

Principle of Automatic Optical Cable Reel Cutting



AI Overview

Automatic optical cable reel cutting machines measure, cut, and wind fiber optic cables efficiently, offering high precision, speed, and full automation for production lines.

Overview Automatic optical cable reel cutting machines are specialized equipment used in fiber optic cable manufacturing to cut cables to precise lengths and wind them into reels or coils for further processing or shipment. These machines are essential in telecommunications, data networking, and fiber optic production, ensuring clean cuts, minimal signal loss, and consistent quality.

Key Features

- Full Automation:** Machines can automatically measure, cut, and wind cables without manual intervention, reducing labor and human error.
- High Precision:** Advanced metering systems and compensation technology ensure accurate length measurement, even for delicate optical fibers.
- Flexible Operation:** Length and speed parameters are adjustable, allowing customization for different cable diameters and production requirements.
- User-Friendly Interface:** Touchscreen controls with multilingual options simplify operation and maintenance.
- Material Compatibility:** Machines can handle various cable types, including fiber optic cables with protective sheaths, Kevlar reinforcement, or steel wire jackets.

Types of Cutting Mechanisms

- Rotary Blade Cutting:** Uses precision circular blades for clean, burr-free cuts across a range of cable diameters.
- Heated Blade Cutting:** Simultaneously cuts and seals cable ends to prevent fraying.
- Ultrasonic Cutting:** Employs high-frequency vibrations for cutting tough or delicate materials without damaging internal fibers.
- Edge Trimming Machines:** Focus on removing excess insulation or sheaths along cable edges.

Integrated Systems Many machines include cable pay-off units, cutting and length metering units, and take-up units, allowing for continuous operation with...

Article Content

Design and analysis of an automatic cable reel for multiple cable ...

Compared with the ordinarily manual cable reels or the slip rings, the automatic cable reel developed in this paper is innovative to realize the automation of the separation and joint of the ...

Optical Fiber Winder Cable Take up Machine with PLC

The Optical Fiber Winder Cable Take up Machine is a device that uses a servo control system and is driven by a high-precision servo motor to neatly wind the

Cable Cutting System-Novo Precision

Overview At Novo Precision we are taking cable cutting to the next level. While most manufacturers who deal with cable are stuck manually measuring and cutting

On brief: Procedures & precautions for cutting and re

The document provides a recommended procedure for cutting and respooling Corning Cable Systems fiber-optic cables. To begin, the brief specifies certain

Cable Auto-Cutting Machine with Automatic Lift Pay-off

The machine consists of three separate units, a cable pay-off units, a cable auto-cutting and cable length metering unit and a cable take-up unit. Suitable for

Full automatic cable winding, hanging and cutting machine

Main Products□ 1. The design of this machine is unique, the operation of the machine is ergonomic, and it is suitable for automatic stripping of 2~4 core ribbon optical fiber. 2. The upper and lower

Automatic Fibre Optic Cable Cutting & Rolling Machine

The Briticom® Automatic Cable Cutting/Rolling Machine is used for producing fibre optic patch cord. This product comes with a flexible length and speed setting, as

Faytek automatic fiber optic cable cutting machine

Automatic fiber optic cable cutting machine Used in fiber optical cable cut, will be around the cylinder covered the cable, according to the quantity and the length of

AUTO REEL CUT-TO-LENGTH SYSTEMS

AUTO REEL CUT-TO-LENGTH SYSTEMS Autoreel Ltd is one of Europe's leading manufacturers of cable handling machinery for reeling, measuring and cutting cable, wire rope, hose and other flexible

Cable armoring machine working principle

After completing the armoring, the optical cable will go through an automatic cutting device to cut the optical cable to the specified length, and then

Fully Automatic Fiber optic cable cutter 450X Price & Datasheet

Fully Automatic Fiber optic cable cutter 450X Automatic cable cutting machine is for cable cutting winding, measuring. The advantage of this machine is : middle suspended, Length and speed setting

Design and development of an automatic cutting tool for optical fibers ...

A new type of automatic cutting tool for obtaining good fiber end-surface has been proposed. In principle, a bare fiber is scored by rotating a broadaxe-shaped blade, while the fiber is supported by

Wire and Cable Components Part II - Takeups and

Operation can be fully automatic with various reel handling options, or semi-automatic, requiring tending only for loading and unloading of reels. These

Cut to Length Systems and Cable Warehouse Equipment

Cut to Length Systems and Cable Warehouse Equipment Redmond Gary Australia is the Australian and New Zealand distributors for Autoreel Ltd and they are one

Optical Cable Inner End Automatic Collection Device and Method

During the processes of optical cable rewinding or construction cable laying, the optical cable inner end on the I-shaped reel is prone to becoming dislodged and flying off due to loosening. This

Automatic FTTH Drop Cable Coiling And Cutting Machine

Used for cutting optical cable (or similar materials), the optical cable wound on the cable barrel is unfolded, according to the set length and quantity, cut into

AUTO REEL CUT-TO-LENGTH SYSTEMS

AUTO REEL CUT-TO-LENGTH AutoReel PLW machines use a patented design concept that replaces the traditional shaft and utilises pintles to support the cable drum making loading very easy, reduces

Automated Cable Handling Systems

Techna's Fully Automated Cable Handling Systems facilitate and ease the process of cable handling by including drum loading, cable de-reeling, measuring, cutting, coil strapping and final ejecting in one

Reeling concepts

Voith offers reeling concepts for all paper grades that fully meet all requirements with regard to winding quality and cost-effectiveness.

Automatic cable cutter

Find your automatic cable cutter easily amongst the 10 products from the leading brands (Schleuniger, iiM, CABLE EQUIPEMENTS, ...) on DirectIndustry, the

AOFC-2001 Automatic Cable Cutting Machine

AOFC-2001 (Align) Automatic FTTH Drop Cable Cutting Machine cut cable Machin
AOFC-2001 (Align) cable cutting machine is improved type machine with multi

Cable Winding Systems: The Ultimate Guide to Efficient

Explore fengyicables for the ultimate guide to cable winding systems. Boost efficiency with expert auto reel solutions!

Cable Reeling Machines: Types, Applications and Benefits

What are Cable Reels or Cable Reeling Machines? Cable reeling machines, or simply "cable reels," are specialized equipment designed to efficiently store, unwind, and rewind electrical or fiber optic

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At present, optical cable reels are often wound manually with film or non-automatic equipment is used to wrap the film and then manually transfer the product to the next process, manually...

Design and analysis of an automatic cable reel for multiple cable ...

This paper describes the mechanical design of the winch unit and connection unit of the cable reel, which can automatically wind cables and join or separate the electrical connectors,...

Cable Towing, Measuring and Cutting Systems

- Optional cutter for plastic pipe and gaskets GTSA-7 Towing System with Automatic Reel Unwinding The GTSA-7 Series towing system can automatically unwind cable from reels that are mounted on

Motorised Reels | Cavotec

Cavotec motorised reels ensure safe, continuous and controlled transfer of power, data and fluids to mobile machinery operating in the world's toughest environments — from ports and steel mills to

Cable Reels: Principles and Applications | IQS Directory

In this chapter, we delve into the fundamentals of cable reels by examining their definition, design, essential features, and the factors to consider when selecting the right cable reels.

Cable Cutting Machine

OFTech touch screen automatic fiber optic cable cutting machine is special equipment used for fiber optic cable length measurement, cutting, counting and

Design and Development of Automatic Drilling Machine for Cable Reel

In view of the current poor processing quality of cable reels and low production efficiency, this paper determines the structure and function of the cable reel automatic drilling machine according to the

Contact Us

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