

SUCCESS STORY

Railway Systems SIL-3 Safety Compliance

Business Problem

The big challenge of the project was to comply with different safety standards i.e. CENELEC EN 50126, EN 50128 and EN 50129 and achieve the SIL-3 certification from TUV and EBA.

Implemented Solution

For compiler and assembler we collected known problems from the vendor company with historical data of tools. These tools were used in the safety industry since last 10 years and no hazardous situation was observed in this duration. Additionally, we did boundary tests with the compiler and assembler. Our RTOS library was not safety certified and we did not have the historical data. To overcome this challenge, we decided to work with RTOS development company during our maintenance contract. We analyzed the safety violations in the library along with boundary test on our target CPUs. These evidences were enough to satisfy the safety requirements.

We conducted different review sessions with CENELEC committee members and modified our processes and deliverables according to these standard requirements.

Business Results

Our customer vended this product to rail industry and, as a result, became one of the market leaders in rail control system domain.



Client

Our customer has assembled the most comprehensive collection of Radio Remote Control brands for locomotives, cranes, material handling equipment, mining machinery, mobile equipment and virtually any equipment where the operator can be moved to a safer, more efficient location.