

1 Scope

This standard identifies the recommended criteria for certification of control system technicians. These criteria address qualifications based on education, experience, training, and job performance.

2 Purpose

The purpose of this standard is to provide industry with basis for certifying the qualifications of control systems technicians who work on facility equipment that is important to safe and efficient operations, in order to help reduce the possibility that unqualified personnel could perform improper maintenance on such equipment. It is intended solely as a recommendation for functional organization, and offers a structured basis for certification of control system technicians in each specific facility where they may be used.

The standard describes three (3) technician categories or levels, which are intended as functional descriptions of typical skill proficiency and competency levels identified at numerous facilities as well as empirically in job analysis. These are essentially points of reference for application of this standard to a specific facility situation. No specific number of categories, levels, or classifications are required by this standard since each facility has its own organizational structure and the information contained in this standard is not intended to change existing organizational arrangements.

This standard also recognizes that each facility or company needs a certification program, procedure, and/ or plan to cross-reference the relationship between the facility job descriptions/categories and the three (3) functional levels. The key to this cross-reference is the existence of a good representative job description of each type of technician at a facility.

This standard can be used independently in circumstances where no equivalent, formally accredited program exists, although formal accreditation by a recognised and reliable accreditor is strongly recommended. It is not intended, however, to set forth qualifications, which differ according to the individual job descriptions in each organization. For example, the "Typical knowledge and skills list" included as Annex A is meant to be a guideline only.

3 Definitions

3.1 control system:

a system in which deliberate guidance or manipulation is used to achieve a prescribed value of a variable (see ANSI/ISA-51.1-1979 [R1993]).

3.2 device:

an apparatus for performing a prescribed function (see ANSI/ISA-51.1-1979 [R1993]).

3.3 direction:

"management, supervision or guidance of an action" (American Heritage College Dictionary, 3rd ed.); performance of a task or operation under the guidance of a qualified individual (oversight may be in person or via direct communication).

3.4 experience:

applicable work in design, construction, commissioning activities, operation, maintenance, on-site activities, or technical services. Observation of others performing work in the above areas is not experience. This experience can be obtained during start-up or operations in industry, or in the military.

3.5 group leader:

the person in the highest level of functional supervision whose responsibilities are oriented solely toward instrumentation and control.