



WAGE DATA

Rate Type / Statistical Type	Entry level	Mean	Experienced
Annual wage or salary	\$29,262	\$39,545	\$44,687
Hourly wage	\$14.07	\$19.01	\$21.48

JOB DESCRIPTION

Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.

DUTIES

- Inspect, test, or measure materials, products, installations, or work for conformance to specifications.
- Measure dimensions of products to verify conformance to specifications, using measuring instruments such as rulers, calipers, gauges, or micrometers.
- Read blueprints, data, manuals, or other materials to determine specifications, inspection and testing procedures, adjustment methods, certification processes, formulas, or measuring instruments required.
- Record inspection or test data, such as weights, temperatures, grades, or moisture content, and quantities inspected or graded.
- Mark items with details such as grade or acceptance-rejection status.
- Notify supervisors or other personnel of production problems.
- Discard or reject products, materials, or equipment not meeting specifications.
- Collect or select samples for testing or for use as models.
- Write test or inspection reports describing results, recommendations, or needed repairs.
- Compare colors, shapes, textures, or grades of products or materials with color charts, templates, or samples to verify conformance to standards.

TOOLS and TECHNOLOGY

Tools used in this occupation:

Accelerometers — Capacitive acceleration instruments, Magnetic induction acceleration instruments, Piezoelectric acceleration instruments, Resonance acceleration instruments

Calibrated resistance measuring equipment — Digital resistance meters, Resistance meters, Resistivity meters

Eddy current examination equipment — Eddy current flaw detectors, Eddy current probes

Integrated circuit testers — Backplane testers, Logic test systems, Manufacturing defect analyzers MDA, Printed circuit board PCB testers

Leak testing equipment — Bubble leak testers, Calorimetric leak testers, Mass flow leak testers

Technology used in this occupation:

Analytical or scientific software — Data analysis software, Design of experiments DOE software, Minitab software, Tolerance analysis software

Industrial control software — Coordinate measuring machine software, CyberMetrics GAGETrak Calibration Management Software, Statistical process control SPC data collection devices, Wilcox Associates PC-DMIS Inspection Planner

Label making software — Inspection marking systems

Optical character reader OCR or scanning software — Label inspection systems

Spreadsheet software — Microsoft Excel

KNOWLEDGE

Production and Processing — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

SKILLS

Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

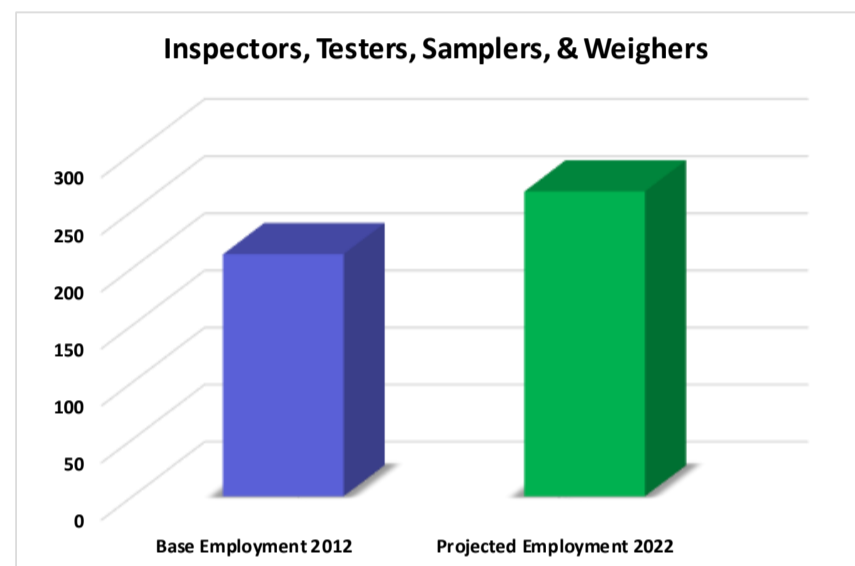
Speaking — Talking to others to convey information effectively.

Coordination — Adjusting actions in relation to others' actions.

Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is working properly.

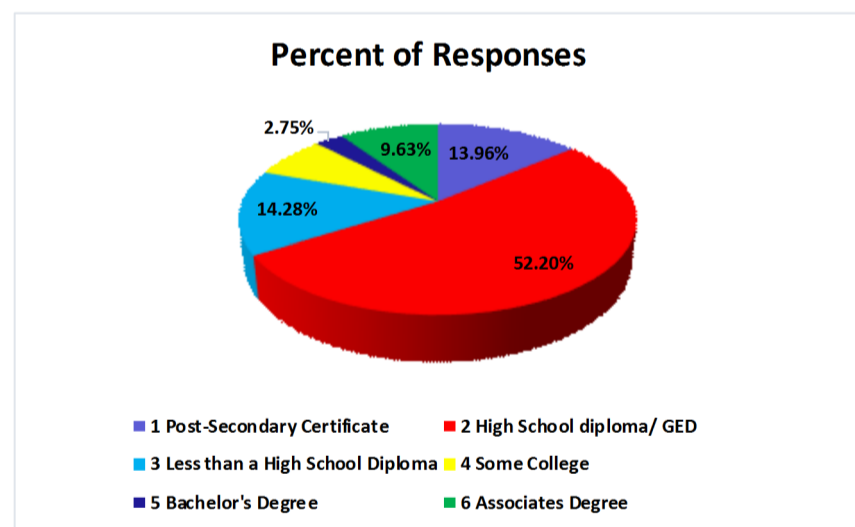
EMPLOYMENT PROJECTION



This information is based on LMI Gateway Data

EDUCATION

The graph below shows the results of a national survey listing the most common required level of education for Inspectors, Testers, Samplers, & Weighers.



EDUCATION FOR THIS JOB

- 2014 Catalogue of Colorado Advanced Manufacturing Program and Skill Resources
<http://www.coloradomanufacturingcareers.com/>
- Approved Colorado Community College Manufacturing Cluster education programs
<http://www.coloradocommunitycolleges.com/go/programs/skilled-trades-technical-sciences/>
<http://www.coloradocommunitycolleges.com/go/>
- Colorado Four Year Colleges and Universities
<http://higher.ed.colorado.gov/academics/colleges/public4year.asp>
- Locations to Get Manufacturing Certificates
<http://www.coloradomanufacturingcareers.com/>

