

Light Steel Keel Roll Forming Machine

This automatic machine is engineered for the high-precision manufacturing of light steel keels. It integrates forming, punching, and cutting processes into a continuous automated line with a robust steel frame.



ADDITIONAL IMAGES



Overview

Automated Light Steel Keel Production

This automatic light steel keel roll forming and packing line is engineered for high-precision manufacturing of various profiles, including 38/50, main channels, and stud & track systems. The integrated system combines roll forming with automated packing technology, featuring advanced servo-driven components for material turning, tape winding, labeling, and palletizing. Designed for efficiency, the line ensures consistent product quality, reduced labor requirements, and high-speed operation suitable for large-scale construction environments.

Performance Metrics

Packing Speed

95 m/min

Max Speed (20 pcs/pkg)

70 m/min

Max Speed (12 pcs/pkg)

50 m/min

Max Speed (8 pcs/pkg)

Total Power Capacity

6.8 kw

Physical Dimensions

Floor Area Requirements

| Configuration | Floor Space |
|------------------|-------------|
| Standard Machine | 8.5m x 2.3m |
| With 3m Keel | 7m |
| With 4m Keel | 9m |

System Components

Production Line Stages

- Turning Material & Engaging
- Tape Winding
- Material Pulling
- Labeling
- Palletizing

Electrical & Control

Key Electrical Components

| Component | Quantity |
|------------------------|----------|
| PLC | 2 |
| Touch Screen | 1 |
| Servo Motors | 7 |
| Photoelectric Switches | 5 |
| Frequency Changers | 1 |

Control System

PLC Control, Touch Screen Interface, Servo Motor Drive, Frequency Control

Technical Construction

Construction Materials

- Frame: Square welding tube 80*80*3
- Conveyor: Thickened non-slip belt
- Hooks: Cr12 with heat treatment
- Driven Shafts: 45# steel with chrome plating
- Manipulator: Heavy-duty aluminum extrusions