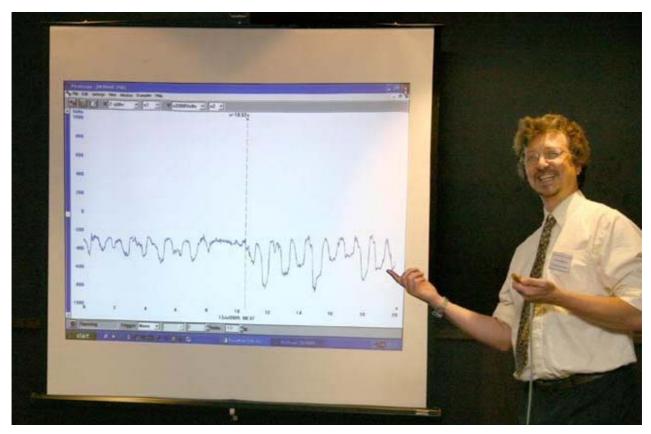


Electrostatic Solutions Ltd

Excellence in electrostatic technology expertise providing client-oriented solutions

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ESD Management Seminar

Achieving a highly effective ESD programme

For ESD Coordinators, production and QA personnel, or anyone who needs to know how to implement an effective ESD Control Program.

- √ How to set up a highly effective ESD control programme
- √ ESD programme measurements and test methods
- ✓ Assessing the ESD programme with the checks and tests and auditing

Who should attend this course?



Measuring the static voltage on your body can be quite surprising!

This course is suitable for those who need to have a good understanding of how to implement an ESD Program in electronics manufacture, including

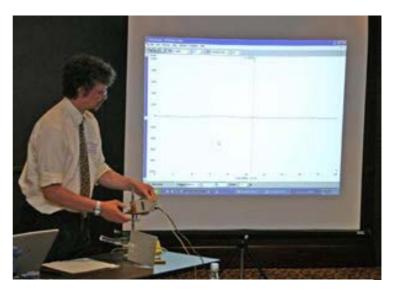
- ✓ ESD Coordinators
- ✓ Production engineers
- ✓ Quality engineers
- ✓ Engineers who need to understand and implement ESD measures

The course welcomes experienced and inexperienced delegates, taking their understanding to a deeper level they need to implement an effective ESD Program.

What is the course like?

In sessions 1 & 2, presentations and practical demonstrations use electrostatic instruments to show the reality of static and ESD. The key principles of ESD prevention are concisely and clearly expressed as "the seven habits of a highly effective ESD program". Dr Smallwood shows how these principles are reflected in the requirements of the highly effective 61340-5-1 and ESD S20:20 ESD program standards.

Sessions 3 & 4 focus on aspects of assessment, checks and audit of the ESD program and ESD measurements required by 61340-5-1 and ESD S20:20.



Dr Jeremy Smallwood uses electrostatic instruments to demonstrate static

Checklists enable delegates to assess their own ESD program compliance. Delegates have the opportunity to observe and try a selection of test methods.

The course is aimed job specific specialist training ESD training for engineers and ESD Coordinators presented in a very stimulating and enjoyable format. Dr Smallwood encourages lively discussion of issues and questions arising during the day.

The course provides a valuable opportunity for engineers to discuss ESD issues with their peers from other organisations. Experience shows that this informal sharing of experience is very much appreciated and often leads to solutions to particular issues.

Course outline

(The detailed course content may be subject to variation on the day)

Delegates will gain a deeper understanding and awareness of static electricity and its action in the electronics manufacturing environment, and a good understanding of the principles of an effective ESD prevention program.

- √The seven habits of a highly effective ESD programme
- ✓ How to achieve, and assess compliance
- √ How to make ESD measurements
- ✓ How to implement a checks, test and audit program

Courses are provided in an attractive and comfortable venue with lunch and coffee provided. Place availability is limited and so we advise early registration. An intensive onsite ESD course can be provided if required.



Delegates measuring ioniser performance during Session 3

Session 1 & 2: The seven habits of a highly effective ESD program

Session 1 & 2: focuses on why we need ESD prevention, and how to implement the seven habits of a highly effective ESD program. Live static electricity demonstrations illustrate the need for the ESD Program measures.

Creating a highly effective ESD program

Why do we need ESD prevention?

The seven habits of a highly effective ESD program

Discussion & Questions

Sessions 3 & 4.

ESD measurements, assessment, checks and audit

Day 2 focuses on aspects of assessment, checks and audit of the ESD program and ESD measurements. An opportunity will be provided for delegates to try for themselves some of the important test methods.

ESD program measurements and test methods

Assessing the ESD programme with the checks and tests and auditing

The session illustrates the use of checklists to assess and check ESD programme compliance

Discussion & Questions



Course Trainer Dr Jeremy Smallwood MIEE FinstP CEng CPhys

Dr Jeremy Smallwood is an independent Consultant specialising in electrostatic discharge (ESD) training, research, and consultancy,

Jeremy combines simple practical demonstrations with top level understanding of ESD issues, to provide interesting and effective training presentations. The demonstrations bring alive the reality of electrostatic charging and how this can lead to ESD damage, as well as demonstrating the effectiveness of ESD prevention measures.



Jeremy's in-depth knowledge allows him to clearly identify and explain key points during basic training, while taking the subject to much greater depth in specialist training courses. In recent years has been closely involved British developing the Electrostatic Control Association (BECA) Seminar programme and in December 2003 was elected Chairman of BECA.

Jeremy spent 7 years in industrial electronics R&D before accepting a research post at Southampton University electrostatic discharge studies. subsequently led **Electrostatics** the Section at ERA Technology Ltd, covering a wide range of electrostatic projects, training and consultancy work. In March

1998 he set up Electrostatic Solutions Ltd to give independent expert electrostatics related training, consultancy and R&D services.

He is an expert member of the British Standards national committee on electrostatic damage prevention and is Chairman of IEC TC101 Electrostatics, which drafted the BS EN 61340-5-1 & 61340-5-2 ESD standards.

What our delegates said:

"If you're an ESD Coordinator this course is for you!" E Flynn, MBDA (UK)

"Relaxed and informative" R Brook. Baxall Ltd

"Definitely an eye-opener" G Parvin. AMS Ltd

"The practical demos gave an insight into how static charges can be generated easily in ways never thought of." M Edwards. IR Automotive Ltd

"I am new to this subject and I found Jeremy's view very interesting" R Aspinall. MBDA (UK)

"Eye opening!" S Munroe. Communicaid Ltd.

"A very valid and informative well run seminar." M Jones. ICR Ltd.