

ISO 45001 Occupational health and safety management for the automotive industry



What is ISO 45001?

ISO 45001 is the new, internationally recognized management system standard for Occupational Health and Safety (OH&S). It was created to address the need to provide a consistent global framework, focussed on proactive prevention of injury and ill-health whilst providing an environment which is safe and healthy.

The wellbeing of the worker is the primary focus of ISO 45001. Viewed through the lens of risk management, the new standard takes into consideration social and psychological factors as well as human factors encompassing error prevention.

With the increased concentration on statutory and regulatory compliance, coupled with its alignment to the new ISO high level structure ISO 45001 is a perfect partner to quality and environmental management systems.

Having complementary management systems allows organizations to anticipate, adapt and respond to the risks and opportunities created by a highly competitive, innovative industry like automotive. This provides organizations, large and small, with the resiliency and agility needed to thrive in the global market.

The IATF recognizes the importance of ISO 45001. It is specifically referenced as a way organizations may demonstrate conformance to the personal safety aspects of clause 7.1.4, in the new IATF 16949:2016 standard, but the relationship

goes much further than that. Effective occupational health and safety is a key component of corporate responsibility (IATF 16949 clause 5.1.1.1), whilst ISO 45001's strong focus on legal and other requirements further complement IATF 16949. Both standards also recognize the role human performance and error can have on the outcomes of the systems and products. Finally, the requirement in ISO 45001 to align OH&S to the strategic direction of the business, driven by top management, along with active participation of workers, accelerates continual improvement, and illustrates that the relationship between IATF 16949 and ISO 45001 goes well beyond a single clause.



How can ISO 45001 benefit your organization?

The automotive industry has long recognized the importance of creating a strong safety culture, and has led the manufacturing sector in demonstrating the importance of employee morale and safety to productivity and ultimately, revenue.

With a heritage of using technology to improve productivity, quality, safety and health, the automotive industry has revolutionized manufacturing, particularly with the use of robotics. From robot welding and paint spraying which keep workers away from the fumes and mist that can have devastating long term effects on health and quality of life, (whilst improving quality and efficiency of manufacturing); to the new breed of cobots (collaborative robots) and exoskeletons which are reducing muscular skeletal stress associated with heavy lifting, repetitive actions or sustained awkward postures. Musculoskeletal disorders (MSDs) are a major social and economic burden in the manufacturing industry . Interestingly, what a lot of people don't realize is that there is also a relationship between MSDs and stress. Stress can lead to MSDs and MSDs can lead to stress, so effectively managing both can have a significant

positive impact – in the UK for instance, MSDs and stress account for 71% of work-related ill-health within the manufacturing sector.

Cobots are being used for tasks such as intricate screw-driving on the automotive assembly line, relieving workers from ergonomically unfavourable work.

Exoskeletons 'take over' or support muscle function, so that the muscle does not have to work as hard, reducing muscle fatigue and potential injuries. These are being trialled in many manufacturing environments and perhaps most well known in the automotive industry, the EksoVest trialled in partnership with Ford¹.

Whilst exoskeletons are forms of personal protective equipment (PPE) and therefore are at the bottom of the "hierarchy of controls"² (organizations should aim to use controls from the top), it does demonstrate that the automotive industry is looking at technology to improve safety and health. This focus on technology to help drive continual improvement is also found in ISO 45001.



