

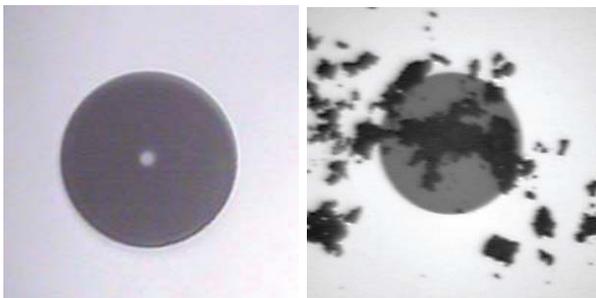
Get Rid of the Static to Improve Fiber Network Performance

Our thanks to MicroCare for allowing us to reprint the following article.

Fast, consistent and reliable cleaning is essential for a modern fiber optic network to perform up to spec. A huge proportion of network failures — perhaps as many as 80% — are due to contamination on connectors, so cleaning is critical.

Getting Rid of the Static

One source of contamination is static on an end-face. Wiping an end-face during cleaning with a dry wipe imparts an electrostatic charge to the end-face, turning it into a microscopic magnet. This end-face will attract dust from the air with surprising rapidity -- literally, in seconds.



Tests have shown that “wet-dry” cleaning is the optimal answer because it eliminates the static. In a 2007 NFOEC paper “Accumulation of Particles Near the Core During Repetitive Fiber Connector Matings and Dematings” the authors stated that “the [static] effect could be reduced by application of ionized air or by a cleaning fluid instead of a dry cleaning process, both methods neutralizing the electrostatic charge at the connector end face.”

The Sticklers™ team agrees with the iNEMI findings and suggests that the “Best Practice” should always feature wet/dry cleaning. One of the largest telcos in the US also agrees, and has standardized on wet/dry cleaning for their fiber installation and maintenance procedures.

Dissipative Fluids

Selecting the optimal dissipative fluid is important, however. Alcohol will not perform effectively because it lacks the proper chemical characteristics (hygroscopic,

density, viscosity, drying time, etc.) as well as the proper packaging, and often is contaminated before the cleaning even begins.

To implement wet/dry cleaning, the Sticklers™ Fiber Cleaning Fluid can be used with any of the Sticklers™ CleanWipes™ products for cleaning jumpers, or CleanStixx™ swabs for cleaning inside fiber optic ports.



As shown in the photos, above, one small spot on the wipe should be dampened with the fast-drying fluid. Just flip open the dispenser as shown and press down to dampen the wipe. Then place the end-face on the damp spot and drag it across the wipe to a dry area. After lifting the connector from the wipe, the connector will be dry and static-free.

If a cleaning box or a cartridge system is used, dampen the wipe with a squirt of the Cleaning Fluid, and drag the connector from the wet portion to the dry portion. When cleaning ports, swabs can be dampened with the same fast-drying Cleaning Fluid. If a mechanical port cleaning device is used, dampen the tip of the device and clean twice. The first activation of the device will be a wet wipe of the connector end-face and second activation will

