

How to remove the insulation from fiber optic cables



Overview

Care of Optical Fibers During Splice Preparation Splicing and termination procedures require the removal of a section of the optical fiber's protective coat.

Key Takeaways

Use precision fiber strippers and follow a layer-by-layer approach to safely remove insulation without damaging the glass fiber.

Step-by-

Step Process 1. Identify Cable Layers Fiber optic cables often have multiple layers: the outer jacket, aramid yarn (strength fibers), buffer coatings, and the glass fiber itself. Each layer must be stripped individually to avoid damaging the fiber.

2.

Use the Right Tools

Mechanical Fiber Strippers: Handheld tools with precision slots for different coating diameters (125 μm , 250 μm , or 900 μm) allow controlled removal of jackets and buffers.

Thermo-

Mechanical Strippers: Apply heat to soften the coating before pulling it off, reducing the risk of nicks.

Chemical or Non-

Contact Methods: Solvents, hot air, or laser ablation can be used for specialty fibers or delicate coatings. Cutting Scissors or Ripcords: For outdoor armored cables, use cable-cutting scissors or ripcords to remove armor and jackets safely. 3.

Stripping Procedure

Outer Jacket: Mark the length to strip, cut carefully, and remove using a stripper or ripcord. For armored cables, cut the armor first and pull the ripcord to remove the jacket. Aramid Yarn: Cut or pull away the strength fibers without touching the glass fiber.

Buffer Coating: Use a precision fiber stripper to remove the buffer layer. Avoid nicking the fiber; even a small scratch can lead to cracks under stress. Glass Fiber: Once exposed, handle carefully.

Perform a 45-degree bend test to check for hidden damage before connectorization.

4. Cleaning After stripping, clean the fiber with a lint-free wipe and, if necessary, a gel remover to eliminate adhesives or gel inside the buffer tubes.

5.

Maintenance and Safety

Always use sharp, well-maintained tools; dull blades can stress or break fibers. Wear safety glasses to protect against glass shards. Dispose of stripped coatings and aramid yarn properly to avoid contamination or injury.

6.

Tips for Outdoor Cables

Remove gel or adhesive carefully to prevent fiber contamination. Heat loose tubes gently to straighten them if needed, avoiding excessive bending that can kink the fiber. By following these steps and using the appropriate tools, you can safely remove insulation from fiber optic cables while maintaining the integrity of the glass fiber for splicing or connectorization.

Article Content

Care of Optical Fibers During Splice Preparation

Splicing and termination procedures require the removal of a section of the optical fiber's protective coating. It is crucial that the coating removal be accomplished carefully to minimize the impact on the

Fiber and Cable Stripper – Types, Uses & Guide

Learn how to use fiber strippers, cable cutting scissors, and armored cable slitters. Discover their applications in fiber splicing, cable prep, and FTTH.

Fiber Strippers – tools, mechanical, thermal, chemical, plasma,

A fiber stripper is a precision tool used to remove the protective polymer fiber coatings from an optical fiber. This process exposes the bare glass without scratching or nicking it, which is required for tasks

Stripping Techniques For Your Fiber Optic Cable Assembly Process ...

Good fiber optic stripping techniques in your cable assembly process are crucial. See best practices for how to strip fiber optic cable buffers & jackets.

Fiber-Optic Strippers | McMaster-Carr

Choose from our selection of fiber-optic strippers in a wide range of styles and sizes. Same and Next Day Delivery.

How to Strip and Prepare Fibre Optic Cable for Termination: A ...

In this informative guide, we'll walk you through the step-by-step process of stripping and preparing fibre optic cable for termination, covering techniques, tools, and best practices to help you

POF Basics: Termination

FiberFin uses a proprietary process for finishing the POF used in all of its products. This is done using hand techniques described below, as well as automatic machines built and designed in-house. We

WRXTS6 Thermal Stripper

Optix America's WRXTS6 Thermal Stripper efficiently removes insulation from fiber optic cables. Fast heating, rechargeable & ergonomic design.

Fiber Optic Wire and Cable Strippers | McMaster-Carr

Choose from our selection of fiber optic wire and cable strippers, including electrical wire strippers, electrical cable strippers, and more. Same and Next Day Delivery.

trueCABLE's Fiber Optic Cable Strippers: The Essential Tool for Fiber

Precise fiber optic stripping matters. See trueCABLE's 3-hole Fiber Optic Stripper features, safe use tips, and step-by-step guide for flawless terminations.

Cable Management Guide: Organize Office Cables 2026

Master cable management with our step-by-step guide. Organize desk cables, hide wire clutter, and create a clean office setup on any budget.

How to Install Ethernet Cable: Step-by-Step Guide (2026)

Learn how to install ethernet cable with our easy-to-follow guide. Get step-by-step DIY instructions to set up a reliable wired network for your home or

How to Repair Fiber Optic Cable: A Comprehensive Guide

This blog shares the common causes of fiber optic issues and provides detailed solutions on how to repair fiber optic cable.

How Deep is Fiber Optic Cable Buried: Installation Guide

Learn how deep fiber optic cable is buried, key factors affecting buried fiber optic cable depth, and best practice for underground optical fiber installation.

The FOA Reference For Fiber Optics

All fiber optic applications are not the same. At the FOA, we're mainly concerned with communications fiber optics - telco, CATV, LAN, industrial, etc., but fiber optics are also used in medical or

Indoor Fiber Optic Cable Types: Top 12 List

This guide explores common indoor cable varieties and their distinct attributes when wiring rooms or structures for high-speed fiber optic links.

Ervin Cable Construction LLC hiring Travelling Splicer II Fiber in ...

At Ervin Cable Construction, LLC, as a Fiber Splicer II, you'll complete the process of fusing optical fibers, to maintain our telecommunication networks. Your splicing work is essential for ...

Electrical Cable

What is an Electrical Cable? The electrical cables are the medium by which they distribute and transmit electrical power at different destinations. These cables are capable of transmitting high

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://fdsoluciones.es>

Technical inquiry: <https://fdsoluciones.es/project-enquiry.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

