

Preparing for the Manufacturing Skills Inventory

Please review the information below to prepare for the Skills Inventory.

General Manufacturing and *Welding:

Basic Ruler Reading: Topics include reading measurements in quarters, halves, eighths, and sixteenths, and reading measurements in millimeters and centimeters.

Shop Math: Topics include adding numbers, converting decimals to fractions, determining dimensions, converting measurements, and working with fractions, order of mathematical operations, calculating the area and perimeter, parts of a circle and the Pythagorean Theorem.

Spatial Reasoning: Measures the participant's ability to view an object in their mind and manipulate it. Topics include folding shapes, merging shapes, stacking blocks and figure comparison

Welding: *Welding is optional. If you are interested in welding training, you must take the Welding assessment. Topics include: welding terms, welding symbols, and welding safety

Design/Drafting:

Basic Reading Comprehension: Measures the ability to draw important information from written material.

Math & Reasoning Skills: Covers topics such as percentages, multiplication, fractions, word problems, patterns and comparisons, Venn Diagram.

Mechanical Reasoning: Topics focus on understanding simple machines, mechanical principles, pulleys, gears, levers, and pendulums.

Spatial Reasoning: Measures the participant's ability to view an object in their mind and manipulate it. Topics include folding shapes, merging shapes, stacking blocks and figure comparison

Microsoft Excel 2016: Topics include the ability to create and develop a basic Excel workbook, including the most commonly used commands for formatting cells, navigation through the application, using formulas, and changing the overall appearance of the spreadsheet.

Available Resources:

[GCF Learn Free](http://gcflearnfree.org) (gcflearnfree.org)

Microsoft Excel, Reading Comprehension, Math

[Alison](http://Alison.com) (Alison.com)

Reading Comprehension, Math

[Khan Academy](http://khanacademy.org) (khanacademy.org)

Reading Comprehension, Math, Mechanical Principles

Metrix Learning

Math and Microsoft Excel 2016

Metrix Learning is available through the Metrix Learning Orientation at the American Job Centers in Danielson, Montville and Willimantic.

Barron's Mechanical Aptitude and Spatial Relations Test Book

Available for use at the American Job Centers in Danielson, Montville and Willimantic.

Please check at the front desk.

Additional resources for spatial reasoning – Free apps for tablet/smart phone customers, Rubics Cube, Legos and puzzles help build this skillset.

PLEASE NOTE: The assessments are computer based. Calculators, smart phones/watches and cell phones are not allowed. Pencils and scratch paper may be used.

You will need to use a “mouse” to select answers to multiple choice questions in order to complete the assessment.

If you need to brush up on your computer skills prior to the assessment, please register for and attend **Computers Made Easy** at the American Job Center.