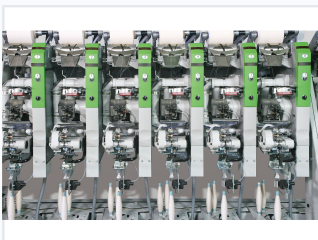


# Automatic Tray Winder for Chemical Fibers

This automatic tray winder is designed for winding chemical fibers at high speeds. It features an intelligent doffing unit and a flexible bobbin treatment system.



## ADDITIONAL IMAGES



## Overview



The electronic control unit featuring USTER QUANTUM 3 monitoring for precise yarn quality management.



Sophisticated dual-screen interface allows real-time monitoring of all 72 spindles and winding parameters.



User-friendly programmable interface for adjusting traverse speed and package density.

## High-Efficiency Automatic Winding Solution

The Automatic Tray Winder is a new generation of textile machinery designed to meet high-production requirements for chemical fibers, supporting yarn counts from Ne.6 to the highest ranges. Featuring several patented inventions, this machine ensures stable performance and perfect package formation with a capacity of up to 72 spindles. It is engineered for professional textile environments, offering a flexible bobbin treatment system and intelligent automation to maximize operational efficiency.

## Monitoring Technology

USTER QUANTUM 3 • SMARTWINDER 2

## Key Performance Metrics

### Performance Highlights

**72 pcs**

Max Spindles

**60 m/min**

Traverse Speed

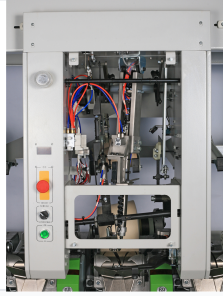
**13.5 s**

Doffing Cycle

**320 mm**

Max Package Diameter

## Doffing & Logistics



Integrated control panel with emergency stop and manual/auto reset functions for safe operation.

### Intelligent Doffing Unit

- Intellectualized single spindle automatic re-start
- Adjustable piecing yarn fixing position
- Smart judgment of bobbin and package existence
- Manual and automatic doffing modes optional
- Automatic package transportation
- Pre-full wait package function for enhanced trolley efficiency

## Bobbin Treatment



Engineered for high-speed operation with integrated automation for chemical fiber processing.

### Bobbin Supply Capacity

Configuration	Supply Rate
Single Plug	3000 Pcs/Hour
Double Plug	3300 Pcs/Hour

### System Capabilities

- Multi-channel logic judgment for interference-free treatment
- Automatic conveyor loop for empty bobbin return
- Automatic identification of empty vs. skinny bobbins
- Compatible with various bobbin dimensions and specifications

## Piecing & Suction



Multi-station configuration designed for high-throughput winding and automated bobbin handling.



Precision metal guides ensure accurate yarn placement during high-speed winding operations.

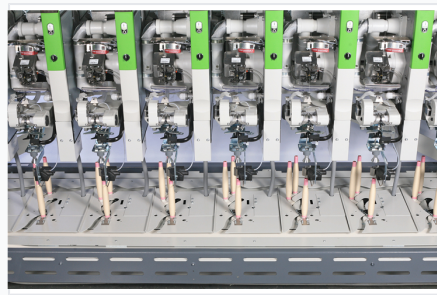
### High-Efficiency Piecing Unit

- Innovative yarn tail monitoring device
- Upper/lower air door control for reduced air consumption
- Vertical suction on straight rail for motion precision
- Vortex blowing system optimized for tube diameter
- CBF double-roll yarn end removing device (increases success rate by 5-8%)

## Transmission



Robust frame construction with integrated sensors to ensure consistent winding for various yarn types.



Advanced tension control mechanisms on each winding head to optimize yarn quality.



High-performance motor and guide system for reliable and continuous industrial operation.

### Bobbins Delivery System

Independent transport of empty and full bobbins via single belts driven by dedicated motors with deflection adjustment mechanisms.

## Compliance

### Quality Standards

ISO 9001, Environmental Management, Occupational Health & Safety