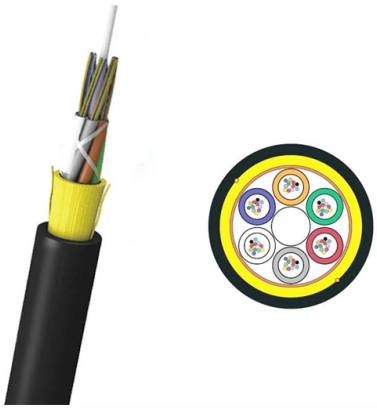
Stripping Techniques for Small Optical Cables



Overview

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

Key Takeaways

Effective stripping of small optical cables requires precision tools, careful layer-by-layer removal, and proper handling to avoid fiber damage.

Key Principles

Stripping optical fibers involves removing protective coatings and jackets without nicking or scratching the glass core, which can lead to cracks or connection failures under stress or thermal cycling. Small optical cables, such as single-fiber cables with diameters of 2–3 mm, require progressive stripping: first the outer jacket, then aramid yarn, and finally the buffer coating. Each layer often needs a different tool or setting to ensure the underlying fiber remains intact.

Tools and Methods

Mechanical Strippers

Precision hand tools with multiple slots for different coating diameters (e.g., 250 µm buffer, 900 µm tight buffer, 2–3 mm jacket) are commonly used. Adjustable strippers allow fine-tuning of the blade gap to prevent fiber breakage. Small Allen wrenches can adjust the slot by microns for optimal stripping.

Examples include the Greenlee Pro Grip 5-in-1 and Clauss CFS series.

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Thermal Strippers

Use controlled heat to soften polymer coatings for easy removal without mechanical stress. Suitable for fibers with non-standard diameters or high-temperature coatings. Devices like the Vytran FFS-2000 or FiberStrip 7030 are commonly used.

Chemical Stripping

Involves solvents or acids (e.g., sulfuric acid or paint strippers) to dissolve coatings. Requires careful handling and compliance with safety regulations, as some chemicals are hazardous. Coating softens in about a minute and can be wiped away with lens tissue.

Best PracticesLayer-by-layer stripping: Always remove the outer jacket first, then aramid yarn, and finally the buffer coating. Limit strip length: Typically 30–50 mm at a time to avoid fiber stress. Maintain tools: Keep blades sharp and clean to ensure smooth cuts.

Excess fiber: Leave extra fiber at cable ends to allow for mistakes during stripping and connectorization. Cleaning: After stripping, remove any residue using appropriate solvents or lens tissue to ensure a clean fiber end. Specialty ConsiderationsSmall-diameter fibers (e.g., 200 µm coatings) require strippers with smaller holes or precise automated systems.

Loose tube or armored cables may need specialized slitting tools for longitudinal or circumferential cuts. Window stripping: For applications like fiber Bragg gratings, a short section of coating may be removed mid-fiber rather than at the end. By following these techniques and using the appropriate tools, technicians can safely strip small optical cables, ensuring high-quality splicing and connectorization while minimizing the risk of fiber damage.

Article Content

Stripping Techniques For Your Fiber Optic Cable

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 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,

Hard-clad silica fibers (HCS fibers) need special stripping inserts and diameters. Non-silica fibers, e.g. some fluoride fibers and chalcogenide fibers, can be rather

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

The Ultimate Optical Fiber Stripper Guide

Explore Optical Fiber Stripper types and uses. Learn pro techniques for precise stripping to ensure reliable network performance with top tools.

The “golden rule” in stripping

Note the cable diameter and jacket thickness for each cable – Stripping cables and fibers is a delicate process. Carefully set your hand tool or machine tool to the right cable diameter and

Care of Optical Fibers During Splice Preparation

The methods, techniques, and agents used during fiber cleaning and coating removal must be carefully chosen and controlled to ensure that fiber reliability is retained.

Tutorial Passive Fiber Optics, Part 5: Fiber Ends

There are fiber axicon lenses in which, near the fiber end, the fiber diameter is rapidly reduced to a very small value. This can be achieved either by polishing the end into a pencil-like shape or by using a

Fiber Cable Stripping Tools: A Comprehensive Guide

Fiber cable stripping tools are essential for anyone working with fiber optics. Understanding the different types of tools, their applications, and best practices is crucial for ensuring successful installations and

Good stripping techniques for your fiber optic cable assembly process

If the fiber cracks in a cable assembly, the connection is weakened or lost. Your cable assembly house could face repairing or replacing connectors in the field, which could be exceedingly...

Fiber and Cable Stripper – Types, Uses & Guide

Sharp-edged slots in the jaws are sized to strip either the jacket, the primary coating, or the secondary coating. 2. CFS-2 Fiber Cable Cutting Scissors

PDF document

Read this PDF document online, download the original file, and browse related details on device.report. Additional coding instructions can be found in the Article File chapter of

Good stripping techniques for your fiber optic cable ...

Without question, good stripping techniques in your fiber optic cable assembly process are imperative. What happens if you damage the fiber during this production step?

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Tips & Techniques for Using Stripping Tools on Fiber Optic Cable

If the blade of the strip tool contacts the bare fiber, it''s easy to scratch the fiber OD, reducing product reliability. Click for more tips & techniques.

Laser stripping of optical fibers opens up new applications

Conventional techniques Optical fibers can be stripped by mechanical, chemical, or thermo-mechanical methods. Each method has its own advantages but they also have drawbacks,

Fiber Optic Tools

Jonard Tools is the global leader in fiber optic tools. We manufacture over 125 unique fiber optic tools and offers a range of kits for the fiber optics industry.

How to Terminate Fiber Optic Cable: Top 5 Essential Tips

Learn how to terminate fiber optic cable with connectors and splicing. Discover tools, techniques, and tips for precise termination.

The FOA Reference For Fiber Optics -Mechanical Splices

Mechanical Splicing Process Cable and fiber preparation is practically the same as for fusion splicing. Prepare the cables to be spliced (VHO on cable preparation) Strip jacket, removing an adequate

How To Strip Electrical Wire

In this guide, we''ll show you how to strip various types of electrical wire, introduce you to the necessary tools, and provide expert tips to help you master this fundamental electrical skill. What

Related Video Reference

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

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Contact Us

Continue your research online:

Website: https://ensaa.es
Technical inquiry: https://ensaa.es/contact.html

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

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved