assemblers and inspectors share high degrees of transferability to other assembly and inspection roles, ranging from electric and furniture products to complex machines such as boats. Though transferability to areas outside assembly and inspection is limited, there is a trend of some transferability observed in roles with machine operation, such as metalworking, industrial painting and plastic processing. With some training, assemblers and inspectors may find it easier to transition into these roles. Some upward mobility is observed, with moderate transferability observed to product manufacturing and assembly supervision, but additional training and experience in supervision is likely required.

To learn more about developments, trends and new technologies in Canada's automotive manufacturing industry, visit our website <u>futureautolabourforce.ca</u>.



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