

Article Overview

Cable tray making machines are automated systems that form, punch, and cut metal coils into ladder, perforated, or solid-bottom cable trays for electrical installations.

Core Machines in Cable Tray Production

- o **Roll Forming Machine** The roll forming machine is the primary equipment in cable tray production. It continuously shapes metal strips into tray profiles such as U-channel, C-channel, or ladder-type configurations. The line typically includes an automatic hydraulic decoiler, leveling unit, servo feeder, hydraulic punch machine, roll forming stations, and a flying or fixed-length shear. Roll forming is ideal for high-volume production and can handle materials like galvanized steel, stainless steel, pre-painted steel, and aluminum with thicknesses from 0.6 mm to 3.0 mm .

- o **CNC Press Brake** After roll forming, secondary bending operations are performed on a CNC press brake. This machine adds flange bends, forms connection tabs, and creates fitting attachments such as elbows, tees, and crosses. CNC control ensures precise back gauge positioning and multiple bends per part, with tonnage requirements typically ranging from 40 to 160 tons depending on material thickness and tray width .

- o **Punching System** Punching machines create knockouts, mounting holes, and ventilation slots in the tray. Modern systems use CNC-controlled punches with customizable dies to achieve precise hole layouts, improving heat dissipation and wiring scalability. Some production lines integrate punching directly into the roll forming process for efficiency .

- o **Shearing and Cutting Units** Shearing machines cut the formed trays to the desired length. Flying shears allow continuous operation without stopping the line, while fixed-length shears are used for batch production. Advanced systems may include rotary lateral shears for high precision .

Production Line Features

- o **Automation:** Fully automated lines integrate decoiling, leveling, roll forming, punching, cutting, and stacking into one seamless operation, controlled via PLC with touch-screen HMI for easy parameter setting and fault diagnosis .

- o **Flexibility:** Machines can produce various tray types (ladder, perforated, solid-bottom) and sizes by changing roll sets and punching molds. Widths typically range from 50 mm to 1200 mm, heights from 20 mm to 150 mm, and thicknesses from 0.4 mm to 3.0 mm .

- o **Efficiency:** Production speeds range from 10 to 40 meters per minute depending on material and profile complexity. Automated systems minimize labor requirements and maximize output .

- o **Durability:** Main frames are constructed from high-strength steel, and forming rollers are precision-machined and heat-treated for long service life .

Applications

Machine for making cable trays

Cable tray making machines are used to manufacture trays for industrial, commercial, and residential electrical installations. They provide safe, organized pathways for power, control, and communication cables, supporting large quantities of data or power lines overhead or under-floor . In summary, a complete cable tray production setup combines roll forming, CNC press braking, punching, and shearing units, with optional automation for high-volume, precise, and flexible manufacturing of various cable tray types.

The Fully Automatic Multi Sizes in One Pre-Galvanized Cable Tray Making Machine is your answer. This

High-performance cable tray making machine for trough trays. Automatic roll forming, punching, and

Types of cable tray machines A cable tray machine makes different types of cable tray machines. Here are some of

The Cable Tray Making Machine is a highly efficient and fully automated production solution developed for manufacturing various

The minimum setup for basic cable tray production includes a leveler or manual decoiler, a punch press or laser

We are engaged in offering Automatic Cable Tray Metal Punching Machine to our clients. All our products

Kehan cable tray making machine is designed for all types of wire mesh cable tray manufacturing. Wire

A perforated cable tray roll forming machine is an essential equipment for manufacturers of

Cable Tray Making Machines is an industrial machinery used to manufacture cable trays, which are structural components used in

Cable Tray Roll Forming Machine used to manufacture high Quality Cable Tray"s of different Sizes from

At Lotosforming, we specialize in designing and manufacturing state of the art roll forming machines, including those used for

The whole cable tray production machine adopts PLC control, AC frequency conversion speed regulation technology, to realize

Cable tray roll forming machine is commonly used to make different kinds of cable trays, which is widely

China Cable Tray Machine manufacturer, Bazhou Yiping Hongshengda Electromechanical Equipment Co.,



Machine for making cable trays

Ltd is Cable Tray Roll

Cable tray making machine is a fully automatic, high-efficiency production line designed for the continuous

Discover cable tray making machines with CE certification, PLC control, and 0.8-2.0mm material thickness.

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