

The role of steel tape in optical cables



Overview

In cable structures, plastic coated steel tape is typically applied longitudinally to work in conjunction with the outer sheath, forming a three-dimensional protective barrier that effectively enhances the cable's mechanical strength and durability in complex environments. As a key structural component in both optical and electrical cable designs, it. Common forms include steel tape, steel/plastic composite tape, and steel wire, making them indispensable cable materials in power cables, communication cables, and optical cable structures. Steel tape for cables typically uses cold-rolled low-carbon steel strip to enhance the cable's compressive. Corrugated steel tape armor protects the inside fibers from the possible attacks by Typically used steel tapes by fiber optic cable manufacturers are Stainless Steel tape (SS tape) and Electrolytically Chrome Coated Steel tape (ECCS tape). To protect the optical fibres from water ingress, the tube is filled with a thix tropic gel, and is enclosed in a thermoplastic sheath. The cables have embedded strength. Steel Tapes are unique materials for the Optical Fiber and special cable applications which need specific properties on armouring function to prevent external forces and anti-corrosion function for the longest life underground conditions.



Article Content

Feb 19, 2026

D-Series Distribution

DX-Series Distribution Cable series with corrugated steel tape (CST) armoring. Ideal for installation where direct burial or rodent

Oct 24, 2025

B-Series Breakout

Inner cable is a fully functional B-Series Breakout riser-rated cable High-performance components and construction Most rugged and

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ARMOR-LITE Unitube Single Jacket Steel Tape Armored Fibre

Features & Benefits Available up to 24 fibre count in either single-mode or multi-mode optical fibres Steel tape adds to crush

Apr 13, 2026

Microsoft Word

Scope: The scope of this procedure is to describe how to properly install a cable pulling grip on an Optical Cable Corporation

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Steel-Tape Armored Unitube Cables

The Steel-Tape Armored Unitube is suitable for direct burial applications and other campus backbone environments where the cable

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InternetCableData-corrugated steel tape armoured cable en

Prysmian Group Direct buried cables Draka installation Optical cable for direct buried Cable Design Central Strength Member (CSM).

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Steel Tapes (Steel Based Tapes, ECCS Tapes)

Steel Tapes are unique materials for the Optical Fiber and special cable applications which need specific properties on armouring

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Steel Tape Armored fiber optic cable China

Besides resistance to compression and biting, the steel tape layer also enhances the overall impact and shear resistance of the

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LAZ Optical Steel Tape Armored Unitube Cables

The LAZ Steel Tape Armored Unitube is suitable for direct burial applications and other campus backbone environments where the

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Loose Tube Steel Tape Armoured Fibre Optic Cable

CABLE STANDARDS 24 fibre uni-tube corrugated steel tape armoured cable for indoor or outdoor duct installation or direct burial

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What is Steel Tape Armoured Cable Used For?

Conclusion Steel tape armoured cables are an essential solution for industries and applications that

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SWA Fiber Optic Cable: Steel Wire Armoured Fiber Cable

Discover SWA Fiber Optic Cable features, benefits, and applications. ETK is a global supplier of steel wire armoured

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Central Uni-Tube Steel Tape Light Armored Fiber Optic Cable

Technical Characteristics Description It is an outdoor application fiber optic cable with central uni-tube and light-armored with double

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Double Galvanized Steel Tape Armored Optical Fiber Cable

Double Galvanized Steel Tape Armored Optical Fiber Cable (Cables for industry) are suitable for underground use in industries. The

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Fiber Optical Cable Direct Buried Steel Tape Armour

Cables performance: ESCAB GYTY133 - fiber cable is stranded loose tube structure with steel tape double

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Application And Advantages Of High-Performance Plastic Coated Steel ...

With stable performance, reliable protection, and excellent process adaptability, our plastic coated steel tape has been

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Basic Components of a Fiber Optic Cable - trueCABLE

This article examines the key components that make up a fiber optic cable including the core, cladding, coating,

Dec 20, 2025

Aksh OptiFibre Ltd. :: Optical Fibre Cables::Smartcore Steel Armoured ...

Direct Burial Cable is designed to be placed directly under the ground either by trenching or ploughing. The metallic cable is

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Application And Advantages Of High-Performance Plastic Coated

As a key structural component in both optical and electrical cable designs, it is made by coating one or both sides of

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Steel Tape Armored fiber optic cable China

Steel tape armoring involves wrapping or wrapping one or two layers of chrome-plated steel or stainless steel tape inside the sheath

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What's in a Cable?

Steel tape armour is also popular in some countries particularly on some fibre optic cables. This form of armour uses

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Dual Sheath Multi Loose Steel Tape Armoured (PSP)

Dual Sheath Multi Loose Steel Tape Armoured (PSP) 24 to 144 250um fibre dry core OM1, OM2, OM3, OM4 multimode or OS1 /OS2

Jun 20, 2026

What Is Steel Tape Armored Fiber Optic Cable?

Unlike standard outdoor cables that rely primarily on jacket thickness and water-blocking materials, STA

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Application Notes

Armored Versus Non-armored Cable Armoring increases the strength and robustness of a cable relative to its surroundings. The

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Yarn Or Tape: Which Proves Best for Optical Fiber Cable

In the optical cable structure, water-blocking glass yarn, non-water-blocking glass yarn and water-blocking tape are

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Applications and Technical Requirements of Steel in Cables: A Key ...

Steel-based cable materials such as steel tape, steel/plastic composite tape, and steel wire play vital roles in the mechanical

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Fiber-optic cable

Fiber-optic cable A TOSLINK optical fiber cable with a clear jacket. These cables are used mainly for digital audio connections

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Steel Plastic Composite Tape for Optical Cables Market

The demand for steel plastic composite tape (SPCT) in optical cable manufacturing is shaped by distinct factors in

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Celesta Steel Tape Armored

The optical fibres are arranged into ribbon units by placing the fibres in a flat array of color-coded fibres partially bonded together by

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The Science Behind Corrugated Steel Tape Armored Fiber Optic Cable ...

Types of Corrugated Steel Tape Armored Fiber Optic Cables Corrugated steel tape armored fiber optic cables are

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Master Your Fibre Optic Installation: Step-by-Step Best Practices

This comprehensive guide delves into the intricacies of fiber optic installation, exploring topics ranging from cable

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Galvanized Steel Tape Armored Fiber Optic Cables

Galvanized Steel Tape Armored Fiber Optic Cables General Information: Direct buried and/or duct type installation with highly

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Corrugated Steel Tape Armoring Process for Loose Tube Cables

In most of the cases where extra mechanical strength is required, a corrugated steel tape armoring can solve the

Sep 05, 2025

ARMOR-LITE Unitube Single Jacket Steel Tape Armored Fibre

Product Details Sterlite Tech™ ARMOR-LITE® Unitube Single Jacket Steel Tape Armored Cables is a central tube cable using

Contact Us

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