High Static Applications & Safety

HIGH STATIC APPLICATIONS

In many applications, Tigerflex™ hoses with grounding wires (such as our WE, 2001 or 2020 series) or charge reducing additives (such as our WBS, UF1 or UF2 series) are sufficient to dissipate static. However, applications involving fine particles transferred at very high rates of speed have increased potential to generate static. Tigerflex™ Voltbuster™ hoses are designed for these very high static generating applications.

Static Generating Applications*	Food Grade and Non Food Grade Applications	Non Food Grade Applications Only
Very High	VOLT, VLT-SD	TR1
High	WE, 2001, 2020, GTFE & PF	UV3, UVPE
Medium	WBS	AMPH, UBK, UF1, UF2, UFC, UV2

**This chart is intended only as a guideline for selecting the proper Tigerflex™ hose series. Actual results are application-dependent. Additional factors influencing static generation include, but are not limited to, the composition of the transferred materials, rate of material transfer, relative humidity, length and size of hose, and number and degree of hose bends. It is the purchaser's responsibility to ensure hose suitability prior to installation.*

GROUNDING OF EQUIPMENT

Tigerflex™ hoses with grounding wires are designed to dissipate static electricity when the embedded grounding wire is physically extracted and securely connected to ground, through the fitting or by other means. Trucks, railcars and other equipment connected to the hose must first be grounded in order for the hose to function properly.

Hose assemblies should be tested regularly to ensure proper bond continuity of grounding wire to metal coupling.

ENGINEERED INNOVATION FOR PEACE OF MIND

STATIC SAFETY

Superior Static Protection! A properly grounded Voltbuster™ hose will not retain an electrostatic charge sufficient to create a propagating brush discharge. Hose material, using the embedded grounding wire, shows a charge decay time constant of < 1 second, based on independent lab testing.

BACK SAFETY

Tigerflex™ Voltbuster™ hoses are lightweight and flexible for worker safety. According to the US Department of Labor, sprains, strains and tear injuries account for approximately 40 percent of total injury and illness cases requiring days away from work.[1] These types of injuries are commonly the result of overexertion of the back or shoulders. Cumbersome rubber and metal hoses can pose an increased risk of these types of injuries due to their heavier weight.

FOOD SAFETY

Tigerflex™ Voltbuster™ hoses are specially designed to ensure the purity of the transferred materials. The hoses' durable stainless steel grounding wire is encapsulated in the rigid plastic helix on the exterior of the hose, safely eliminating the risk of metal contaminating the transferred materials. However, traditional plastic and food grade rubber hoses typically place their grounding wires in the body of the hose. Over time, the transfer of powders, grains or other abrasive materials can wear away the interior of the hose tube, and may ultimately reach the metal wire, causing portions to separate from the hose and contaminate the transferred materials!

[1] U.S. Department of Labor, Bureau of Labor Statistics, Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, 2009 (November 9, 2010)