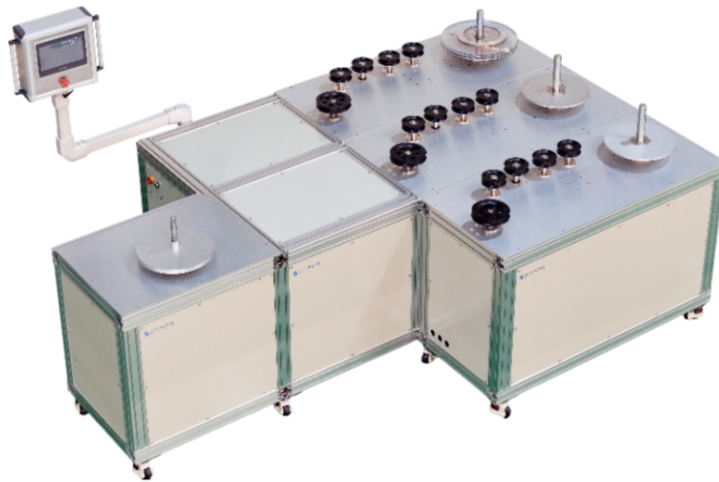


# Three-axis winding machine

## Introduction



The 3-axis vertical winding machine can precisely preset in segments the tape feed length, torque, tape tension, angular velocity, and linear velocity, and achieve constant control of tension, angular velocity, and linear velocity during continuous tape feeding. The machine supports a maximum of 3 simultaneously fed tapes, with a maximum tension per tape of 50 N (customizable), and accommodates tapes with widths ranging from 4 mm to 12 mm. It can be expanded into professional magnet winding equipment or online testing equipment. It provides a concise user interface for simple operation, allowing direct monitoring of tension, speed, number of turns, and other data during the winding process, and enabling precise adjustment of tension and speed.

## Functions

- 1.Integrated touchscreen interface;
- 2.Forward/reverse guide tape;
- 3.Precise control of length, tension, and linear speed;
- 4.Tension preload protection;
- 5.Abnormal tension alarm;

## Applications

Designed specifically for university laboratories, research institutions, and high-tech enterprises; suitable for general-purpose programmable winding processes. It supports simultaneous winding of 1 to 3 tape strands, with adjustable tension ranging from 1 to 100 N and flexible speed control to suit various processes. Powered by 220 V AC supply, the unit delivers a maximum power of 7000 W.

## Parameters

|                   |                     |
|-------------------|---------------------|
| Tape width        | 4-12 mm             |
| Spool weight      | Within 10 kg        |
| Linear velocity   | 0-30 cm/s           |
| Tape tension      | 0-50 N              |
| Take-up torque    | 0-50 N*m            |
| Dimensions        | 2.3*1.1*1.8 m       |
| Power             | 7000 W              |
| Current           | 32 A                |
| Control interface | Lan port & USB port |
| Control system    | PLC & Touchscreen   |