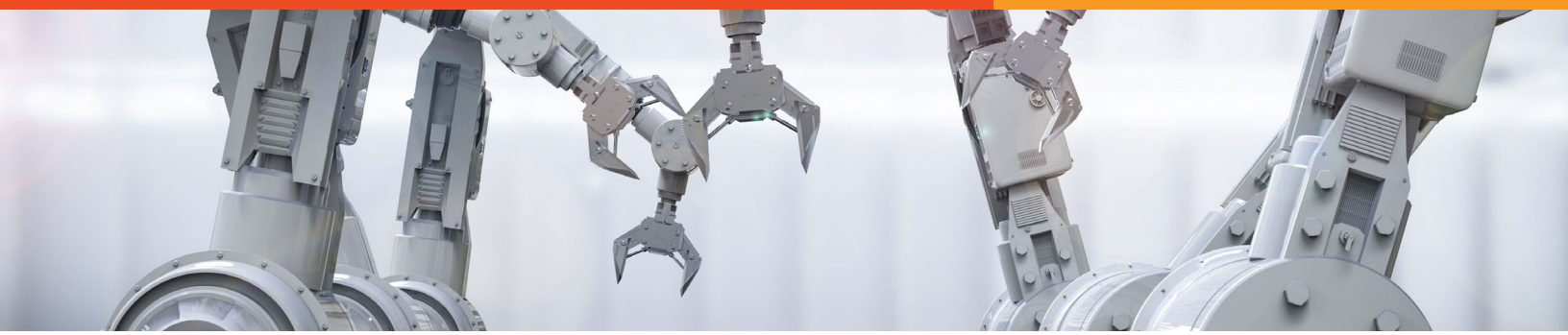
Robot / Machine Functional Safety



Background

Robot proliferation is prevalent across all industries. Factories have embraced industrial robots for jobs that are either too dangerous or labor intensive for humans. Robots have been widely deployed for welding, painting, assembly, pick and place, and packaging applications.

Mobile robots are being adopted extensively in warehousing applications that pick and deliver product based on demand. Many of these applications require that humans share the same workspace and work collaboratively with robots. This has created a new safety concern for businesses. Machines perform actions that can cause serious, even fatal, injuries if they are not properly safeguarded.

Autonomous vehicles are being developed and deployed at a brisk pace. Farming, mining, quarries, floor cleaning, lawnmowers, etc. are all examples of where autonomous robots are being used.

Companies must assess the risk associated with these new technologies to ensure the safety of all personnel and to limit their liability.

exida has experience and is the top choice for automation, machine, and functional safety for:

- automatic cleaning machines
- automatic guided vehicles
- collaborative robots
- autonomous robots
- automation systems
- autonomous mobile platforms
- autonomous vehicles
- industrial robot cybersecurity
- ground vehicle automation
- IIOT security
- mobile robots
- robot related incidents
- robot reliability
- robot safety certification
- robot safety training
- robotics components
- robotics systems
- self-driving robots

A good machine safeguarding program will ensure the safety of employees and the health of your company's bottom line.

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exida can effectively train your team to perform machine hazard and risk assessments to identify all possible hazards and estimate the risk for each hazard. Specifically, exida coaches you through the process of evaluating the risk, developing and implementing risk reduction options. exida can also educate your team in multiple approaches to SIL target selection. These are just some of the things exida does to ensure you are on the right path.

Services

exida engineers are the undisputed experts in applying automation to solve safety critical problems over the full safety lifecycle. We have the ability to solve the complex issues, and stand ready to assist when needed for:

- Machine Hazard Analysis & Risk Assessment
- Robot/ Collaborative Robot Hazard & Risk Assessment
- Safety Integrity Level Selection
- Safety Integrity Level Verification
- Functional Safety Audits (1-5)

Certification

exida is an ANSI accredited Certification Agency that can help your company achieve compliance effectively and efficiently.

ANSI/RIA 1506, ISO 13849, IEC 62061 are just a few of the global standards that impact the design and deployment of safe products. exida saves you time to market by wading through all the standards, ensuring compliance and offering certification. exida recognizes that for robot and machine safety, expertise in both safety and security is required to fully assess the inherent risk.

exida is the choice of leading companies when it comes to implementing and achieving compliance to the global standards relating to the IEC 61508, IEC 62061, ISO 13849, IEC 60335, and IEC 60730 for safety of machinery and IEC 62443 for industrial control system cybersecurity as well as ANSI/RIA 1506.

Robot and Machine Safety Training Courses

We offer a range of Functional Safety training courses for professionals in the robot and machine industry, from basic to advanced concepts.

Students benefit from exida's in-depth knowledge and expertise, enabling them to fully understand the standards and implement procedures in their organizations to ensure that Functional Safety is maintained.

- FSE 110 - Machine Safety Engineering - IEC 62061