

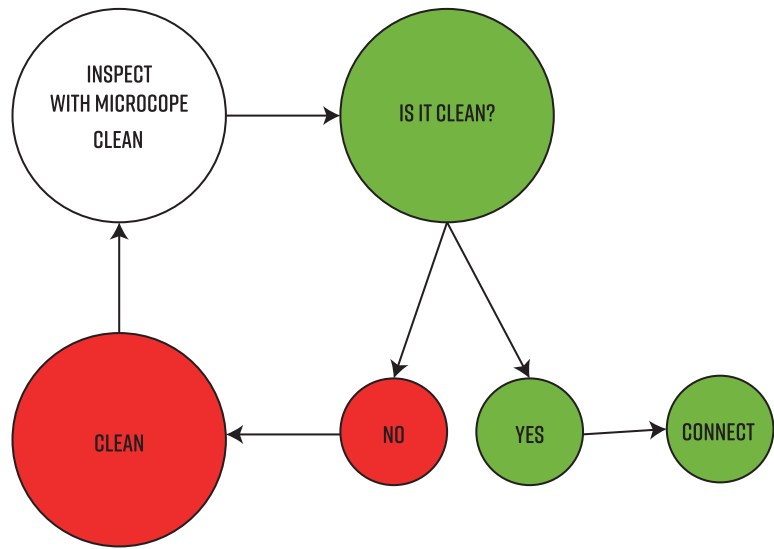
# INSPECT BEFORE YOU CONNECT

Product sheet  
Inspect before you connect

V1.0, 2020-07-27

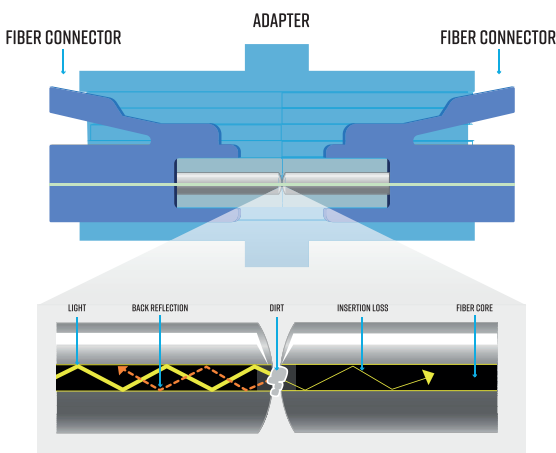
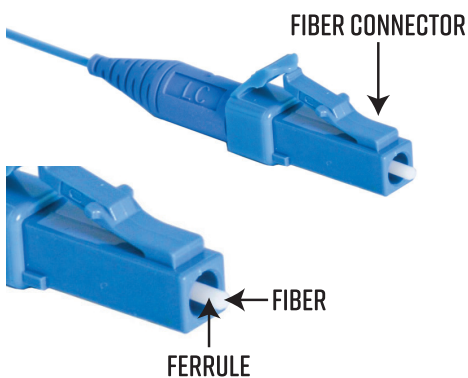
Micropol Fiberoptic AB  
Älvdalsvägen 4  
313 50 Åled

Phone: +46 (0)35 17 85 39  
Mail: info@micropol.com



## CONTAMINATION — The #1 reason for fiber networks failures

- Dirty connectors cause 80% of field test failures
- Microscopic debris significantly degrades signal performance and can cause permanent damage to connectors and the equipment they are plugged into
- Mating dirty connectors can break apart debris, spreading it across the fiber endface
- Typical debris on fiber connector endface can be 2-20µm and can only be seen with a fiber optic probe microscope
- Following the Inspect before you connect process ensures fiber end faces are clean prior to mating connectors



