

# Safety – Seminars

# The road to a safe machine.

A guide for manufacturers and operators.

#### Module 5: The fundamentals of ESPE and Exams

#### Module description:

Are you planning to build a new machine or do you want to design and integrate electro-sensitive protective equipment (ESPE) as part of a retrofit on an existing system? In this training session, you'll learn what you need to be mindful of here.

We'll introduce you to the legal framework, consisting of the Machinery Directive and the relevant safety standards and look at various use cases to illustrate how they are designed.

You'll learn the basic formulas for determining safe distances as a function of the stopping time and the design of electro-sensitive protective equipment. We also teach you what's important when it comes to measuring overtravel and carrying out safety-related testing as an integrator or tester of electro-sensitive protective equipment.

#### **Contents:**

- Summary of the fundamentals of 2006/42/EC Machinery Directive
- Presentation of "safety standards" as they relate to ESPE
- Testing, who's qualified to do it? How does implementation work? Risk assessment, German
  Ordinance on Industrial Safety and Health
- Testing safety light curtains
- Overrun measurement (NLM)

#### **Duration:**

Approx. 4 hours

#### **Required:**

none

#### **Trainers:**

Thomas Krusen, Dominik Holtkötter, Dustin Hollenberg

#### **Training location:**

- At our Duisburg location
- At your location plus travel expenses
- Online



### **Certificate of participation:**

• Digital for online training courses, paper for face-to-face training courses

# **Training materials:**

• Digital

# **Number of participants:**

- Min. 4 participants, max. 10
- If there are more than 10 participants, we can divide the course into several groups
- and hold it on consecutive days or dates.

#### Price:

• 260€ per participant (plus travel expenses)