#### **Target Group:**

Occupational health and safety managers and experts, Designers of control systems, machine/production line builders, robot system designers and any kind of engineers. Test and certification bodies concerned about the risks associated with machines.

# **Participation:**

\$125 per participant Language: English

# **Registration at:**

www.rosscontrols.com/issa

#### Place of the Seminar:

# McNaughton-McKay Electric Company

1357 E Lincoln Ave, Madison Heights, MI 48071 Phone +1-248-399-7500

#### **Hotels Recommended:**

(Please book directly)

# Hampton Inn Detroit/Madison Heights/ South Troy

32420 Stephenson Hwy, Madison Heights, MI 48071

Phone +1-248-585-8881

# **Baymont by Wyndham Madison Heights Detroit Area**

32800 Stephenson Hwy, Madison Heights, MI 48071

Phone +1-248-588-3388

# Residence Inn by Marriott Detroit Troy/ Madison Heights

32650 Stephenson Hwy, Madison Heights, MI 48071

Phone +1-248-583-4322

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This seminar is organized by ROSS CONTROLS and the ISSA – Section on Machine and System Safety and will be hosted by McNaughton-McKay in Madison Heights, MI.

The **ISSA** (International Social Security Association) was founded in 1927 with its headquarters in Geneva, Switzerland. Today it is active in 158 countries with 330 member institutions worldwide.

The ISSA - Section on Machine and System Safety is committed to improving safety and health at work in the field of machine and system safety.

The mission of the ISSA - **Section for Electricity, Gas and Water** is the protection of workers against electrical accidents and occupational diseases due to electricity and ionizing radiation.

#### www.issa.int









# **Seminar**

# Functional Safety and Validation

May 23-24, 2022 Detroit

#### **About the Seminar:**

The objective of the seminar is to give an overview about some international standards for machinery safety and their application. These standards provide manufacturers of machines the basic technical rules for the design of safe machinery. The seminar is intended to transmit the participants the basic knowledge of these standards and their use in the industrial area. The seminar also shows practical application examples. The speakers give information as experts involved in the standardization machinery safety.

#### **Moderator:**

Klaus-Dieter Becker, German Social Accident Insurance Institution for the energy, textile, electrical and media sectors BGETEM, Cologne (D)

## Speakers:

- Klaus-Dieter Becker, BGETEM, Cologne (D)
- Chris Brogli, ROSS CONTROLS, Ferndale, MI (USA)
- Patrick Gehlen, Siemens AG, Erlangen (D)
- Otto Görnemann, Sick AG, Waldkirch (D)
- Jens Juehling, Head of the BGETEM's prevention department, Cologne (D)
- Fabio Pera, Italian National Institute for Insurance against Accidents at Work (INAIL), Rome (IT)
- Thomas Schulz Basten, BGHM, Düsseldorf (D)
- Florian Spieteller, VDE e.V., Frankfurt/M (D)
- Dietrich Warmbier, ROSS CONTROLS, Ferndale, MI (USA)

# **Program**

# Monday, May 23, 2022

10.00 a.m.	Registration	
11.00 a.m.	Welcome Address Dietrich Warmbier (ROSS CONTROLS) Klaus Becker, BGETEM	
11.30 a.m.	Risk assessment	Chris Brogli
12.15 a.m.	IEC 60204-1 Electrical equipment of machinery	Jens Jühling
1.00 p.m.	Lunch Break	
2.00 p.m.	ISO 13849-1 "Safety- related part of control systems; Part 1: General	Klaus-Dieter Becker
3.15 p.m.	Coffee Break	
3.45 p.m.	ISO 13849-1 "Safety- related part of control systems; Part 1: General (Continuation)	Klaus-Dieter Becker
4.15 p.m.	Software requirement ISO 13849-1	Thomas Schulz Basten
4.45 p.m.	Discussion	

# **Program**

### **Tuesday, May 24, 2022**

9.30 a.m.	Fluid power safety (Hydraulics / Pneumatics)	Dietrich Warmbier
10.15 a.m.	Functional safety and cyber security: dependencies, standards and pragmatic approaches	Florian Spieteller
11.00 a.m.	Safeguarding and complementary measures	Otto Görnemann
11.45 a.m.	Discussion	
12.00 a.m.	Lunch Break	
1.00 p.m.	Industrial Security – Lessons learned from attacks on industrial control systems	Patrick Gehlen
1.45 p.m.	Practical application of machinery safety standards. Example: Industrial robot systems. ISO 10218-2	Otto Görnemann
2.30 p.m.	Example how to apply ISO 13849-1, -2 (SISTEMA) including validation	Fabio Pera/ Klaus Becker
3.45 p.m.	Discussion	