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| **11 Quality management** | |  |
| Criteria | Range | Resource identified |
| 11.1 Quality standards, assurance, control and improvement. | British standards | <https://en.wikipedia.org/wiki/British_Standards> |
|  | <https://whatis.techtarget.com/definition/British-Standards-Institution-BSI> |
|  | <https://www.engineeringtoolbox.com/british-standards-d_761.html> |
|  | ISO standards | <https://www.iso.org/standards.html> |
|  | <https://en.wikipedia.org/wiki/International_Organization_for_Standardization> |
|  | <https://www.nqa.com/en-gb/certification/sectors/engineering-manufacturing> |
|  | CE | <https://ec.europa.eu/growth/single-market/ce-marking_en> |
|  | <https://www.hse.gov.uk/work-equipment-machinery/ce-mark-summary.htm> |
|  | <https://asq.org/quality-resources/ce-marking> |
|  | <https://en.wikipedia.org/wiki/CE_marking> |
|  | Engineering bodies (Engineering Council, Institution of Engineering and Technology (IET), Institution of Mechanical Engineers (IMechE), Society of Operations Engineers (SOE)) | <https://www.engc.org.uk/> |
|  | <https://www.theiet.org/> |
|  | <https://www.imeche.org/> |
|  | <https://www.soe.org.uk/> |
|  | Culture of quality, right first time | <https://www.ideagen.com/thought-leadership/blog/6-building-blocks-for-creating-a-culture-of-quality> |
|  | https://www.youtube.com/watch?v=6s3cbHIFbFc |
|  | Quality standards (ISO9001) | <https://www.iso.org/iso-9001-quality-management.html> |
|  | <https://www.bsigroup.com/en-GB/iso-9001-quality-management/> |

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|  | Inspection and testing | <https://electrical.theiet.org/bs-7671/faqs/inspection-and-testing-faqs/> |
|  | https://www.tradeskills4u.co.uk/posts/inspection-and-testing |
|  | Traceability | <https://www.keyence.com/ss/products/marking/traceability/basic_about.jsp> |
|  | <https://en.wikipedia.org/wiki/Traceability> |
|  | Document management and version control | <https://www.girlsguidetopm.com/how-to-do-document-version-control/> |
|  | <https://en.wikipedia.org/wiki/Version_control> |
|  | Process capability | <https://asq.org/quality-resources/process-capability> |
|  | <https://www.itl.nist.gov/div898/handbook/pmc/section1/pmc16.htm> |
|  | <https://sixsigmastudyguide.com/process-capability-cp-cpk/> |
|  | Statistical process control (SPC) | <https://en.wikipedia.org/wiki/Statistical_process_control> |
|  | <https://sixsigmastudyguide.com/statistical-process-control-spc/> |
|  | <https://www.youtube.com/watch?v=e5g2NmIUdc> |
|  | Six sigma | <https://en.wikipedia.org/wiki/Six_Sigma> |
|  | <https://www.isixsigma.com/new-to-six-sigma/getting-started/what-six-sigma/> |
|  | <https://www.investopedia.com/terms/s/six-sigma.asp> |
|  | Total quality management (TQM) | <https://en.wikipedia.org/wiki/Total_quality_management> |
|  | <https://www.investopedia.com/terms/t/total-quality-management-tqm.asp> |
|  | Failure mode effect analysis (FMEA) | <http://www.ihi.org/resources/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx> |
|  | <https://www.isixsigma.com/tools-templates/fmea/fmea-quick-guide/> |
|  | <https://en.wikipedia.org/wiki/Failure_mode_and_effects_analysis> |
|  | Pareto analysis | <https://en.wikipedia.org/wiki/Pareto_analysis> |
|  | <https://www.investopedia.com/terms/p/pareto-analysis.asp> |
|  | <https://www.mindtools.com/pages/article/newTED_01.htm> |

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|  | Cause and effect diagrams | <https://en.wikipedia.org/wiki/Ishikawa_diagram> |
|  | <https://asq.org/quality-resources/fishbone> |
|  | <https://www.mindtools.com/pages/article/newTMC_03.htm> |
|  | https://www.youtube.com/watch?v=bNDlg1h-za0 |
|  | Quality circles | <https://www.bbc.co.uk/bitesize/guides/zhb6vk7/revision/3> |
|  | <https://en.wikipedia.org/wiki/Quality_circle> |
|  | <https://www.leansixsigmadefinition.com/glossary/quality-circles/> |
|  | https://www.inc.com/encyclopedia/quality-circles.html |
| 11.2 Types and applications of Standard Operating Procedures (SOPs) and their purposes. | Types and applications – Manufacturing, quality | <https://www.getmaintainx.com/blog/now-is-the-time-for-manufacturing-standard-operating-procedures/> |
| http://www.advice-manufacturing.com/Standard-Operating-Procedures.html |
| Types and applications – Maintenance | <https://www.onupkeep.com/answers/asset-management/standard-operating-procedure-maintenance-team-sops> |
| <https://www.reliableplant.com/Read/14671/developing-procedures> |
| Purposes – Standardisation of activity | <https://en.wikipedia.org/wiki/Standard_operating_procedure> |
| <https://blog.montrium.com/experts/what-are-sops-and-why-does-my-organization-need-them> |
| Purposes – Customer satisfaction | <https://en.wikipedia.org/wiki/Standard_operating_procedure> |
| <https://blog.montrium.com/experts/what-are-sops-and-why-does-my-organization-need-them> |
| Purposes – Safety | <https://en.wikipedia.org/wiki/Standard_operating_procedure> |
| <https://blog.montrium.com/experts/what-are-sops-and-why-does-my-organization-need-them> |
| Purposes – Training | <https://en.wikipedia.org/wiki/Standard_operating_procedure> |
| <https://blog.montrium.com/experts/what-are-sops-and-why-does-my-organization-need-them> |