



Preventive risk and hazard analysis

The ever-increasing requirements and the increasing complexity of products and processes, requires early analysis and identification of potential risks. With the implementation / improvement of a coordinated process to execute the preventive hazard / risk analysis, we assist with an efficient implementation. Gehrung & Partners can support you in the following areas:

- **Risk and hazard analysis process**
 - Evaluation of the existing risk analysis process of the entire product development
 - Introduction of a development process according to IEC 61508
 - Introduction of an appropriate risk analysis process, including the necessary interface definitions
- **Preventive Risk analysis**
 - Training and coaching of preventive risk analysis methods/ tools
 - Support with the implementation of preventive risk analysis (Product-FMEA, Process-FMEA, FTA, DRBFM, etc.)
 - Interface alignment between individual product FMEAs and process FMEAs
 - Interface alignment with supplier and customer FMEAs
- **Hazard analysis by means of functional security (SIL/ASIL)**
 - Determination of the application range and SIL-/ASIL-Level classification by means of risk analysis
 - Evidence for the required SIL-/ASIL-Levels of congruent components/ systems with help of failure rates investigations (FMECA / FMEDA)

Customer benefit:

- Legal protection - Legal basis for product liability cases
- Securing the future - Increasing reliability
- Market opportunities - Improved image with reliable products and processes
- Cost reduction - By minimizing non-compliance costs
- Quality improvement - Increasing product and process quality
- Time saving - By using preventive product and process analysis
- Adherence to schedules - An increase in predictability by means of a preventive approach
- Qualification - Through the "Train the Trainer"-principle
- Transfer of Knowledge - Consistent understanding of quality

