

Training Needs Assessment



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Purpose

The purpose of a training needs assessment is to identify skill/knowledge deficiencies affecting individual job performance within an organization so appropriate resources can be dedicated to the areas of greatest need, i.e., those that closely relate to fulfilling the organization's goals and objectives, improving productivity and providing quality products and services.

Methodology

- Identify skill/knowledge requirements of the jobs being assessed.
- Determine Key Performance Indicators (Why is the client choosing to conduct the Assessment?)
- Customize Assessment as needed
- Conduct written phase of Assessment
- Conduct performance and verbal phases.
- Develop Individual Training Plans
- Provide feedback to individuals and discuss next steps
- Implement Individual Training Plans
- Measure effectiveness of training against Key Performance Indicators.

Subject Areas Electrical Craft

- Electrical Safety
- Fundamentals of Electricity
- Electrical Formulas
- Electrical Schematics
- National Electric Code
- Power Distribution
- Motors & Generators
- Installing Conduit
- Control Devices
- Inverters
- Test Equipment
- Schematic Troubleshooting
- Ladder Logic
- Advanced PLC Programming

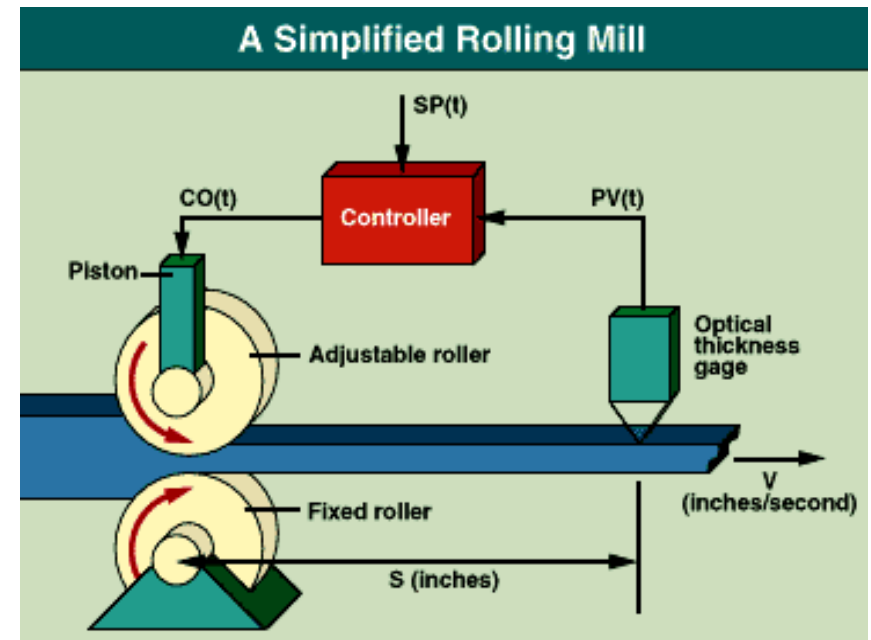
Electrical Skills Assessment

Knowledge Assessment

Sample question:

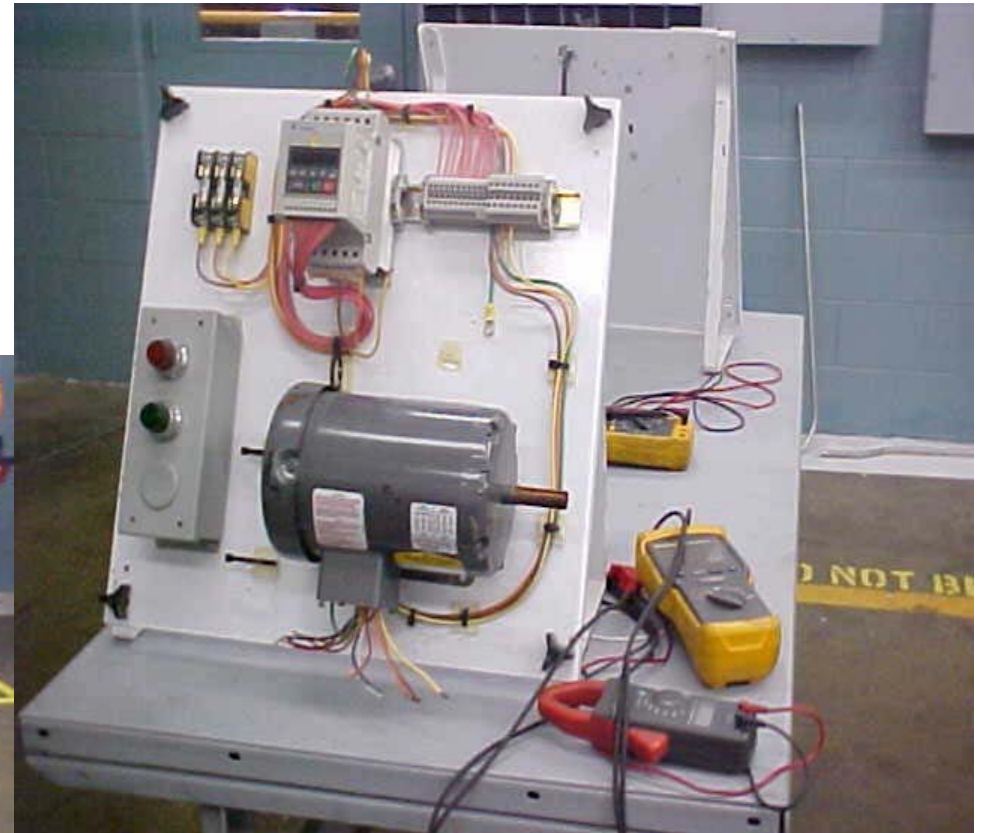
What defines the relationship between changes in the measured variable and changes in the controller output?

