LISSNER

Urethane ESD Office Desk Seating

Implemention of Electrostatic Discharge Control Test

1.0 Purpose..... 1

2.0 Scope and Focus.....1

3.0 Tools Used.....2

4.0 Process.....3

1.0 Purpose

Implement ESD electrostatic control test in accordance with the ANSI/ESD-S20.20 patent policy on a chair, applying the following points:

- ESD S 4.1: Protection of articles susceptible to electrostatic discharge – worksurfaces – characterization of resistance.
- ESD STM 4.2: Protection of articles susceptible to electrostatic discharges – surfaces and work – load dissipation characteristics.

2.0 Scope and Focus

The tests were applied to a chair regarding ESD S 4.1 and ESD STM 4.2

Request Technical	Method Implementation Process	Test, Standard, or Warning Method	Rank Recommended
Protected Area	Working Surface	ESD S 4.1 ESD STM 4.2	<1 x 10^9 ohm <200 volts

Note: the ESD STM 4.2 test was applied at 100 volts

Note: ANSI S20.20 does not specify any lower limit, however, ANSI/ESD S4.1 recommends a resistance range greater than or equal to 1 x 10^6 ohms in the manufacturing environment.

3.0 Tools Used

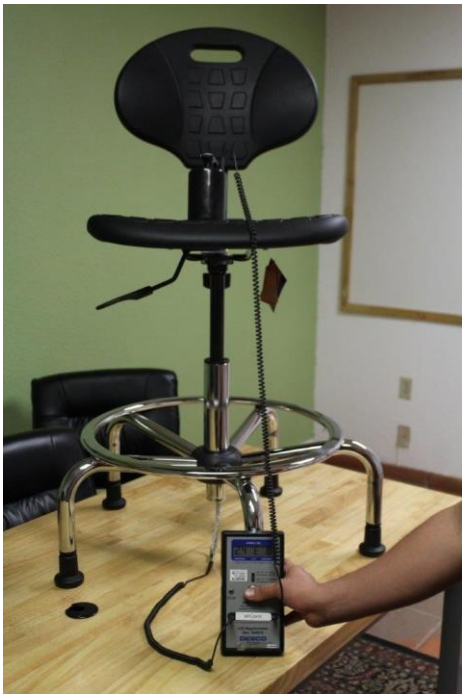
LCD Megohmmeter Item A50070

4.0 Process

The tool (LCD Megohmmeter item A50070) was placed on different points on the urethane chair, obtaining the following results with unit of measure in ohms.

1: Chain – ESD Backrest

2: Chain – ESD Seat



3: ESD Backrest – ESD Seat

Tests	Type of Test	Testing Method	Results	Limits
1: Chain – ESD Backrest	Point - point	ANSI/ESD S4.1 y/o ANSI/ESD STM 4.2	2.1 x 10^8 ohms	<1 x 10^9 ohms y/o <200 volts
2: Chain – ESD Seat	Point - point	ANSI/ESD S4.1 y/o ANSI/ESD STM 4.2	2.1 x 10^8 ohms	<1 x 10^9 ohms y/o <200 volts
3: ESD Backrest – ESD Seat	Point - point	ANSI/ESD S4.1 y/o ANSI/ESD STM 4.2	2.1 x 10^8 ohms	<1 x 10^9 ohms y/o <200 volts

- For standards that have multiple resistance testing methods, these limits apply to all methods
- ANSI/ESD STM 4.2 tests were applied at 100 volts