

SPECIFICATIONS FOR ELECTROSTATIC DISCHARGE (ESD) WORKSTATIONS

OVERVIEW: Kewaunee workbenches are designed to bring static dissipative materials to the same electrical potential by applying paths to ground through ground paths. The workbench itself is grounded to near zero potential to dissipate any susceptible ESD items that need to maintain a near zero potential. This near zero potential is obtained by grounding the work surface that dissipates a charge by using a work surface resistance between 1 x 10⁶ to 1 x10⁹ ohms. In turn, the work surface is attached to the common point ground wire which is attached to the facility ground. From this stand point, the charge will be dissipated in a manner not to fuse any ESD sensitive components or equipment together.

GENERAL REQUIREMENTS:

Kewaunee ESD protective work stations are grounded in accordance with the EOS/ESD Grounding Standard 6.1,

All standard Kewaunee powered accessories are in accordance with NEC and local codes.

Kewaunee ESD work surfaces are in accordance with the EOS/ESD Work Surface Standard 4.1

Kewaunee ESD workstations are in accordance with the ESD Protective Workstations Advisory Document 53.1.

MECHANICAL CONNECTIONS:

Kewaunee ESD protective workstations use nylon jacketed, polyvinylchloride insulated, copper conductive twelve gauge wire to connect our common point ground to the facility ground. Additional work surfaces intended to be used for unprotected ESD sensitive device work areas are connected to the common point ground with sixteen gauge wires.

WORK SURFACE SPECIFICATIONS:

Kewaunee Scientific Corporation uses a static dissipative laminate to provide a controlled path to ground. At 50% relative humidity using a 3M Megometer, the resistance associated with this laminate lies within a volume resistance of 1x10^6 – 1x10^9 ohms. Not only do our work surfaces provide a good path to ground, the work surface itself also possesses good chemical resistant properties on most common solvents.