- a) Controller input
- b) Controller difference
- c) Controller action
- d) Controller programming

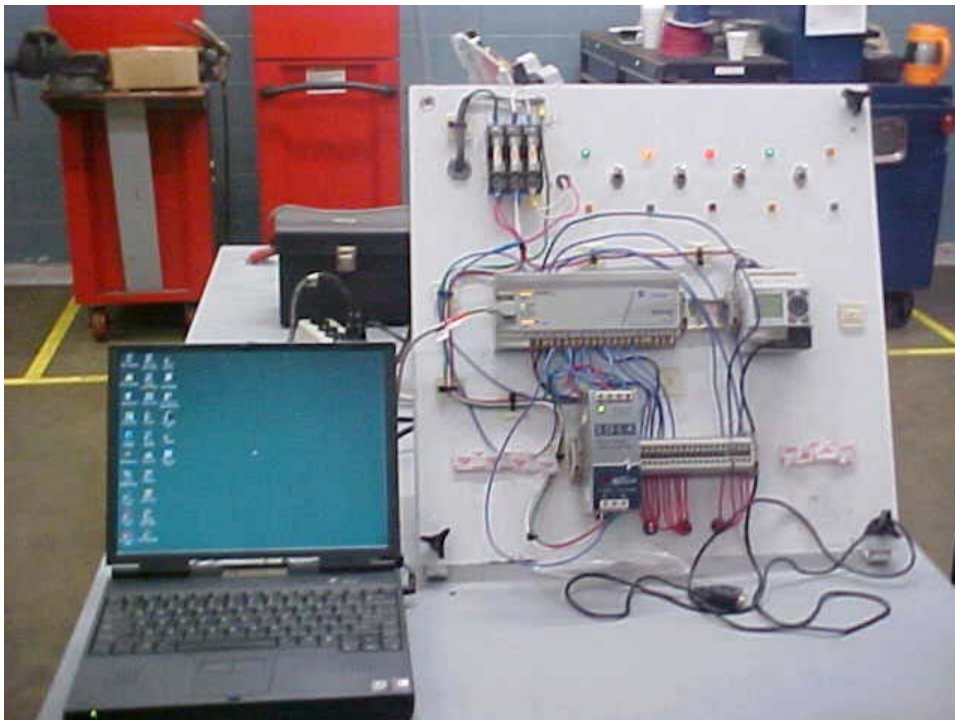


Electrical Assessment Exercises

**Motors & Test
Equipment**



PLC



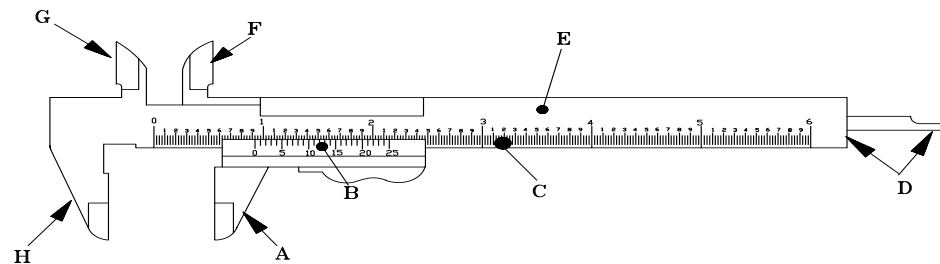
Subject Areas Mechanical Craft

- Motors & Couplings
- Mechanical Drives
- Bearings & Seals
- Lubrication
- Pneumatics
- Hydraulics
- Welding
- Gears, Drives, & Clutches
- Fasteners & Torque
- Math

