SciCron Technologies

FAQ
Information

Do Your Products Have to be Grounded to Work?

1. Because our products are anti-static as well as static dissipative they do not have to be grounded to resist charge generation, i.e., they will resist tribocharging in normal use and application even if they are not grounded. However, if they are grounded they cannot generate a charge, even under force charging conditions. Therefore, for optimum performance, particularly in applications involving very charge sensitive equipment and devices, we recommend that our products be grounded.

2. Grounding our products is very simple. Any single point grounding contact on the surface of our products grounds that entire surface allowing instantaneous dissipation to ground of any induced charge anywhere on or near that surface.

3. Since the edges of our products are not conductive, both front and back surfaces should be grounded. This is easily accomplished by making a connection through the plastic with a lug (bolt) contacting both surfaces with an appropriate contacting medium.

4. The contacting medium can be as simple as a copper washer, which makes direct contact with the surface and with the grounding lug. (Drill a hole through the sheet, push a bolt through the hole, place a copper washer under the head of the bolt on one side and another under the nut on the other side, tighten the nut, attach a ground wire to the bolt. The job is done and both surfaces are grounded.) Other techniques can be used, including adhering a grounding wire to the surface with conductive epoxy, or by contacting the surfaces with a grounded frame, as might be found on a machine cover or an installed glazing panel. The message is that there is no one approved way to do the job. Any technique, which causes any point on the surface to be in permanent contact with a grounded surface or wire, will work.

5. Grounding should be to an appropriately configured common ground point. (This comment will be understood by engineers – all it means is that all connections to ground within a single installation should go to a single ground. For example, in your home, all the ground connections in the wall receptacles – the third-round hole – connect ultimately to a single 10-foot-long copper rod hammered into the ground somewhere near the circuit breaker panel.)

Note: In Europe the term is “earthing”, not grounding.