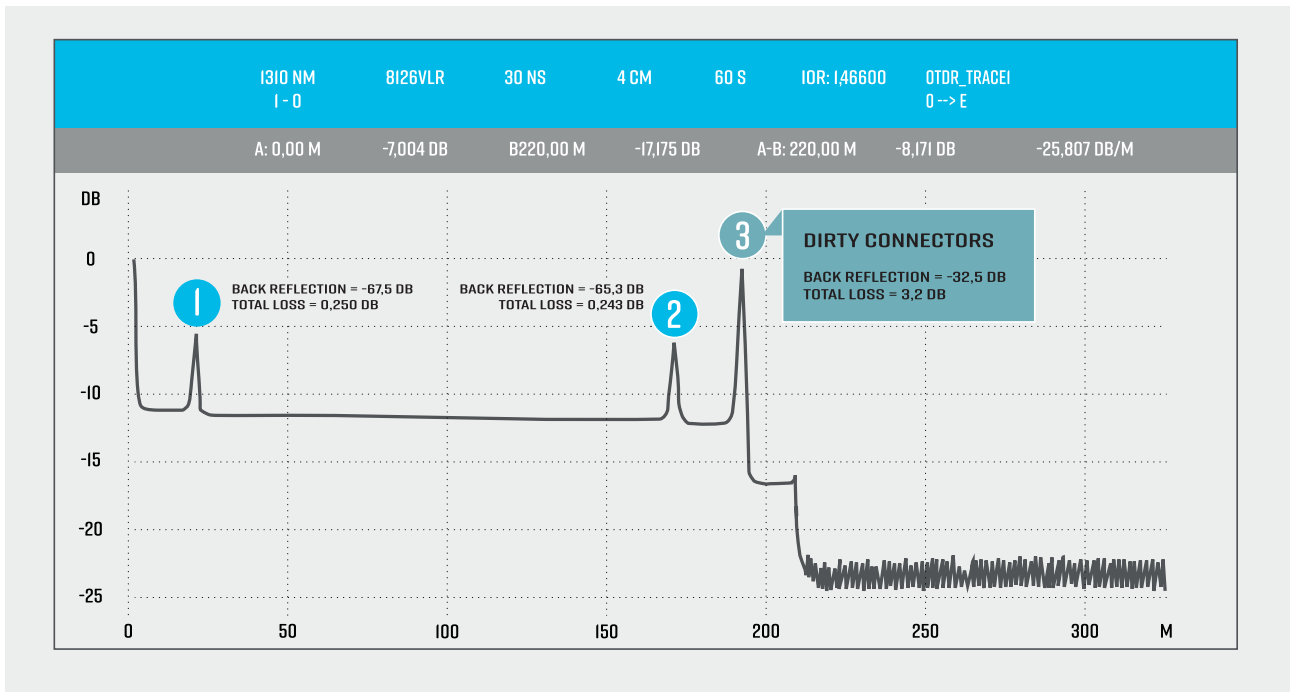
Inspecting **BOTH** sides of the fiber connection is the **ONLY WAY** to ensure that will be free of contamination and defects

Patch cords are easy to access and view compared to the fiber inside the bulkhead, which is frequently overlooked. The bulkhead side may only be half of the connection, but it is far more likely to be dirty.

A single particle mated into the core of a fiber can cause significant back reflection, insertion loss and even equipment damage.

Inspecting and cleaning connectors, test ports and reference cords before testing network connectors prevents cross-contamination.

# OTDR TRACE SHOWING THE EFFECT OF FIBER CONTAMINATION



**1 CLEAN CONNECTORS**

BACK REFLECTION = -67,5 DB  
TOTAL LOSS = 0,250 DB

**2 CLEAN CONNECTORS**

BACK REFLECTION = -65,3 DB  
TOTAL LOSS = 0,243 DB

**3 DIRTY CONNECTORS**

BACK REFLECTION = -32,5 DB  
TOTAL LOSS = 3,2 DB

This OTDR trace shows how a dirty fiber connection affects overall signal performance. Inspect Before You Connect! Proactively inspecting each fiber connection significantly reduces network downtime and troubleshooting.

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