Sector specific standards

Automotive application field

ISO/DIS 26262: Road vehicles – Functional safety

adaptation of IEC 61508 specific to the application sector of electrical and electronic systems in the road vehicle industry

Railways application field

CENELEC EN 50128: Railway applications — Software for railway control and protection systems

developed by the European Committee for Electrotechnical Standardization (CENELEC), is part of a series of standards that represent the railway application-specific interpretation of the IEC 61508 standard series

Airborne Application Field

RTCA/DO-254

formally recognized by the Federal Aviation Agency (FDA) in 2005 as a means of compliance for the design of complex electronic hardware in airborne systems. Published by RTCA (Radio Technical Commission for Aeronautics)

The Nuclear Power Plant Application Field

IAEA safety standards series (INTERNATIONAL ATOMIC ENERGY AGENCY) NS-G-1.3 Instrumentation and Control Systems Important to Safety in Nuclear Power Plants: Safety Guide

Process industries

The process industry sector includes many types of manufacturing processes, such as refineries, petrochemical, chemical, pharmaceutical, pulp and paper, and power.

IEC 61511 is a technical standard which sets out practices in the engineering of systems that ensure the safety of an industrial process through the use of instrumentation.

Machinery

IEC 62061 is the machinery-specific implementation of IEC 61508. It provides requirements that are applicable to the system level design of all types of machinery safety-related electrical control systems and also for the design of non-complex subsystems or devices.