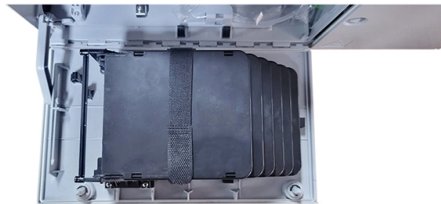


# How to perform heat splicing on fiber optic cables



## Article Overview

Fusion splicing joins two fiber optic cables permanently using heat, creating a low-loss, continuous optical path.

### Overview

Fusion splicing is a method of permanently joining two optical fibers by melting their ends together with an electric arc. This process ensures minimal signal loss and back reflection, making it ideal for long-haul networks, data centers, and mission-critical applications. Unlike mechanical splicing, which uses alignment and gel, fusion splicing produces a stronger, more reliable joint with typical loss around 0.1 dB.

### Required Tools and Materials

- Fusion splicer: A precision machine that aligns fiber cores and generates the electric arc.
- Fiber cleaver: Ensures a flat, perpendicular end face for optimal fusion.
- Cable stripper: To remove the outer jacket and buffer coating.
- Isopropyl alcohol (IPA) and lint-free wipes: For cleaning the fiber.
- Splice protection sleeves: To protect the fused joint.
- Microscope or inspection scope: To verify cleave quality and fiber alignment.

### Step-by-Step Procedure

- Prepare the Fiber...

## Article Content

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Splicing in optical fiber is the joining two fiber optic cables together. There are 2 methods of cable splicing, mechanical

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## What is Fiber Optic Cable Splicing?

Fusion splicing can withstand a wide range of temperatures. Dust and other pollutants are kept away from the optical

## Contact Us

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