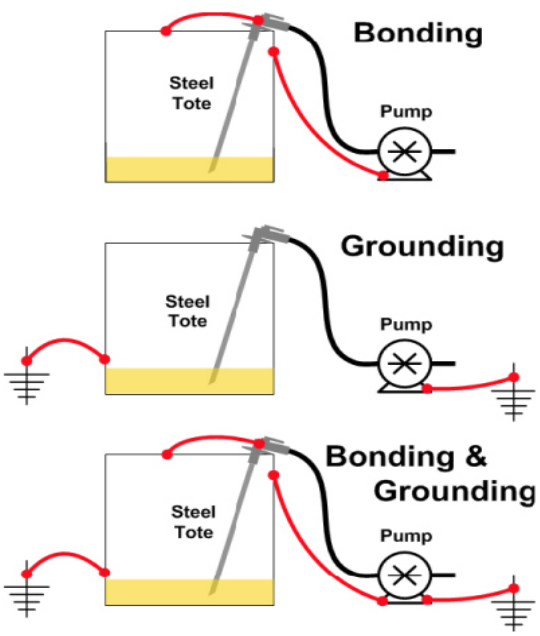
Static discharges are frequent ignition sources



Did you know?

- Static can ignite vapor-air mixtures inside tanks.
- Flow of liquids, gases and solids, through pipes and ducts can generate static electricity.
- Generally, static has to accumulate on an ungrounded conductor (usually metal) – like the level gauge or the steel weight.
- There are several ways to reduce static:
  1. Ground and bond all equipment handling flammable or combustible liquids.
  2. Preventing free-fall of flammable liquids into vessels.
  3. Using conductive materials for all parts of the system.
- Synthetic materials, such as nylon, can promote generation of static; these materials may be used for flexible intermediate bulk containers (FIBCs) or filter media.
- Most fire-retardant clothing (FRC) has low static generating properties.

What Can You Do?

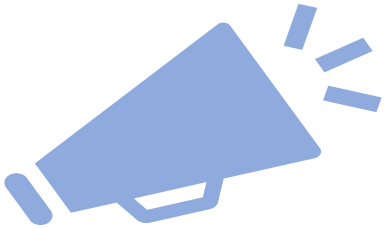
Pouring flammable liquids can generate static electricity. The development of static electricity is related to the humidity levels in the area. Cold, dry atmospheres are more likely to facilitate static electricity. Bonding or using ground straps for metallic or non-metallic containers can prevent static generation. Whenever possible use plastic or metal containers or safety cans.Minimize the production of vapors and the associated risk of ignition by flashback. Vapors from flammable liquids are denser than air and tend to sink to the floor level where they can spread over a large area.

The tricky part:

Static electricity is a stationary electric charge that's created when there is an imbalance between positive and negative charges within or on the surface of the material. The unpredictable nature of electrostatic energy, and particularly the effect of environmental factors, is why operational experience may be of limited value when dealing with static electricity. An inherently dangerous process may run for many years without incident because one condition was missing at any given time. But then circumstances change. Perhaps the air is unusually dry. Or the object acquires an even greater than usual charge. And the fire or explosion no one expected occurs


Flexsorb loading

Generating static is easy.
Controlling static takes extra diligence.



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