



Technology field:

Safety Engineering

Safety engineering addresses the risks arising from the use of technology, the operation of industrial plants and the handling of substances. Moreover, nowadays, safety technologies for protecting citizens and critical infrastructure against the threats of terrorism and natural disasters are playing an ever greater role. For this reason, safety engineering is a very heterogeneous field of business whose companies are mostly operating at interdisciplinary level across all economic sectors.



Clusterportal Baden-Württemberg



Safety engineering in Baden Wuerttemberg

Besides the companies that are specifically involved in the field of safety technology, such as the Pilz GmbH & Co. KG, in most cases, safety technology represents a sub-section among other fields and is customized according to the sector-specific requirements of its customers. Thus, the manufacturers of sensors and measurement technology, Sick and Endress + Hauser, are for example offering a large range of products in the field of safety technology production. The Bruker Optik GmbH has moreover specialized, amongst other things, in infrared spectroscopy used in the context of crime technology. Diehl BGT Defence and AIM Heilbronn, on the other hand, are specialists in the field of military security technology.

Due to the given heterogeneity, various Fraunhofer institutes and universities in Baden-Wuerttemberg are doing research in the field of safety technology. The aforementioned actors have formed, together with a number of innovative companies and relevant organisations, the innovation cluster Future Security BW, and its successor Future Urban Security, respectively. Hereby, the field of research is explored from two perspectives: On the one hand, from a scientific-technological point of view of technology and product development; on the other hand from the perspective of social sciences with regard to the acceptance and research of the causes.

The network Security Forum Baden-Wuerttemberg, an independent body composed of stakeholders from enterprises, science and the state administration of Baden-Wuerttemberg, primarily aims to protect firms and organisations against the unauthorized accessing of confidential data (key issues range from IT security to access control systems and protection against industrial espionage, inter alia).

Also in the future, the protection of critical infrastructure will play a central role. This applies likewise for the identification of explosive substances as well as the field "Security & Society". Moreover, the topic IT security has recently attracted considerable public attention and will become even more important in the light of an increasing global networking.