

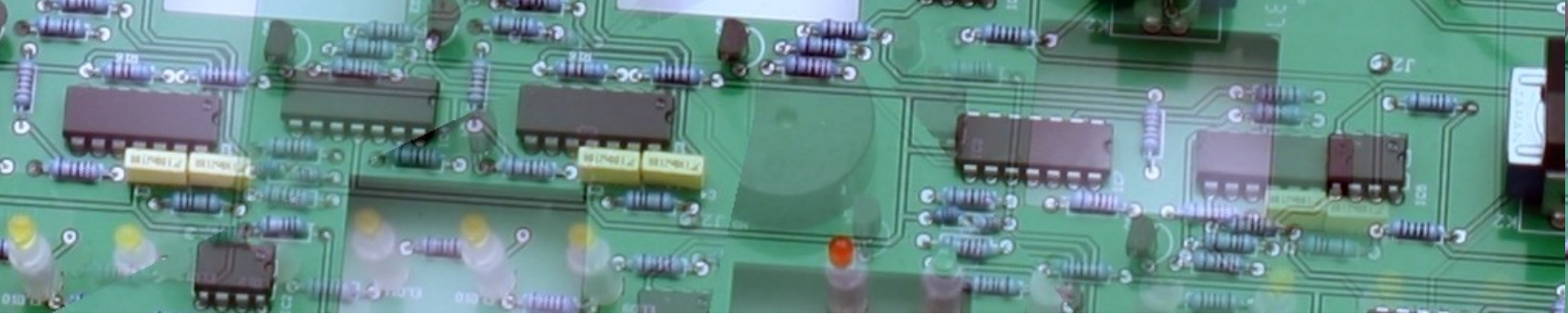
ESD-CENTRE OF COMPETENCE

Certified Learning services for ESD-Coordinators

ESD-Assistant, ESD-Responsible and
ESD-Coordinator

Practical and detailed information on the latest knowledge on ESD protection in accordance with the 3-stage model and the requirements of the IEC 61340-5-1 standard is conveyed. From the basics to the methods, measurements and materials up to the creation of an ESD control program plan. The participants receive all information they need to implement a meaningful ESD protection concept in the electronics processing industry within three days. The 3 day seminars are certified according to DIN ISO 29993:2018 - Learning services outside formal education - Service requirements.





THE 3-STAGE-MODEL

The 3-stage model is lived in the automotive industry by many OEMs and distributes the load on several shoulders. The learning content is based on the ESD training guideline RL1011 presented at the ESD Forum 2009 and the IEC 61340-5-1:2016 standard.

Practice has shown that a broadly based ESD team makes ESD protection in a company financially affordable and achievable.

CONTENT - ESD ASSISTANT

On the first day of training, the ESD-ASSISTANT course focuses on basic ESD knowledge. The ESD-ASSISTANT is the first level in an ESD-team and ensures the daily compliance with ESD-protection in practice. He carries out initial instructions and verification measurements and ensures that the specifications of the ESD control program plan are implemented.

TARGET GROUP

Employees in the electronics industry who are currently or in the future responsible to perform daily tasks in an ESD team. A basic technical understanding should be available. Do you know what is measured in Ohm?

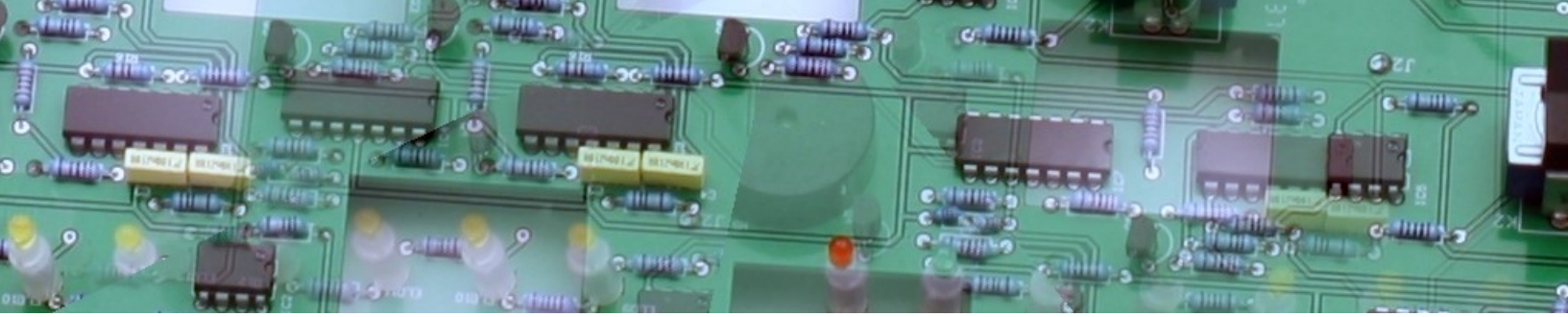
SERVICES

In English language the courses are currently only offered as in-house events. Seminar documents according to IEC 61340-5-1 are provided.

