

Electrostatic Solutions Technical Brief No. 4

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

Training

IEC61340-5-1 specifies that ESD training must be provided for all personnel who specify, procure, design, mark or handle Electrostatic Sensitive Devices (ESDS), and those who manage or supervise them. Sensitive devices may be components, or assemblies, in manufacturing or field service situations. The objective of the training is to effectively use the materials, equipment and procedures required by the Technical Report, and to understand why they are needed. Training should be provided as part of employee introduction courses, and should be appropriate to the ability and job function of the trainee.

The training course normally includes;

- Theory of electrostatic charging
- Basic knowledge of electrostatic discharge
- Special handling procedures
- Protective items
- Identification of ESDS
- The limits of protection measures
- ESDS sensitivity
- Use of new techniques & processes before implementation
- Conflicts with safety requirements
- High voltage precautions, if required
- Awareness of the IEC61340-5-1 Technical Report

Follow-on training should be provided at an appropriate (documented) interval specified by the company ESD Co-ordinator. A register of trained personnel must be maintained.

A typical training scheme might include 3 levels:

Level 1

Dos & Don'ts list for visitors, customers, temporary employees, and contractors etc. This might be handed to personnel at reception or on entry into the EPA.

Level 2

A course for permanent employees, as part of an induction course or periodic training course. This consists of theory and practical aspects, as well as use of equipment and packaging.

Typically a course may be 1-2 hours long, and may use a variety of formats. A formal test, or some feedback, of individual performance may be required by the ESD Co-ordinator.

Level 3

This would typically be specialist training given to particular personnel according to their job requirements. This level would be taken after a level 2 training course.

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 IEC61340-5-1 and IEC61340-5-2 original documents.

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