Technical Reports:
Optical Fiber Electroless Metallization

POINTek, Inc.
1. Application of Optical Fiber Metallization

◆ Requirements
  – Strong Metal-to-Fiber Adhesion and Good Fiber Geometrical Accuracy
    - Ni/Au Metallization
    - Low Cost Electroless Plating Process

◆ Applications
  – High Environmentally Reliable Interconnection for Optical Devices
    - Opto-Electronic Devices for Hermetic Pigtail
    - Long-Haul Array Optical Passive Devices for Outdoor Application
2. Reliability

- Optical Fiber Electroless Metallization
  - Ni/Au Electroless Plating

  Conventional Process
  ![Crack](image1)

  POINTek’s Process
  ![No Crack](image2)

- High Toughness: 12 Hrs Sustenance of 1.5Kg Load for a Ribbon and 0.45Kg for a Fiber

  ![1.5Kg Metallized Fiber Ribbon](image3)