

Electrostatic Solutions Technical Brief No. 4

IEC61340-5-1: *Protection of electronic devices from electrostatic phenomena – General Requirements*

ESD Training

IEC61340-5-1 specifies that as a minimum, initial and recurrent ESD training shall be provided for all personnel who handle or come into contact with ESD susceptible devices (ESDS). Initial training must be provided before personnel handle ESDS.

ESD Training Plan

It is a requirement of 61340-5-1 that an ESD Training Plan must be written. The ESD Training Plan must define

- the personnel that are required to have ESD training
- the type and frequency of training
- a requirement for maintaining training records
- where the records are stored.
- methods used to ensure trainee comprehension and training adequacy

In practice, it is often a good idea to give ESD Training, appropriate to their job, to a wider range of personnel. For example

- The ESD Coordinator and other personnel involved with setting up, maintaining and evaluating the ESD Program may need in-depth training on the principles and practice of ESD control, measurement methods, auditing techniques and other topics.
- Cleaners may need training on specific cleaning methods for ESD control floors or work surfaces - and what not to touch in an EPA!
- Managers may need training on the background and need for ESD Control and other topics related to their role.
- Anyone who enters the EPA needs some sort of training - even if it's a simple do's and don'ts (e.g. for visitors) and instruction to wear appropriate ESD control garments or foot grounders - and not to touch things that shouldn't be touched!

An ESD training course normally includes;

- Basic understanding of electrostatic charging and ESD
- Special handling procedures and equipment used in the EPA
- Wearing and testing personal grounding equipment
- Identification of ESDS and understanding of ESDS sensitivity
- The requirements of the ESD Program
- ESD and safety requirements e.g. High voltage precautions

How we can help with your ESD Training

Electrostatic Solutions can help with your ESD Training needs, providing

- Advice and consultancy in developing your ESD Training Plan
- Basic ESD training provided at your site for all personnel who need it
- In-depth ESD Training for ESD Coordinators and others who need to understand how to develop, maintain, measure, and evaluate an ESD Program
- Custom ESD Training courses according to your specification

Our standard ESD Training courses include live demonstrations of static electricity in action, full hand-outs and a Certificates of Attendance for all delegates. A simple test can be provided if required. Questions and discussions during the seminar are encouraged.

The Reality of ESD

This 2 hour basic ESD Training course is normally provided at your site. It is suitable for all personnel who need to know the basis of ESD prevention whether they be an assembly operator, supervisor, manager, engineer, cleaner....

Topics covered include

- A basic understanding of ESD
- Why we need ESD prevention
- The importance of personal grounding
- Standard ESD prevention measures
- ESD packaging

The Reality of ESD - Refresher

This basic ESD Training course is normally provided at your site and is a 1 hour shortened version of The Reality of ESD. It is intended as a refresher.

Achieving a Highly Effective ESD Program

If you need to understand the principles of ESD, how to write, maintain and evaluate an ESD Program, and make ESD measurements then this is the course for you. The full course is normally run as a public 2-day course, with accommodation for those who need it.

Day 1 covers the principles of static electricity and ESD Prevention and requirements of the 61340-5-1 and 20:20 ESD standards.

Day 2 gives hands-on experience of ESD measurements and evaluation compliance of an ESD program using checklists.

Custom ESD Training courses

If you can't find the ESD course you want – we can write it for you!

The information given here is believed to be correct but no liability is accepted for any consequences arising from the application of the information. For full information refer to IEC6340-5-1 and IEC61340-5-2 original documents.

Electrostatic Solutions Ltd

<http://www.electrostatics.net>

Telephone: +44 (0)23 8090 5600

Email: jeremys@electrostatics.net

13 Redhill Crescent, Bassett, Southampton, Hampshire, SO16 7BQ, U.K.