

Course Name: Basic OSP Fiber Optic Splicing

Course Overview:

An overview of basic fiber optics, fiber optic cable preparation, outdoor fiber optic splicing and OSP closure preparation. Includes extensive hands-on exposure to loose tube cable, fiber splicing equipment, and splice closures.

Course Length: 5 Hours

Who should attend?

- Field Service Technicians
- Field Engineers
- Managers/ Field Supervisors
- Design Engineers
- Electricians
- Managers or Supervisors

Prerequisites: None. Entry level

Course Fees:

- 5 Hour course at your location \$3250 for up to 10 attendees

Course Content:

Brief Introduction to Fiber Optics

- Definition of fiber optics
- Applications and advantages of fiber optic media

Fiber Optic Cable Design

- Design objectives
- Loose tube cable
 - Basic loose tube construction
 - Loose tube cable design examples
 - Loose tube mechanical features
 - Loose tube advantages, disadvantages, and applications

Fiber Splicing

- Applications for splicing
- Selection of splice hardware
- Selection of splice solution:
 - Mechanical
 - Fusion
- Types of fusion splicers
- Types of fiber cleavers
- Fiber preparation and cleaving:

- V-groove alignment
- Core alignment
- Mass fusion

Introduction to Types of Fiber Closures

- Sealed (or Dome)
- Aerial
- Pedestal

Practical Exercises

- Demonstrate loose tube cable sheath removal and fiber access
- With instructor, assemble a typical sealed fiber optic splice point including:
 - Cable sheath removal
 - Splice closure assembly
 - Sealing and securing cables to closure
 - Routing buffer tubes
 - Accessing fiber and loading splice trays
 - Performing fiber splices with core alignment splicers
 - Final assembly and sealing of closure
- Demonstrate Proper Splicing Techniques:
 - Fiber preparation and precision cleaving
 - V-groove and core alignment fusion splicing
 - Tight buffer splicing
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Wrap-up and Review