



Automation technology from Germany's leading expert for machine safety

EAC engineering and consulting GmbH, based in Hamburg, is an independent partner for high-quality and innovative engineering services concerning safety for machines, facilities and more so people working with and in them. With years of experience in this field, the company recently widened its portfolio to include automation technology.

TEXT: JESSICA HOLZHAUSEN

EAC GmbH offers extensive support to companies searching to enhance safety measures, drawing from years of experience. What is so unique about EAC is that its services range from a first risk analysis and drawing up a safety conception to actually designing a technical solution, from planning to automation. At EAC, experts from different fields work closely together to be able to address the different aspects

that are important for safety in production. So, mechanical and electrical engineers work hand in hand with experts in hazard and risk control, biologists or geologists as well as people specialised in economics.

Today it is natural to first access risks for example through a Failure Mode and Effects Analysis (FMEA) or a Hazard and Operability Study (HAZOP) and to then address

them accordingly. Safety expert EAC engineering and consulting GmbH develops the right measures and implements them to guarantee safety. "We have specialised on the topic of safety in plant manufacturing and machine engineering since



EAC has also been awarded the Top Consultant Award in 2014/2015 and in 2016. Photo: © EAC GmbH

1996," says Stefan Afsin, managing director at EAC engineering and consulting. Together with Dr. Peter Egler, a consultant for occupational and environmental medicine, Stefan Afsin founded the stock corporation EAC in 2002.

The best approach to safety is right from the beginning, before even setting up the machines or developing new ones. "Safety engineering means to lay out safety and security measures correctly during project planning and building machines and production facilities," says Afsin. But because specialist engineers developing machines already have a great deal on their mind and much to do, it is important not to put additional pressure on them with very complicated and often ambiguous questions of safety. This is why it is important for companies to rely on the specialist knowledge of companies like EAC. "We like to emphasise that safety, plant availability and efficiency have to be in harmony." The overall aim is to present solutions and optimisation proposals that are legal, practical and tested.

Of course, legal certainty also plays an important role for companies investing in their safety – even though the human factor might outweigh it emotionally. Often people only realise that a machine or facility is insecure when there is almost an accident, luckily without any serious consequences, or when there is a real accident. Taking the necessary measures to guarantee safety reduces the risk of liability significantly – and the risk to people and valuable, expensive machines. So, taking safety into consideration right from the beginning minimises risks and costs on different levels.

It is a difficult balance; too much safety costs a great deal of money because parts are really expensive. If too many security measures are put up, this can actually be counterproductive: "Employees can be very inventive when it comes to bypassing protections," says Afsin. The main issue here is to make the machines and facilities tamper-proof, so that employees cannot switch off safety measures just because it makes their workflow maybe faster but also quite dangerous.

Another important area is what, in terminology, is called functional safety. In short, it means that the equipment operates correctly and safely even when the operator makes a mistake or there is a hardware failure. "This has by now become an own discipline we have mastered excellently and included in our consultation," states Afsin. Excellency clients have confirmed "nominating us for the TOP CONSULTANT award the second time in a row".

Only this year, EAC has included automation technology in its portfolio as a separate business segment, so that today the company offers everything out of one hand – from conceptualisation to safety engineering, programming, commissioning, legal certification and solving a question according to CE standards. Involving EAC in a new implementation process or machine development can, in the end, save unnecessary additional costs because the experts will take safety measures into consideration right from the beginning. "It is our goal that a facility has to be to 100

per cent available the moment the production facility is set up, the automation software installed and the approval through our specialists has taken place," says EAC co-founder Stefan Afsin.

Top service and the best solutions are what EAC offers its clients in all branches, says Afsin, including the newly established automation technology department. "That is what our clients are accustomed to when working with EAC as TOP CONSULTANT and it is something they can rightly expect from us in future."

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Main image: Stefan Afsin (left) is awarded the Top Consultant Award from mentor Christian Wulff. Photo: © EAC GmbH
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