

Employee Skills Testing



Organizational Description

Ours is a business organization, the General Electric Custom Assembly Team, or G.E. CAT. It is a medium size factory which produces complete electronic circuit prototypes for General Electric, and it is located in Bloomington, Indiana. The job of this factory is to assemble prototype electronic circuits for trial runs before mass production and to provide feedback for the design and mass production teams. The circuits are produced by hand in this factory, and competency in soldering is the key quality factor. The production personnel consists of 150 workers, six supervisors, one design engineering team, and one manager. The workers are stationed along three assembly lines, each with fifty workers and two supervisors. The factory operates according to shift-based working hours.

Testing Philosophy

In order to provide the highest quality circuit board product to customers, all staff shall achieve and continually maintain high standards of competence in product assembly. To assure duties are performed safely, accurately, and with current information, an annual competency program will be implemented in coordination with job appraisals, professional development plans, performance improvement sessions, and quality assurance activities. The program will include tests administered by supervisors and/or masters that measure the actual performance level of the employee in the following areas:

- Job skill according to standards of acceptability
- Tool and equipment safety according to governing bodies
- Tool maintenance according to manuals
- Professional development for possible advancement within the department

Employees will receive documentation of individual results immediately following the test.

Identified deficiencies will be remediated within previously established time frames by one or more of the following:

- Additional 1:1 training
- Direct supervision of the employee
- Mentoring by another qualified employee

The action plan will be documented, and re-testing will occur according to established procedures.

Testing Policy

Our mission is the pursuit of the highest possible quality. Because our product line demands excellence, it is imperative that constant evaluation occur. However, we acknowledge that such evaluation can lead to worker resentment, so when at all possible, testing should be justified using the following method.

Using Westgaard's four steps to justify a test

1. Identify the skills to be tested.
2. Establish the need.
3. Discover whether the skills are known to be present at the desired level of expertise.
4. Set a time and a place for the testing to occur.

Because the skills needed to solder a circuit are kinesthetic in nature, it is imperative that all workers in the assembly lines have at least competent level soldering skills and maintain them throughout the work life in the factory. Accordingly, in addition to being tested upon hire,

employees undergo a periodic review to ensure that their skills have not degraded over time. Eyesight and tension can complicate the successful soldering of circuits. For this reason, employees are encouraged to obtain a yearly physical and eye examination from a certified physician.

Employees should not be tested more than once in a month. Periodic spot-checks may involve all or part of a soldering procedure. Employees should encourage fellow line workers and should guard against inappropriate conversation regarding the evaluation of fellow employees.

Employee Testing Procedures

Schedule & Setup

- All employees must take at least one test during the 6 month period after hiring.
- First Monday of the month is the testing day.
- Random assignment software, with the constraints above, determines the workers to be tested on the testing day. The lists are posted on the bulletin boards, and supervisors inform those who are selected for the testing.
- The lists are exchanged with those of the other supervisors, and each supervisor tests another's assembly line. Each supervisor tests two other assembly lines within two months.

Appropriate Facility

- Supervisors check the environment to ensure that it is in its usual condition: lights, noise, air conditioning, et cetera.

Presentation & Instructions

- Supervisors inform employees about the purpose, content, and usage of the test.
- Supervisors encourage employees to avoid becoming anxious and to continue working in a regular manner.

Observation

- Two of the supervisors come to the assigned assembly line, and one takes the first half of the list while the other takes the remainder, along with the information regarding the location of the employees to be tested.
- Supervisors do their inspection in the real setting, observing the employees while they are working.
- Supervisors have enough checklists to observe the people they are supposed to observe.
- Supervisors observe the employees' behaviors during the process and check the appropriate box on the "mastery" checklist.

Debriefing

- After conducting the evaluation, supervisors thank the employees and inform them of the results of the test.

Reporting

- Employees who have taken the test receive their results the following day in an envelope.
- Employees are informed about how they performed according to the standards and what the results mean according to the contract, rewards, and remediation.
- Employees are also informed about the ensuing processes.
- Supervisors submit annual summaries of information contained in the testing database.

Hiring Testing Procedures

This section addresses the testing process for use during the hiring process. Deviations from the process defined for current employees are described below; all other steps remain the same.

Schedule & Setup

- According to the needs of the assembly line, announcements published in newspapers and online indicate how many employees will be accepted and when and where the test will be administered. Saturday is designated as the alternate day.
- No randomization or no lists.
- Supervisors are also informed of the test date and number of the people who applied to take the test.

Appropriate Facility

- The testing environment is a realistic setting.
- Those who are waiting for the tests may not observe the test administration.

Reporting

- Applicants who demonstrated competency equal to or above the standards are informed that they passed this portion of the pre-hiring testing.
- Additional criteria may need to be met to ensure qualification for the job opening. In such cases, additional tests will also be administered.
- Those who fail at any level are informed of the test results and thanked for their participation.