



Industry Notification - Electrical Engineering Industry

Delta Wire Arranging Machine Solution

IABG Global Solution Center
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Wire Arranging Machine Solution

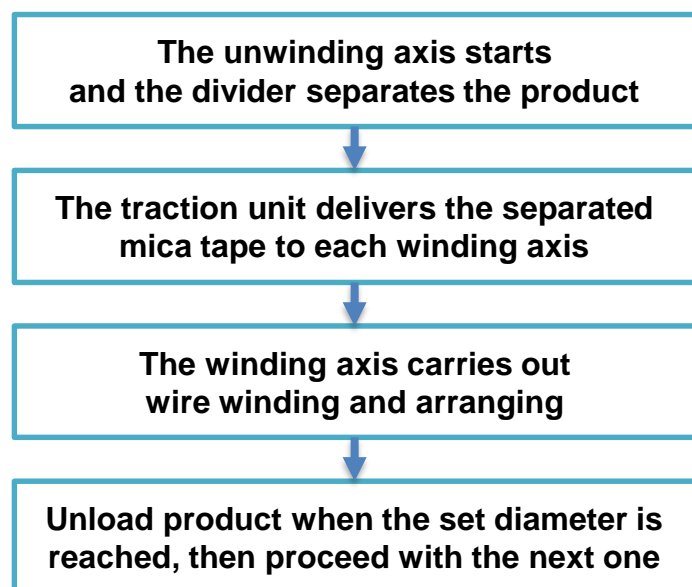
Introduction

Wire arranging machine is widely applied in winding process of wires of different materials and width. Delta's Wire Arranging Machine Solution employs the integrated drive-control system as the main control, with high cost-effectiveness. It offers a built-in custom development platform with high responsiveness for timely commutation, and a built-in PID object to ensure the tension control accuracy of $\pm 0.02V$. The wire arranging speed is up to 110m/min, meeting the needs of most customers.

Application

Winding of PP strap, winding and unwinding of mica tape.

Process Flow



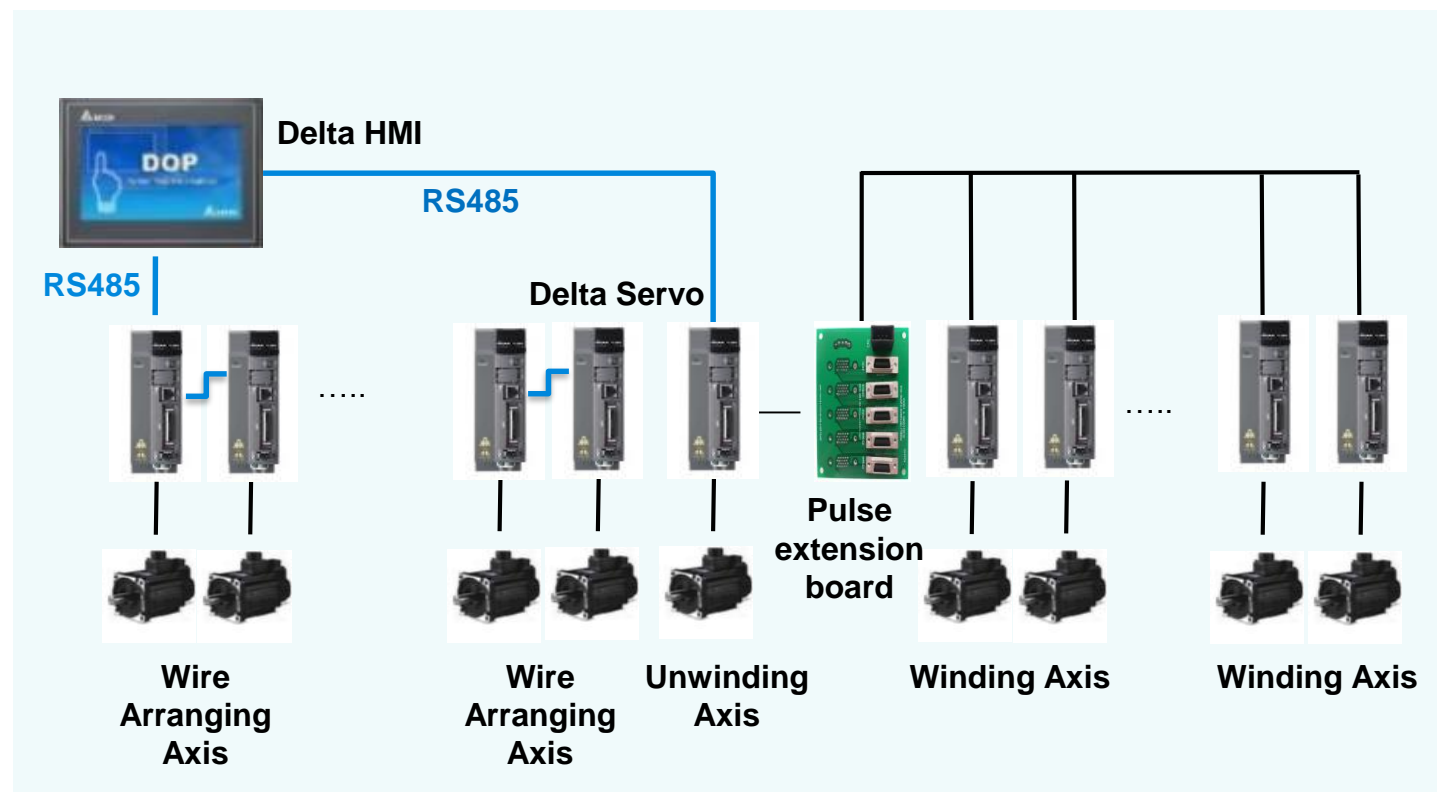
Principle

- **Unwinding:** The unwinding axis unwinds the product to the traction unit at the front of the winding axis.
- **Winding:** The winding axis carries out winding action via feed-forward and PID to ensure constant speed, i.e., constant tension.
- **Wire arranging:** The wire arranging axis follows the winding axis for wire arranging.
- **Winding and repetition:** Unloads the product once it reaches the set diameter, and then proceeds with the next one.

Product



Solution Architecture



Features and Advantages

All-in-One Solution

- High precision integrated drive-control servo system for assured winding quality.
- Continuous mode and intermittent mode are available.
- Intelligent process configuration makes it ideal for different processes.

Cost-efficient and Powerful Performance

- Stable tension control for faster wire arranging.
- The whole system adopts Delta automation products for easy integration and maintenance.

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