COGESA1.25

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

Overview

This standard comprises 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 Weapons, Ordnance, Munitions or Explosives work activities. This includes people working as design managers, development managers and researchers, designers and developers.

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 report to your manager any problems with the technical information and its interpretation
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
P18 record and make any necessary minor adjustments to the components required during construction of the prototype
P19 report promptly any problems or major adjustments required
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 explosives and their implications for your area of work
K2 the relevance of personal protective equipment (PPE)
K3 the nature, characteristics, hazards and risks of the explosive substances and/or articles
K4 the actions to be taken in response to an unplanned event
K5 the deadline for the work
K6 the structure, format, content and quality of designs, materials and conventions used for drawings
K7 types and sources of technical information required for drawings
K8 selection of data and features for inclusion in the technical information
K9 reporting lines and organizational procedures
K10 your own level of authority and that of others you work with
K11 the requirements of confidentiality

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

K12 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
K13 the relevance of personal protective equipment (PPE)
K14 the nature, characteristics, hazards and risks of the explosive substances and/or articles
K15 the actions to be taken in response to an unplanned event
K16 the explosive article design specification
K17 how to read a technical drawing
K18 component assembly methods, tools and techniques, as prescribed in the relevant documentation
K19 the methods of preventing damage to the prototype
K20 the precautions required to prevent unintentional functioning of the prototype
K21 your organization's procedures for quality and configuration control
K22 the documentation requirements
K23 reporting lines and procedures
K24 your own level of authority
K25 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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