

Competency-based Skills Training

Introduction

Competency-based skills training is our structured process of procedural development and implementation to ensure that operating and maintenance personnel at manufacturing facilities possess requisite knowledge, skills, and qualifications for their jobs. The process concentrates on proper documentation on the right procedures as well as the verification that employees can do and will do them correctly, reliably, and consistently. The ultimate result is a sustainable and “Best Practice” certification model across all crews. The process is very structured and is implemented as part of the way the client does business.

Centrally, the process begins here:

- Identifies and documents what an employee needs to know and do on a given job.
- Develop procedural training for job requirements.
- Provides measurement tools that are directly linked to acceptable job criteria and performance.
- Provides resource materials for detailed training
- Utilizes written assessments to determine competence in job performance requirements.
- Utilizes field verifications to verify that critical job skills are performed in the expected way. The actual performance standards are to provide requirements in safety, production, quality, and procedural execution.
- Provides implementation guides for execution.

The competency-based documentation includes these components:

Position Profile

The Position Profile is a “blueprint” for a given job. An upfront definition of the knowledge and skills required for acceptable job performance is the first step in the process.

- **Knowledge items are things an operator must “know” to do the job**
- **Skill items are the things an operator must “do or perform” in the job**

By defining the requirements of each position, the required knowledge and skills for successful job performance are determined. To accomplish this, the Position Profile technique is used to catalogue and document required job knowledge and skills. The completed Position Profile is a “blueprint” of the main functions and duty areas of each job.

It identifies all key knowledge and skills required for successful job performance. The completed Position Profile serves as a record for proficiency assessment, training development and documentation.

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Systems/Task Analysis

The Systems Analysis builds upon the information presented in the Position Profile. A Systems Analysis is the process of identifying, classifying and documenting all of the information an operator must **know** to perform a task or a job.

The Task Analysis builds upon the information presented in the Position Profile. A Task Analysis is the process of systematically identifying, classifying and documenting all of the step-by-step procedures an operator **must do** to perform a task or a job in the expected way.

The System/Task Analysis is developed as job functions that include:

- Perform Safety and Housekeeping Functions
- Communicate and Cooperate with Team Members
- Identify, Locate, and Explain Equipment/Systems and Controls
- Trace Product and Process Flows
- Operate Equipment, Systems, and Related Functions (Standard Operating Procedures)
- Understand Job Safety Analysis (JSA's) and Job Hazards
- Troubleshoot Equipment and Systems
- Perform Operator Basic Care for Reliability
- Perform and Understand Quality Functions
- Perform Administrative Duties
- Perform Environmental Functions

Training Manuals and Resources

Another key benefit of completing the Position Profile, Systems Analysis and Task Analysis is that this collective information forms the content for training manuals. The manuals can be compiled from this content.

Equipment manuals are integral to employee training and the qualification process. These equipment manuals are primarily two sources. Vendor manuals are a key part of the process and are part of the resource material used to provide personnel with knowledge and skill items needed to become proficient in the job. When needed, customized reference manuals on specific equipment and systems are developed. These manuals are valuable in bringing various equipment from multiple vendors into one concise reference source.

Qualification Checklist

The Qualification Checklist is the document used to measure a given employee's job knowledge and skill levels. The Qualification Checklist is pulled and developed from the completed Position Profile for a given job. The Qualification Checklist is a linear list of the Position Profile built in a checklist format for tracking purposes.

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Written Assessments

Written assessments are used to measure knowledge items. Written Assessments are a series of questions that ask the learner to demonstrate some particular aspect of either a knowledge or skill item.

Field Verification

The Field Verifications are designed so that supervisors, trainers or mentors can observe and certify that trainees are competent in the knowledge and skills required for their job. This step is the culminating step for the qualification structure.

Tracking and Reports

An effective training process requires evaluating the trainee's performance and knowledge across a broad spectrum of activities. With an accurate skills management system that maintains records of skills required for each job type and tracks employee acquisition of those skills, we are able to ensure the correct number of trained employees available at all times. Correlating skills inventory data with skill development requirements allows us to refine and direct investment in education, and to achieve more efficient employee utilization.