



Specialists in ESD & Production Consumables





The New Standard in Cleanroom Technology



# EFFECTS OF STATIC DISCHARGE

ESD can cause unseen damage to most electronic components normally used during the manufacture and handling of electronic assemblies and equipment; failure can also occur at the repacking stage by electronics distributors. If the damaged component fails immediately, the result can be a board that fails tests and requires rework. This represents lost production & additional manufacturing costs.

Worse than this, a component may be partially damaged and weakened. It may suffer a change or drift in characteristics. It may remain within specification but fail later when in use by a customer. It has been estimated that 90% of damaged devices may be discovered in this way - this is the most expensive type of failure, as it represents:

- Customer dissatisfaction, and the possibility of loss of product reputation and future sales
- · Customer service personnel and facility cost
- Engineers time, possibly for on-site repair with travel, and parts replacement

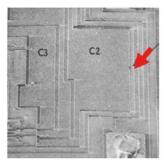
In manual assembly, most ESD arises from charged personnel, if they are not grounded. Most people do not feel an ESD shock unless they are charged to over 4000 V (the sensitivity threshold varies between people, and even over parts of the body!). This voltage is quite common in the uncontrolled environment - how many of us have not felt the occasional electrostatic shock in everyday life?

The cost of a single ESD failure in the field can be astounding. The cost of in-house failures can also be significant and wastes time and resources. While it is difficult to attribute specific failures to ESD damage, most companies prefer to prevent possible damage and reliability problems by storing, assembling and handling equipment under electrostatic safe conditions.

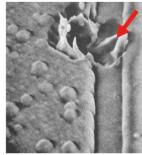
ESD damaged this device. The static spark that damages devices may be too small for you to see or feel.

"Analysis of non-conforming or defective devices showed that 60-75% were damaged by EOS (electrical overstress) or ESD. This rises to 90% for newer technologies. About 70% of these failures were attributed to damage from incorrectly grounded people."

Toshikazu Namaguchi, Hideka Uchida. EOS/ESD Symposium



175 x Magnification



4300 x Magnification











# WHO WE ARE



- · 32 year history, formed in 1987
- · American HQ and Logistics in Austin Tx
- Freedom North American distributor
- · Privately owned Company
- \$25 USD Turnover forecast 2019
- Specialists in ESD, Cleanroom and Production
  Consumables serving Electronics, Auto,
  Pharma & Biotechnology sectors
- 40,000 sq foot manufacturing and distribution centre in UK
- Sourcing and manufacturing team and Global Supply Team











# CORE BRANDS & MARKETS SERVED

Our main areas of expertise are high-end, technology led packaging solutions, ESD supplies and Clean Room materials. But that's not all. We also specialize in finding Innovative technical solutions, as well as identifying ways to reduce your purchasing and supply costs.

Spanning the electronics, medical, defense, aerospace, automotive and autosport sectors, our customers list includes BMW, Celestica, Cisco, Farnell, Flextronics, Ford, Foxconn and IBM.

We're one of the UK's top 100 regional fastest growing companies, and we're quality approved to ISO 9001:2008. As well as our UK headquarters, we have distribution centres in North America. Singapore, Malaysia and the Czech Republic, giving us a global strategic supply network.

The Antistat way of thinking is simple. We know price is important. But so is confidence and reliability. So, what we promise, we deliver.

Think of us not as a supplier, but as a partner. Keeping your business running smoothly is as important to us as it is to you.





































# ANTISTATIC & CLEANROOM





## Static Shielding Bags - Open Top

These open top easy access static shielding bags are designed to protect sensitive electronic devices during transit and whilst being kept in storage. Each of our ESD (electrostatic discharge) safe bags have a 4 layer construction with an anti static coating which provides a complete faraday cage protection against the effects of ESD.



## Moisture Barrier Bags

Designed for the packaging and protection of moisture sensitive surface mount devices (JEDEC std-033). These moisture barrier bags combine superior ESD protection and restrict the transmission of water vapour making them a comprehensive moisture proof packaging solution. These bags are ideal for transporting and storing sensitive devices such as circuit boards and electronic components.



# Pink Antistatic Bags Open/Zip

Our pink anti static bags have the ability to dissipate a static charge to ground preventing static charge building up on the package or device. The antistatic material will not charge up when rubbed against other materials. These bags can be used to package/transport non-ESD sensitive devices within the ESD protected area.



## Gloves - Nitrile Examination

Quality Cobalt Blue Nitrile examination gloves that offer increased tensile strength and protection over Latex and Vinyl. Incredible Ultra-Thin Nitrile examination gloves specifically designed to offer increased comfort, flexibility & sensitivity.



## Cleanroom Clothing Range

Manufactured from lightweight, low linting materials, Integrity® Cleanroom protective coveralls and lab coats provide comfort, breathability and high performance in water vapour transmission rates. To comply with customer specifications and International standards, each of our Cleanroom garments is CE marked to PPE Standard Category 3, type 5 & 6. Depending on the your requirements, our products are also available sterile by Gamma Irradiation and ISO4, EU GMP Grade A Compatible.











# **ESD TOP SELLERS**





## Corstat Packaging

Corstat® is the ESD industry standard for conductive corrugated board providing a buried shielding layer and a sealed surface for a controlled path to ground.

Chip boxes are manufactured from Corstat conductive corrugated fibreboard, and provide an ESD safe and cost effective method of shipping chips and small electronic devices.



#### **ESD Transit** Boxes

Integrity® ESD Transit Boxes are a new generation in component transportation. The specially formulated dissipative coating on each Integrity® Transit Box creates a faraday cage, allowing the safe passage of electronic components that are sensitive to Electrostatic Discharge.

To protect components against impact damage, Integrity® Transit Packs are constructed from a rigid corrugated board, with an easyto-open lid. Internally, sensitive devices are cushioned by ESD safe foam inserts.



#### **Dessicants & Humidity Cards**

Desiccant is a drying agent required to absorb moisture during the packaging, storage and transportation of moisture sensitive devices. Used in conjunction with our ESD moisture barrier bags and humidity indicator cards for a comprehensive dry packaging solution.

- · Suitable for cleanroom use
- Complies with JEDEC std 033
- · Environmentally friendly desiccant compared to chemically produced alternatives
- · Exceeds the moisture vapour absorption of silica gel



## Own label ESD **Clothing Range**

ESD Clothing can help prevent damage to sensitive electronic components that are being assembled or packaged within a protected area. The garments and shoes have been specially designed to be comfortable for the user and effective in reducing the damage caused by static generation.



#### **Antistatic Rubber** Matting

Anti static mats and ESD flooring are effective methods of controlling electrostatic discharge within the EPA. Anti-static matting slows down and controls this discharge allowing static electricity to transfer safely to ground. It also protects the surface of the ESD sensitive devices from wear and tear during processing.

- Smooth roll-mats
- · Textured floor & bench mats
- · Suitable for cleanroom use
- · Tacky Mats & flooring









