

## 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:

Languages: English

## Registration at:

Ross Controls India pvt. Ltd.  
Ambattur Industrial Estate L21  
Plot No. 113  
Chennai 600 058, India

Phone: +91 9810308761  
Contact: Yashpal Setiya  
E-Mail: [yashpal.setiya@rosscontrols.com](mailto:yashpal.setiya@rosscontrols.com)

## Place of the seminar:

Hotel Feathers – A Radha Hotel  
4/129 Mount Poonamallee Road  
Manappakkam  
Chennai - 600089

## Organized by:

Ross Controls India pvt Ltd

## Sponsored by:

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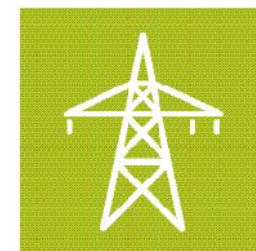
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## Seminar

# Functional Safety and Validation

September 6<sup>th</sup>/ 7<sup>th</sup>,  
2018

Chennai, India

## Foreword:

Considering the upcoming of the new regulation MED 40 the objective of the seminar is to give an overview about the future applicable international standards relevant for its application. With these standards the manufacturers of machines have the basic technical regulations at their disposal. This seminar communicates to the participants the basic knowledge of these standards and their application in the industrial area. This is done also by means of practical examples. The speakers give information as experts in the standardization and machinery safety.

## Moderator:

- Dietrich Warmbier, ROSS Controls

## Speakers:

- Samir Kanchan, MACSAFE, Pune (IN)
- Kevin Behnisch, DKE (German Commission for Electrical, Electronic & Information Technologies), Frankfurt/M (D)
- Otto Görnemann, Sick AG, Waldkirch (D)
- Fabio Pera, INAIL (Italian National Institute for Insurance against Accidents at Work), Rome (IT)
- Amol Bari, Pilz India Pvt Ltd, Pune (IN)
- Dietrich Warmbier, ROSS Controls, Troy, MI (USA)

## Sept. 6<sup>th</sup>, 2018, Thursday

09.00 a.m.	Registration	Dietrich Warmbier
09.30 a.m.	Welcome Address	
09.45 am	Indian Factory Act 1948	Samir Kanchan
10.45 a.m.	Information about the IEC 60204-1	Otto Görnemann
11.30 a.m.	Information on ISO 13849-1 „Safety of Machinery – safety-related part of control systems; part 1: general principles for design“	Samir Kanchan
1.00 p.m.	Invitation to lunch	
2.00 p.m.	E-stop (ISO 13850) and two-hand-control devices (ISO 13851)	Otto Görnemann
3.00 p.m.	Fluid power safety	Dietrich Warmbier
4.00 p.m.	Avoidance of unexpected start Lock-out – tag out (LOTO)	Amol Bari
5.00 p.m.	end	

## Sept. 7<sup>th</sup>, 2018 Friday

9:00 a.m.	Cyber security in Industrial Automation – Standards & pragmatic approach	Kevin Behnisch
9:45 a.m.	Validation of ISO 13849-2	Dietrich Warmbier
10:30 a.m.	Break	
11.00 a.m.	Practical application of machinery safety standards. Example: industrial robot systems – ISO 10218-2	Otto Görnemann
11:45 a.m.	Example how to apply ISO 13849-1, -2 (SISTEMA) including validation	Fabio Pera
12:15 p.m.	Final discussion and conclusion	
12:30 p.m.	Invitation to Lunch	