

Title	Describe and use electrostatic discharge control procedures in electronic manufacturing		
Level	2	Credits	2

Purpose	<p>This unit standard covers electrostatic discharge (ESD) control procedures in an electronic manufacturing environment, designed to minimise electrostatic damage to components.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> –describe the cause, effect, and prevention of component damage by ESD in electronic manufacturing; and –use ESD control procedures in own workplace.
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Classification	Electronic Engineering > Electronic Manufacturing
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Available grade	Achieved
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Guidance Information

- 1 References:
 ANSI/ESD S20.20-2007, *Development of an Electrostatic Discharge Control Program*; Electrostatic Discharge Association;
 ANSI/IPC A-610D, *Acceptability of Electronic Assemblies*, February 2005, published by IPC – Association Connecting Electronics Industries.

Outcomes and performance criteria

Outcome 1

Describe the cause, effect, and prevention of component damage by ESD in electronic manufacturing.

Performance criteria

- 1.1 The generation of electrostatic charge on the body is described.
- 1.2 The damage arising from handling semiconducting components in the presence of charge is described.
- Range permanent damage, latent damage, intermittent damage.
- 1.3 The effect of ESD damage on production and quality of products is described.

1.4 Methods to prevent ESD damage are identified.

Range warning labels, protective materials, handling, safe workstations.

1.5 Electrostatic control procedures are described, and those used in own workplace identified.

Range control procedures – use of warning labels; minimise handling; component packaging; discharging by contact with earthed metalwork; grounded wrist straps; foot straps used with conductive floor coating; grounded antistatic foot and bench mats.

Outcome 2

Use ESD control procedures in own workplace.

Performance criteria

2.1 Electrostatic discharge control procedures are used in own workplace in accordance with company procedures.

Range assessment by observation of use of procedures over a two-week period.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2003	31 December 2021
Rollover and Revision	2	19 March 2010	31 December 2021
Review	3	26 July 2018	31 December 2021

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.