COGESAKR1.19

Build prototype(s) of selected design(s) for explosive articles

Overview

This standard exists within a research and development role and comprises of the following elements:

1. Prepare drawings for explosive article prototype(s).
2. Carry out assembly-related activities to build explosive article prototype(s).

This activity is likely to be undertaken by someone whose work role involves Ordnance, Munitions or Explosives work activities. This includes people working as design managers, development managers and researchers, designers and developers.

This standard replaces COGESA 1.25 and incorporates COGESA1.24.

Performance criteria

You must be able to:

1. Prepare drawings for explosive article prototype(s)

P1 work safely at all times, complying with health and safety and other relevant regulations, legislation and guidelines
P2 use up-to-date standards and technical requirements
P3 identify the features required for the drawings and material specifications
P4 identify the formats and conventions to be used
P5 deal with any problems associated with the technical information and its interpretation, within your control.
P6 produce drawings and assembly procedures or sequences that are clear and concise
P7 use codes and other references that follow the required conventions
P8 obtain approval to drawings within agreed timescales by authorized people
P9 ensure that drawings are properly registered and stored securely
P10 maintain the requirements of confidentiality at all times

2. Carry out assembly-related activities to build explosive article prototype(s)

P11 work safely at all times, complying with health and safety and other relevant regulations, legislation and guidelines
P12 confirm the requirements of the specification and ensure that you have up-to-date documentation
P13 confirm the availability and suitability of any resources required
P14 obtain the required components where available and manufacture new ones where required by the specification
P15 take adequate precautions to prevent damage to components, tools and equipment during assembly
P16 construct the prototype(s), in the correct sequence, using the approved tools and techniques
P17 report any inaccuracies or discrepancies in drawings, specifications or components and take action within your level of authority
P18 record and make any necessary minor adjustments to the components required during construction of the prototype, within your level of authority
P19 report promptly any problems outside of your control
P20 maintain documentation in accordance with organizational procedures
P21 maintain the requirements of confidentiality at all times

Knowledge and understanding

You need to know and understand:

1. Prepare drawings for explosive article prototype(s)

K1 the health, safety and environmental and other statutory legislation, regulations and safe working practices and procedures governing explosivesand their implications for your area of work

K2 the nature, characteristics, hazards and risks of the explosive substances and/or articles

K3 the actions to be taken in response to an unplanned event

K4 the time-scales for the work

K5 the capabilities, capacity and constraints of the team

K6 component assembly methods, tools and techniques

K7 the requirement for format, content and quality of designs, materials and conventions used for drawings

K8 types and sources of technical information required for drawings

K9 selection of data and features for inclusion in the technical information

K10 reporting lines and organizational procedures

K11 your own level of authority and that of others you work with

K12 the requirements of confidentiality

2. Carry out assembly-related activities to build explosive article prototype(s)

K13 the health, safety and environmental and other statutory legislation, regulations and safe working practices and procedures governing explosives and their implications for your area of work

K14 the relevance of personal protective equipment (PPE)

K15 the nature, characteristics, hazards and risks of the explosive substances and/or articles

K16 the actions to be taken in response to an unplanned event

K17 the explosive article design specification

K18 how to interpret a technical drawing

K19 component assembly methods, tools and techniques, as prescribed in the relevant documentation

K20 the methods of preventing damage to the prototype

K21 the precautions required to prevent unintentional functioning of the prototype

K22 the organizational procedures for quality and configuration control

K23 the documentation requirements

K24 reporting lines and procedures

K25 your own level of authority and that of others you work with

K26 the requirements of confidentiality

Scope/range

1. Drawing: discrete part; assembly of discrete parts
2. People: colleagues; your manager; quality control representative
3. Type of components to be assembled: explosive; non-explosive
4. Adjustments: minor (i.e. within the tolerances of the design specification); major (i.e. requiring authorization)

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Developed by	Cogent
Version Number	1
Date Approved	March 2024
Indicative Review Date	March 2029
Validity	Current
Status	Revised and now includes COGESA1.24
Originating Organisation	SEMTA
Previous URN	COGESA1.25.
Relevant Occupations	Science and mathematics Science; Science; Engineering; Science and Engineering Technicians; Process, Plant and Machine Operatives
Suite	Explosive Substances and Articles
Keywords	Build, prototype, explosive articles, drawings, assembly