Mechanical Skills Assessment

Knowledge Assessment

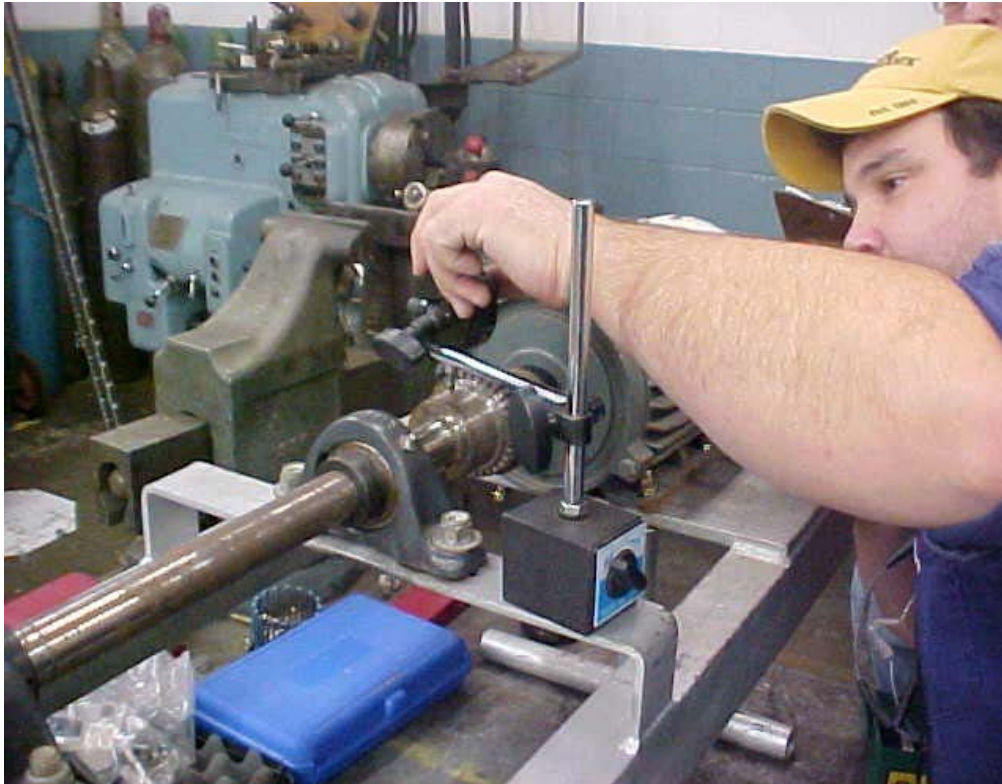
Sample question:



The Vernier Caliper shown above will measure:

- A. depth.**
- B. inside diameter.**
- C. outside diameter.**
- D. all the above.**

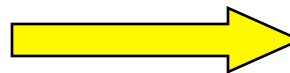
Performance Exercises



← Coupling Alignment

Shaft Alignment

Belt /Chain Installation

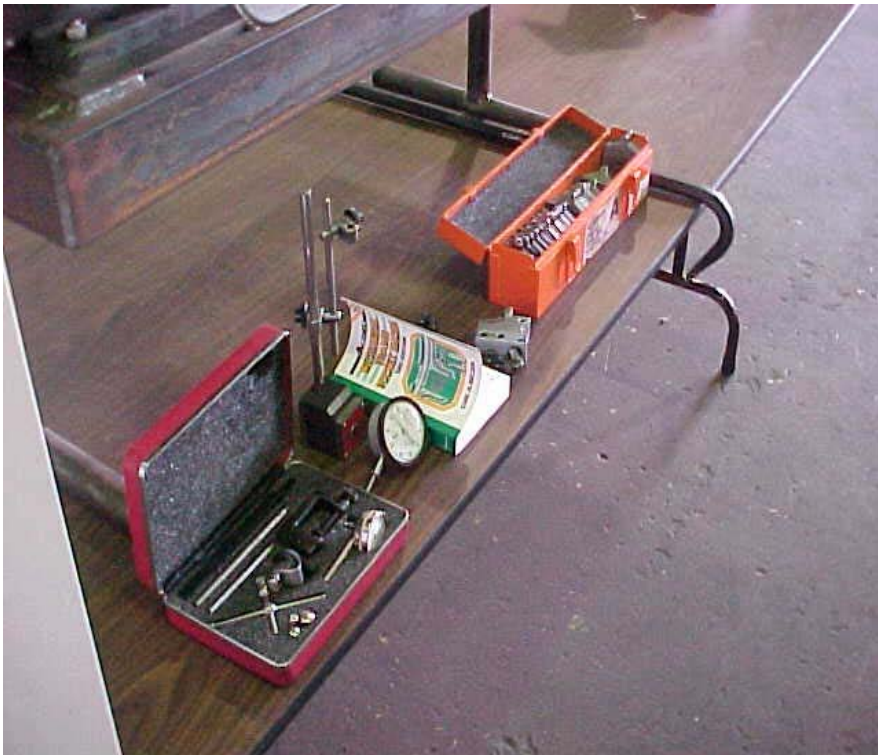


Performance Exercises

Welding & Cutting



Measurement



Scoring of Assessment

- Written & Identification (Knowledge)= % Correct
 - Performance = 5 point scale
- 5 – Can perform this skill without supervision and with initiative and adaptability to problem situations.
 - 4-Can perform this skill satisfactorily without assistance or supervision.
 - 3-Can perform this skill satisfactorily but requires some assistance and/or supervision.
 - 2- Can perform parts of this skill satisfactorily, but requires considerate assistance and/or supervision.
 - 1-Cannot perform this skill

Feedback Reports

- Prepared for each person assessed
- Results illustrated in both numerical form and bar chart per subject area showing individual's results as well as department wide results.
- Recommendations for training interventions if needed.