



Designing of Shielding for EMC

Preamble :

Electronic gadgets have proliferated in every area of our day to day lives. Incorporation of switching devices within circuits have led to faster responses and attractive performances of product but has also resulted in such problems like Electromagnetic Interference (EMI).

Many industries and government departments are demanding EMI compliant products. Moreover, EMI/EMC compliance is an essential requirement of various international certifications.

Shields are used to prevent unwanted EMI (i.e E-H-fields and other electromagnetic disturbances) from entering or leaving a protected electromagnetic zone. The amount of reduction of the unwanted fields depends very much upon the material of shield used, its thickness, size and shielded volume, frequency of the fields, shape and orientation of apertures.

To comply for EMC, one requires a thorough understanding of various shields and its design aspects.

Objective :

The course enables engineers, designers and professionals to learn about the shielding techniques, shielding materials and prevention of electronic equipment and installations through effective shielding, in order to ensure electromagnetic compatibility (EMC).

Duration : 1 Working Day

Who should attend :

The Managers, Engineers and professionals involved in Design, Production & Quality Assurance of Electronics, Electrical, Electromechanical, Computers, Telecommunication, Medical Electronics, Power Electronics, Lighting Equipments, Information Technology(HW) Products and systems.

The course is highly relevant for designing of critical electronics control systems and products used in automobile, space, defence, railways and similar industry.



COURSE CONTENTS :

- Fundamentals of EMI / EMC
- Overview of EMC Design
- Fundamentals of Shielding
- Shielding of Cables
- Shielding Materials, Special Devices & Shielding Techniques
- Interface Control
- Shielding of Equipments

Course Methodology :

The Participant's will learn about the importance and intricacies of shields and shielding techniques and will be able to implement the same in the products and systems.

The course is awareness type and will include the lectures and discussion on specific cases studies with suitable examples.

Participants are awarded a Certificate.