AGENDA — DAY 1:

- 09:00 - Introduction, ESD-Awareness, Basic knowledge about ESD-effects, consequences of ESD-failures, ESD-physic
- 10:30 - **Coffee break**
- 10:45 - Failure emergence, models, ESD-standards
- 11:00 - ESD control-elements
- 12:00 - **Lunch break**
- 13:00 - ESD protection measurements - preparation
elimination
handling
- 14:00 - Knowledge of materials, Behavior of materials, definition of resistance, conductivity and insulationt
- 15:00 - **Coffee break**
- 15:15 - Overview of measurement instruments, Usage of instruments for verification
- 15:45 - open Discussion
- 16:15 - Test for ESD-Assistants
- 17:00 - End of training

The test contains MC Questions. 85% of the questions must be answered correctly in order to receive a certificate.



CONTENT ESD-RESPONSIBLE

Members of the second level of the ESD team carry out regular audits and qualification measurements.

Therefore, the measuring technique is given a wider scope in this course.

The ESD responsables are the interface between the assistant and the coordinator and ensure communication within the team. They carry out the annual trainings and are important contacts in the design of the plan for compliance verification.

Therefore, they have more in-depth knowledge of ESD protection. For example, they know the most important ESD models and the contents of the standard IEC 61340.

TARGET GROUP

Employees in the electronics industry who are currently or in the future to take up duties as ESD responsables or technicians in the company. A basic technical understanding as well as basic knowledge of ESD protection is required. Do you know what distinguishes a dissipative material?

The ESD Assistant course is a good foundation.

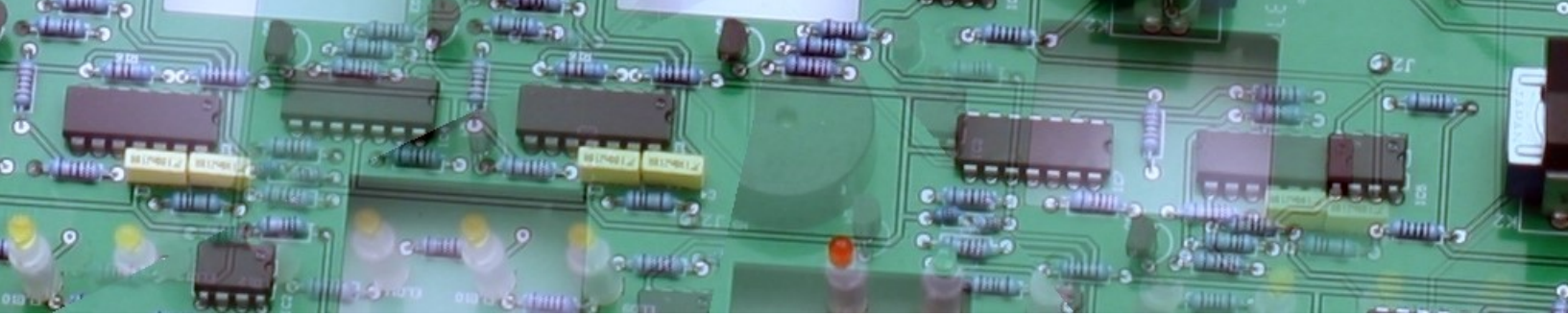
SERVICES

In English language the courses are currently only offered as in-house events. Seminar documents according to IEC 61340-5-1 are provided.

AGENDA — DAY 2:

- 09:00 - Recapitulation of day 1, Position in the company, duties, reporting
- 09:45 - ESD models, content of the IEC 61340-5-1 – What is an ESD control program?
- 10:30 - **Coffee Break**
- 10:45 - Performing an ESD audit, Verification of a work station according to check list, Dealing with problems, returned goods, complaints, reports etc.
- 12:30 - **Lunch**
- 13:30 - Handling of measuring equipment: High resistance meter, Voltmeter, Walking test
- 14:30 - Workshop – Measurements and tests in the EPA
- 14:45 - **Coffee Break**
- 15:00 - Definition of measures and effectiveness control, tailoring
- 15:40 - Recapitulation CDM-risk on metallic surfaces
- 15:45 - open Discussion
- 16:15 - Test for ESD-Assistants
- 17:00 - End of training

The test contains MC and open Questions. 85% of the questions must be answered correctly in order to receive a certificate.



CONTENT - ESD-COORDINATOR

According to the IEC 61340-5-1 standard, every company must appoint an ESD coordinator. He creates the ESD control program plan and ensures the implementation of ESD protection in the company.

He preferably has knowledge of quality management and deep knowledge of the processes and products of the company.

