Förhandsgranskning / Preview

Criticality analysis, implementation and upholding, for technical items

Scope

This guide provides advice and instructions on how organisations can implement and maintain technical criticality analyses of its fixed assets.

This guide is to be used when making changes in a plant, for example when upgrading or installing a new item. A criticality analysis must be performed well in advance of commissioning, as the chosen criticality class governs the configuration of preventive maintenance and storage optimisation.

The purpose of the criticality analysis is to exercise control over the own plant and to determine the location of its critical items. The analysis is essential for prioritising and optimising maintenance activities, designing a risk-based maintenance strategy and developing a sustainable spare parts strategy.

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Appendix 1: Criticality analysis, classification template

1 Terminology

Criteria – Formulation of consequence indicating criticality class levels.

Criticality analysis – Used to render visible the most serious consequences that can occur should an undesirable event such as a failure or fault occur in a given item.

Criticality category – Type of consequence (personal safety, environmental, production reliability, quality/product integrity and maintenance).

Criticality class – Indicates how critical an item is for the production plant.

Item – In this document, the term "item" is used to refer to a system, subsystem, function, process step or component.

FMEA – Failure Mode and Effects Analysis.

MTBF – Mean Time Between Failures.

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