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## Overview

This standard comprises the following elements:

1. Validate new or modified explosives processes and equipment.
2. Optimize new or modified explosives processes and equipment.

This activity is likely to be undertaken by someone whose work role involves Weapons, Ordnance, Munitions or Explosives work activities. This includes those working as manufacturing managers and supervisors and storage supervisors.

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## Performance criteria

*You must be able to:* 1. Validate new or modified explosives processes and equipment

- P1 work safely at all times, complying with health and safety, environmental and other relevant regulations, legislation and guidelines
- P2 confirm that you have the correct operating instructions
- P3 ensure that the operating parameters are established
- P4 confirm that the equipment to be used is in a safe and functional condition
- P5 confirm the suitability of the equipment for the process
- P6 deal promptly with any problems that arise, reporting any that you cannot solve and/or are not your responsibility
- P7 complete the validation within the required constraints
- P8 complete correctly the required documentation
- P9 maintain the requirements of confidentiality at all times

2. Optimize new or modified explosives processes and equipment

- P10 work safely at all times, complying with health and safety, environmental and other relevant regulations, legislation and guidelines
- P11 define the process to be optimized and your optimization objectives
- P12 ensure that your final measurements indicate an improvement over your control measurements
- P13 design and implement systems that can sustain the improvements
- P14 ensure that appropriate action is taken to minimize waste in the process
- P15 complete correctly the required documentation
- P16 maintain the requirements of confidentiality at all times

## Knowledge and understanding

*You need to know and understand:* 1. Validate new or modified explosives processes and equipment

- 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 substance and/or article
- K4 the actions to be taken in response to an unplanned event
- K5 work area hazards
- K6 the requirements of the processing plan for the validation, and any specific security
- K7 the relevance and importance of monitoring process conditions
- K8 the importance of critical operating parameters
- K9 the functions and uses of the different types of equipment used in the operation and how to confirm the status of equipment
- K10 the corrective action to take on discovering defective conditions, materials and/or equipment
- K11 problem solving techniques
- K12 reporting lines and procedures
- K13 the requirements of documentation

2. Optimize new or modified explosives processes and equipment

- K14 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
- K15 the relevance of personal protective equipment (PPE)
- K16 the actions to be taken in response to an unplanned event
- K17 work area hazards
- K18 the requirements of the processing plan for the validation and any specific security requirements
- K19 the limitations of the equipment
- K20 the relevance and importance of monitoring process conditions
- K21 the importance of critical operating parameters
- K22 the functions and uses of the different types of equipment
- K23 waste management procedures

Contribute to the validation and optimization of new or modified explosives processes and equipment



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K24 problem solving techniques

K25 reporting lines and procedures

K26 the documentation requirements

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**Scope/range**

1. Explosive environments: low negative consequence; high negative consequence
2. Constraints: safety; cost; quality; yield
3. Optimization relating to: safety; cost; quality; yield
4. Evaluation against: performance norms; performance targets; historical performance

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