



Industrie Service

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## Functional Safety as per IEC 61508

A Product Information Sheet by the Plant Engineering Business Area

Adequate safety of machinery, systems and processes is increasingly realised with the help of suitable electrical, electronic or programmable electronic (E/E/PE) systems. The underlying standard IEC 61508 covers all safety systems including E/E/PE components where failure would cause considerable risks for people and the environment. The scope of IEC 61508 extends from conceptual design and planning, development, realisation, commissioning, maintenance and modification to decommissioning and de-installation of such safety-related systems, describing in detail how their functional safety can be verified.

### Our Services

TÜV SÜD offers comprehensive plant engineering services. Our experts assist you in all aspects related to the quality, safety and cost effectiveness of your plants and systems and support you, as a manufacturer, designer and user of E/E/PE systems, in implementing IEC 61508 throughout all stages of the safety lifecycle.

- On behalf of operators and designers, we carry out hazard and risk assessment stipulated by IEC 61508 to specify the required safety functions and safety integrity level.

- We offer manufacturers of safety-related systems to carry out product qualification testing as per IEC 61508 and confirm that these systems will fulfil the safety functions required by the pertinent SIL requirements.
- Additionally, we assist in the establishment of a Functional Safety Management System (FSM system) and certify its successful implementation concerning E/E/PE system development.

### Your Benefits

- ▶ Independent assessment of the safety integrity that can be achieved by means of an E/E/PE system.
- ▶ Evidence of a structured and certified FSM system.
- ▶ Improved product design and realisation process in line with the state of the art.
- ▶ Reduced product liability risk thanks to independent verification and confirmation.

We will be pleased to discuss possible forms of cooperation or submit a quotation without any obligation on your part.

Call us!

### TÜV SÜD.

**Choose certainty. Add value.**

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