Clean + Inspect ■ Before You Connect



With fiber optics, the tolerance to dirt is near zero.

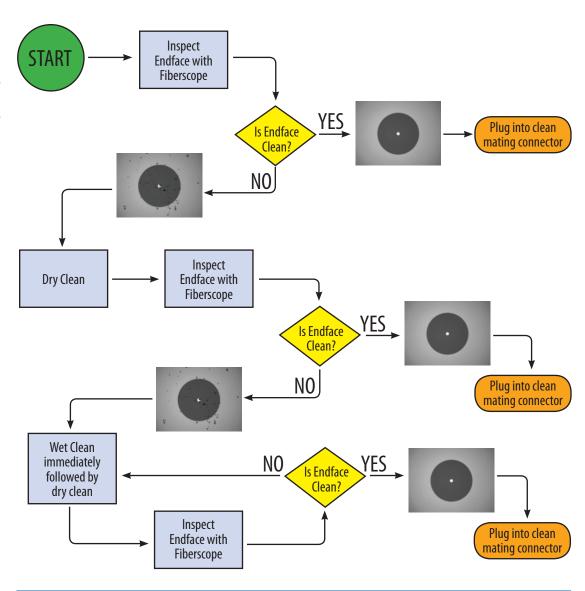
Airborne particles are about the size of the core of SM fiber and are usually silica based - they may scratch PC connectors if not removed! Patch panels have mating adapters that can become contaminated if left open to the air or scrape off foreign particles under repeated usage. Test equipment has fiber-bulkhead outputs that need periodic cleaning, since they may have hundreds of insertions of test cables in short time frames.

We recommend you always keep dust caps on connectors, bulkhead splices, patch panels or anything else that is going to have a connection made with it. Not only will it prevent additional dust buildup, but it will prevent contamination from being touched or damaged from dropping.

Always clean connectors before mating, whether for testing or making network connections.

When testing, we recommend that connectors on both the reference and tested cables be cleaned before every test, as every time the connector is exposed to air, it can accumulate dust. Typical airborne dust is almost the size of the SM fiber core, so cleaning every time is even more important than MM. A secondary effect is that if the connectors are dirty, it can scratch the end finish (most dirt is silica (sand) based) and cause higher reflectance if not loss.





Types of Contamination

Fiber end faces should be free of any contamination or defects, as shown to the right:

Common types of contamination and defects include the following:





Dirt



Pits & Chips

