

Train the Trainer

Where a customer prefers to carry out in-house training, SSE have the facilities to train individuals to the necessary levels of expertise. This option is very cost effective, particularly where staff turnover and recruitment dictate the need for regular induction training. The package includes a 'training kit' with slides and course notes and optionally, a selection of ESD sample equipment.

ESD Co-ordinator Training

This course provides the necessary introduction to the role of an ESD co-ordinator. The content covers all aspects of an ESD Control Program, structured to the clients needs.

Basic Training

- The successful implementation of ESD precautions relies on effective training of staff in correct working methods.
- This training must provide a basic understanding of the ESD problem, together with the specific requirements for particular job functions.
- SSE offer initial training courses for companies that need to introduce or improve ESD protection and set up effective Electrostatic Protected Areas (EPAs). Each course is based on a review of the customer's existing policies, procedures and facilities so that training can be tailored to the exact requirements.



SITE SURVEYS, AUDITS AND TESTING

Site Surveys

- Site surveys are carried out to assess the extent and effectiveness of existing static control systems and procedures, based on BS EN 61340-5-1.
- No charge is made for this service if it is the first stage in the preparation of a quotation for the supply of ESD equipment.



- Where a formal report and recommendations are required, then the service is chargeable at an agreed fee. This fee may be refundable, in whole or in part, in the event of an order for ESD protection equipment and materials.

On Site Testing

- The testing of ESD Protected Areas (EPAs) to ensure effectiveness is a requirement of BS EN 61340-5-1:2007.
- For customers who lack their own expertise or necessary equipment, SSE offer to carry out periodic testing and certification on a contract or as needed basis.

Site Audits

- Periodic audits of ESD control systems are an essential requirement of BS EN 61340-5-1:2007.
- This service is available from SSE, on a regular contract basis, or as a reinforcement of a customer's own internal audits.





Design

- BS EN 61340-5-1:2001:2007 - Protection of Electronic Devices from Electrostatic Phenomena - General Requirements establishes the need for ESD Protected Areas (EPAs).
- SSE have 25 years experience of designing EPA facilities that enable customers to meet the requirements of current standards.
- Solutions are based on SSE's comprehensive product range, taking into account the client's needs and restraints.
- An EPA can be a portable kit ... or a whole factory.

SITE INSTALLATION SERVICES

Benches, Workstations And Matting

- SSE offer a full installation service for many of the standard products shown in this catalogue, which includes:
 - the installation of bench mats with grounding facilities
 - the assembly of benches and wiring (ESD and mains)
 - the assembly of shelving and storage facilities
 - the dismantling and moving of existing equipment

Static Dissipative Flooring Installation

- SSE is a major supplier of static dissipative flooring systems, with over 1100 installed sites throughout the UK, ranging from 10 to 7000 m². The service includes a site survey, a detailed quotation covering all cost elements, installation by specially trained installers and, on completion, test and certification.

- Rubber based materials form the main product line. Although initial cost is slightly higher for rubber, the lifetime cost is lower, due to ease of maintenance and improved durability.

- Where a carpeted floor is preferred, static dissipative loop-pile carpet tiles are available in a wide range of colours.

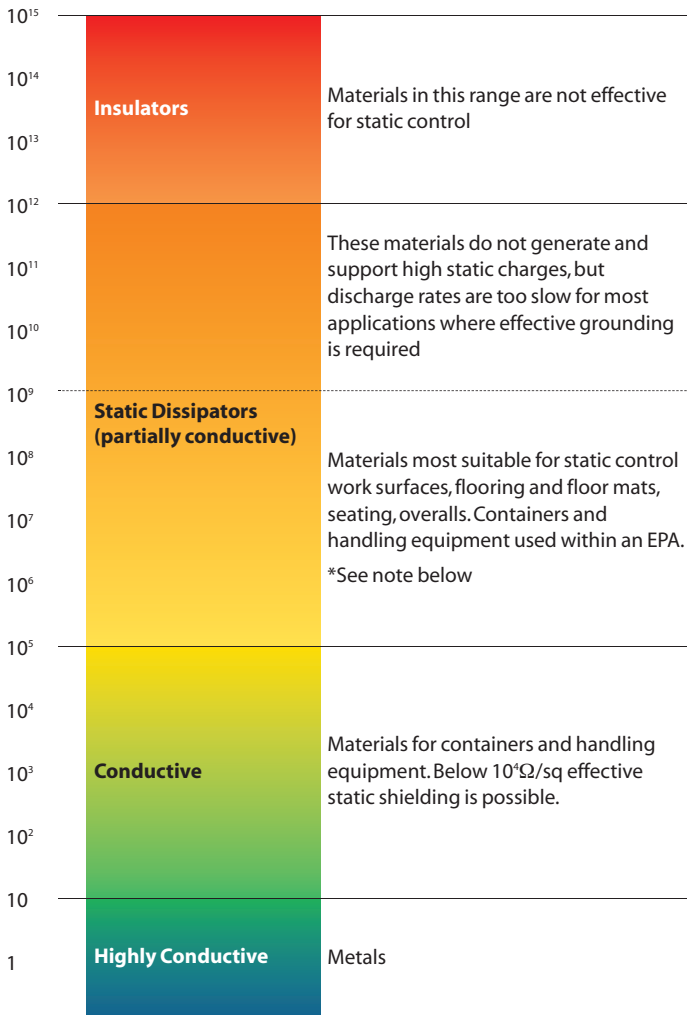


Adaptable Production System workstations at University of Birmingham Department of Physics



Guide To Static Control Materials

Surface resistivity in ohms



*Note:
Operator safety will be compromised if the earth path through bench mats, floor mats and flooring is less than $7.5 \times 10^5 \Omega$ and mains powered equipment is in use.



Terminology

- **ESD** = Electro-Static Discharge
- **EPA** = ESD Protected Area
- **Low charging** = materials that are suitable for use within an EPA, exhibiting low levels of charge generation (previously referred to as anti-static)

BSI Standards Relating to ESD

The current standards are:-

- BS EN 61340-5-1:2007 Protection of electronic devices from electrostatic phenomena – General Requirements.
- IEC/TR 61340-5-2:2008 Protection of electronic devices from electrostatic phenomena – User Guide.

The User Guide contains a huge amount of information relating to practical interpretation of the standard, including a sample **ESD Control Program**. Implementing these standards will provide an ESD protection regime with control of personal body voltage to < 100V.

(Standards available from SSE - see page 63).

- SSE are committed to supplying products and supporting customer requirements to achieve compliance with the new standards.

