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THE ROLE OF THE CST IN A START-UP

Job Descriptions

CST Roles

CST Tasks

Initial Equipment Start-up Activities

In this book a start-up refers to the start-up of a newly built, substantially changed manufacturing facility, or the start-up of a portion of a manufacturing facility which has had a process change requiring new equipment or controls.

The responsibilities of the Control Systems Technician (CST) include installation, troubleshooting, repair, and routine maintenance of instruments. A large portion of this work includes troubleshooting and coordinating repairs to control loops throughout the plant. The CST follows company and craft standards and specifications and coordinates his or her activities with Operations and with other crafts and departments. A CST may be a direct or contract employee.

As a CST this may be the first time you have been asked to participate in a start-up; or perhaps you're very experienced and have participated in many start-ups during your career. In any event, as part of the start-up team, you should know what your roles and responsibilities are during this critical period. The chapters of this book cover the major aspects of a CST's involvement in a plant start-up:

- Defining the role of the CST during start-up
- Applicable safety practices and standards
- Documenting the start-up process
- Working with others
- Verifying and managing changes
- Personnel requirements and responsibilities
- How a CST assists Operations and other site personnel
- Tuning control loops

Sometimes start-ups must be accomplished with limited personnel resources and under extreme time pressure. An effective start-up plan, which we'll discuss in Chapter 3, depends on knowing what technicians should do and how many will be required—and available—to do it. Management will take personnel limitations into account, but CSTs must also understand the roles of the personnel involved in the start-up. Sometimes this information gets communicated verbally, sometimes in formal job descriptions. This chapter will discuss the importance of job descriptions, and the different roles you may be asked to play throughout the start-up.

The role of the CST varies from plant to plant. For example, plant size may determine the roles a CST will play. Where the CST is part of a small group, or possibly working alone, the job will be different than that of a CST working with a larger department. In a larger organization, the CST may have less independence, with specific jobs he or she has to perform during start-up, and will not necessarily be involved in every function described in this book.

The information in this book is intended to apply to many different types of industries that might employ a CST. Obviously, the type of industry and its management will determine exactly how the CST will function within the organization and during start-up.

Finally, the start-up is one of the last activities to occur in an overall project which again may be for a newly built, substantially changed or position of a manufacturing facility undergoing process or equipment changes. Therefore, much of the information in this book pertains to project execution and control, that is, the steps and deliverables necessary to complete the work to start-up the new and modified facility. Some of the work the CST is responsible for actually occurs in preparation of the start-up (e.g., installation, programming, loop check).