



Electrostatic Discharge Control

(ESD S20.20) Facility Certification

DQS MANAGEMENT SYSTEMS SOLUTIONS | 1500 MCCONNOR PARKWAY SUITE 400 | SCHAUMBURG, IL 60173 | 800-285-4476 | WWW.DQSUS.COM

Do you have a formal ESD Control Program that has been externally audited to assure your customers the product is fully protected from potential damage?

Are your employees fully aware of the importance of using ESD protection? We can help you answer these questions potentially saving thousands of dollars in product loss.

The Basics of ESD

Electrostatic Discharge (ESD) is more than the “static shock” we often experience in our daily lives. It is far more dangerous when discussed in an electronics manufacturing or processing setting. In fact, ESD has an impact in almost every aspect of today’s electronics environment. ESD can impact:

- *Production yields*
- *Manufacturing costs*
- *Quality*
- *Product reliability*
- *Profitability*

TYPES OF DAMAGE

There are two types of damage that can result from an ESD event. A catastrophic failure is when an electronic device is exposed to an ESD event, and it will no longer function. However, the second type of damage is more difficult to detect and more dangerous if gone undetected. A latent defect is when the device is exposed

to an ESD event and becomes partially degraded. It may still perform its intended function but will likely have a greatly reduced performance life.

Design & Development

Current trends in design and development of products tend toward making the devices capable of more functions which requires more circuitry, while the size of the device becomes smaller. Some examples include cell phones, flat panel televisions and portable music players to name a few.

How Does ESD Occur?

While the most common form of an ESD event occurs as a result of contact with the human body, automated processing has not totally reduced the occurrences of ESD’s. A device may become charged or at risk of an ESD event as a result of moving down an assembly line or conveyor belt.

When Does ESD Occur?

Unfortunately, the answer is quite simply, at any time during the following processes:

- *Manufacturing*
- *Testing*
- *Shipping*
- *Handling*
- *While in use as intended*

Safety, Time & Money

The key objective is to protect your company and your customers by taking all

necessary precautions. The development of an effective ESD control program can save employees and customers from injury as well as saving money lost in productivity, repair, rework, and shipping. DQS Inc. will certify your facility’s ESD control program to ESD S20.20 and/or IEC 61340-5-1 under the accreditation from the Electrostatic Discharge Association (ESDA).

DQS & ESD 20.20 Certification

As a leading global certification body, DQS has performed thousands of audits in electronics facilities to ISO 9001 and other management systems standards. With auditors that have direct electronics industry experience, our auditors are well versed in electronics manufacturing and testing processes as well as ESD precautions. In addition, the auditors for ESD S20.20 are specifically trained by the ESDA in the certification requirements.

Our audits include the following:

- *ESD Control Plan and management*
- *Training Plan*
- *Compliance Verification Plan*
- *Implementation in ESD Protected Areas*
- *Grounding Systems*

We also offer IEC 61340-5-1, which applies to the activities that manufacture, assemble, process, package, label, service, install, inspect, test, transport, or otherwise handle electrical or electronic parts, equipment, and assemblies that withstand voltages greater than or equal to 100 V HBM, 200 V CBM, and 35 V for isolated conductors.