

Copper and Aluminum Wire Stranding Machine

This machine manufactures wire without back twisting, accommodating copper strand, aluminum strand and ACSR. When equipped with a pressing device, it strands sector conductor, round conductor, and compacted & pre-spiraled separated conductor.



Overview

High-Performance Wire Stranding Solution

This versatile stranding machine is engineered for the efficient processing of both copper and aluminum wires, offering flexible loading options including bottom, top, and side-loading configurations. It features advanced pneumatic or manual bobbin clamping with mechanical safety locking to ensure stable operation during high-speed production. The system integrates precise tension control and wire-breakage testing to maintain consistent conductor quality and prevent loosening during cutting.

Key Performance Metrics

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55.1 m/min

Max Production Speed

45 mm

Max Production Diameter

2500 mm

Haul-off Wheel Diameter

Technical Specifications

Single Wire Diameter Range

Material	Min Diameter (mm)	Max Diameter (mm)
Copper	1.5	5
Aluminum	1.8	5

Stranding Cage Speed: 46 - 164 r/min

Stranding Pitch Range: 50 - 1197 mm

Operational Features

Bobbin Clamping System

- Pneumatic clamping
- Manual clamping via worm gears
- Manual clamping via hand wheels
- Integrated mechanical safety locking

Bobbin Loading Methods: Bottom-loading, Top-loading, Side-loading, Individual Loading, Integral Loading

Control Systems

Automation & Electrical

- PLC and Touch Screen interface
- Digital DC drivers for motor control
- Real-time data modification and display
- Triple-mode wire-breaking test (Mechanical/Electrical/Hybrid)

Pay-off Tension Control

Mechanical friction or constant air force tension with electronic control

Machine Configuration

Standard Components

Pay-off Strand • Stranding Cartage • Compact Die Stand • Double Draught Wheels • Take-up Device • Traverse Device • Taping Head

Cage Construction

Whole shaft design without eccentricity for stable rotation