



Industrie Service

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## Functional Safety as per IEC 61511

A Product Information Sheet by the Plant Engineering Business Area

The safety of systems for the process sector, e.g. the chemical industry, refineries, oil and gas production, paper production or generation of conventional electricity, is increasingly realised with the help of suitable electrical, electronic or programmable electronic (E/E/PE) systems. Within the framework of IEC 61508, the underlying standard IEC 61511 has been tailored to the process sector, describing in detail how the functional safety of safety instrumented systems in process-engineering plants can be verified. The basic principles of this standard are also to be correspondingly applied, however, wherever logic solvers controls are realised via other forms of technology.

### 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 designer, installer, and user of safety systems, in implementing IEC 61511 throughout all stages of the safety lifecycle.

- We carry out hazard and risk assessment stipulated by IEC 61511 to specify the required safety functions and integrity level.

- We confirm to operators and their suppliers that the selected safety 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 safety system deployment.

### Your Benefits

- ▶ Independent assessment of the safety integrity that can be achieved by means of a safety system.
- ▶ Evidence of a structured, certified FSM system.
- ▶ Support in safety system verification and validation.
- ▶ Reduced operator 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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