The ESD coordinator is the central point of contact for all team members and communicates with the top management.

He knows the ESD withstand voltage of the products used and can thus derive sensible ESD protection measures.

TARGET GROUP

Employees in the electronics industry who are currently or in the future entrusted with the introduction and maintenance of the ESD control program plan. Do you know how a standardized measurement of ESD tables is carried out? Do you know what PDCA stands for?

The course sections ESD Assistant and ESD Responsible are a good basis.

SERVICES

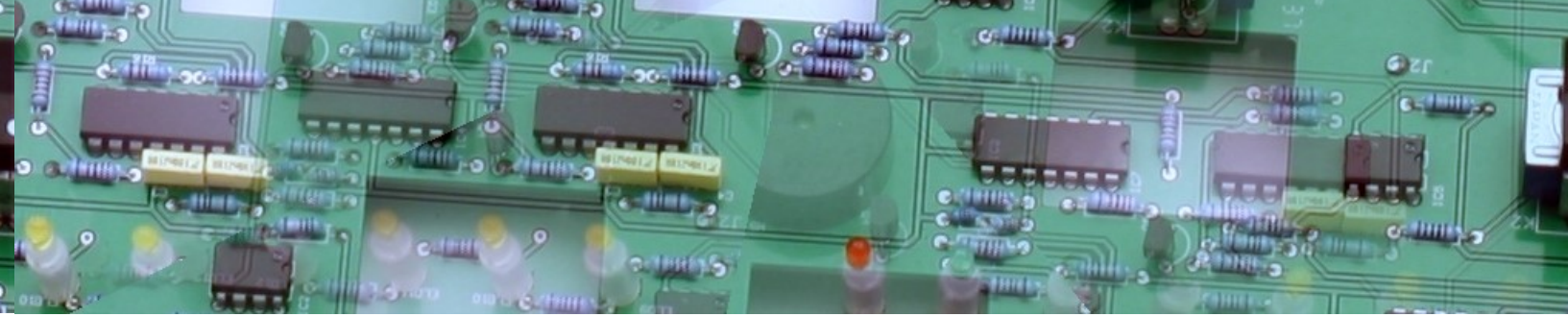
In English language the courses are currently only offered as in-house events. Seminar documents according to IEC 61340-5-1 are provided.

AGENDA — DAY 3:

- 09:00 - Position, duties, reporting
- 09:30 - Risk assessment, Return on investment
- 10:00 - Establishing an ESD control program plan
- 10:30 - **Coffee break**
- 10:45 - Implementing the ESD control into the own quality management system
- 11:30 - Supplier - customer relationship, how to focus your customer to ESD requirements for suppliers, ESD basics for external audits,
- 12:00 - **Lunch**
- 13:00 - What's new in ESD standards, Who else has requirements?
- 14:00 - Perform internal education
- 14:30 - **Coffee break**
- 14:45 - Product qualification, based on the sample theme: shoes
- 15:15 - Relative humidity, grounding and equipotential bonding
- 15:45 - open Discussion
- 16:15 - Test for ESD Coordinators
- 17:00 - End of training

The test contains MC and open Questions.

85% of the questions must be answered correctly in order to receive a certificate.



LEARNING ENVIRONMENT

Please provide bright seminar rooms and refreshments for all participants for an in-house event. It should be checked in advance which options are available for lunch. If the practical seminar is to take place on the second day in your production facility, a table trolley is required for the measuring equipment.

For each seminar, participants receive training documents and a certificate after a successful Open Book exam. The seminars take place as frontal lessons with group work. Small groups ensure that all personal questions are answered.

All moderators have many years of practical experience in external ESD protection. The trainer, Christian Hinz, is an active member of the national and international standardization commissions, the ESD Forum e.V. and the EOS / ESD Association and has over 20 years of experience in external ESD protection.

How to reach us:



Christian Hinz
Trainer

Claudia Jung
Organizer

CONDITIONS

The seminars are billed at the applicable VAT rate in the country of the place of performance.

When registering, you will receive an order confirmation as confirmation of registration. Cancellation up to one week before the start of the seminar is free of charge. A free cancellation is then no longer possible.

If an inhouse Seminar date is cancelled shorter than one week, the travel costs will be charged.

We reserve the right to cancel the seminar date even after confirmation of registration and reimbursement of the fees.

In the event of a seminar or training cancellation by Stat-X, there is no entitlement to reimbursement of travel and accommodation costs as well as loss of work. No liability is accepted for indirect damage, in particular lost profits or claims by third parties.

Stat-X Deutschland GmbH

Kompetenzzentrum
Französische Strasse 12
D-10117 Berlin

Tel: +49 30 447 19 -701
Fax: +49 30 447 19 -702
mailbox.de@stat-x.com

www.stat-x.com
CEO: Klaus Höllwarth

