

Diagnose and rectify a technical issue in precast or prestressed concrete operations

Overview

What is this standard about?

This standard states the skills, knowledge and understanding required to demonstrate competence to examine materials, products and processes in the manufacture of precast or prestressed concrete products, to identify faults and technical problems, and to develop and implement solutions. Detailed knowledge is required of specifications, products and procedures, and health, safety and quality are of paramount importance.

Who is this standard for?

This standard is applicable to operatives, supervisors and technical staff working in the precast or prestressed concrete manufacturing industries.

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Performance criteria

You must be able to:

1. carry out work activities in accordance with **approved, policies, procedures and practices**
2. select, check and use personal protection equipment (PPE) for the work activity
3. check the processes and concrete products for technical problems or faults
4. obtain product specification
5. verify that the correct concrete mix information or specification has been used
6. verify the water addition has been adjusted for the raw materials moisture content
7. check all raw materials match the product specification requirements
8. monitor the progress of work
9. monitor the use of materials and resources
10. report according to organisational requirements on the quality and use of materials and resources
11. diagnose the technical issue and cause, implementing action to rectify or eliminate the problem
12. provide information on problems and rectification to all **relevant persons**

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Knowledge and understanding

You need to know and understand:

1. the **approved practices policies and procedures** for the work activity
2. how to select, check and use the correct personal protection equipment (PPE)
3. the roles and responsibilities of the **relevant persons** in the diagnosis and rectification of technical problems
4. how to obtain and interpret the specification on the concrete products to be produced
5. the production processes for the concrete products
6. how to verify the correct concrete mix information has been used
7. how to verify the water addition has been adjusted for the raw materials moisture content
8. how to check all raw materials match the product specification requirements
9. the types of **technical problem** that could occur in precast or prestressed concrete products production
10. the actions required to identify the different types of technical issue
11. the likely locations of different **technical problems**
12. when it is advisable to escalate attempts or gain assistance to find a **technical problem**
13. the diagnostic methods and equipment for identifying the causes of **technical problems** in precast or prestressed concrete operations
14. the possible causes of **technical problems** in precast or prestressed concrete operations
15. the type of problems that can occur with the diagnostic process
16. the type of problems that can occur with the rectification work
17. the recording, reporting and information systems that should be used
18. the **approved practices policies and procedures** for the work activity

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Scope/range

1. **approved policies, procedures and practices:** legislative, organisational, operational, accident or emergency, health and safety, first aid, and environmental as appropriate to the work site and work activity
2. **relevant persons:** management, supervision, work colleagues, technical staff, maintenance engineers, designated persons and/or those affected by the work activity, as appropriate to the work activity and work area
3. **technical problem:** such as constituent materials, admixture, additives, concrete mix, manufacturing plant or process, curing process, contamination.

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