AUTOMATIC SINGLE-HEAD WINDER

POLAR EVO WIND-LAB



Automatic SAVIO POLAR EVO single-head winder equipped with:

- · touch screen control panel with PC
- · a wide choice of different MESDAN yarn splicers
- · LOEPFE electronic yarn clearers
- \cdot waxing device, tension control, yarn length measuring device ...

Ideal for:

- · didactic purposes in textile schools, universities, etc.
- as a complementary machine to the "Mini Spinning" line
- R&D labs (for research on winding, yarn clearing, waxing, splicing, etc.)



POLAR EVO WIND-LAB Code 3374D

Automatic single-head winder

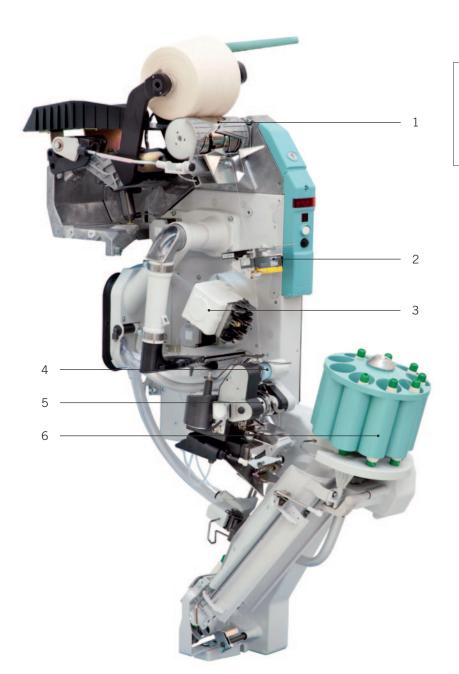
Description

Fully automatic SAVIO POLAR EVO single-head winder complete with most advanced yarn clearing, splicing and waxing functions.

All parameters of the winding process are computer controlled:

- · yarn quality
- · package quality
- production quality
- · alarm monitoring system

All moving parts are driven by individual independent driving motors (upper package and lower bobbin suction, splicer, yarn tensioner).



- 1 drum
- 2 clearer
- 3 splicer
- 4 waxing device
- 5 yarn tensioner
- 6 automatic carousel feeding magazine



THE WINDER INCORPORATES STATE-OF-THE-ART COMPONENTS:

YARN SPLICER

The single-head winder is extremely versatile, 5 different yarn splice technologies can be fitted, all perfectly interchangeable.











JOINTAIR®

Most popular air splicer providing top performance on a variety of yarns. New model endowed with double pressure regulation (one for the yarn ends preparation and one for splicing).

845

Suitable for:

- single cotton
- synthetic, man-made and cotton blends
- · elastomeric core yarns
- long staple wool yarns and blends

AQUASPLICER®

Using air plus water as joining medium. Distinctive features are the total sealing of the chamber area and the exclusive water discharge system preventing water from affecting other areas of splicer and winder. New model endowed with special rust-proof parts.

W00

Suitable for:

- · slub cotton yarns
- plied and coarse cotton yarns
- OE cotton yarns
- mercerized and singed cotton
- · linen yarns
- · elastic core yarns

HOT JOINTAIR®

Hot air as splicing medium in combination with two complementary splicing blasts, enables superior quality joints. New model endowed with double heating system, one for the mingling chamber enclosure heating, and one for the splicing air blast.

H00

Suitable for:

- worsted and woollen single and plied
- high twisted (crêpe) worsted yarns
- luxury yarns (cashmere, alpaca, angora, etc.)
- viscose and polyester OE and AIR JET yarns
- elastomeric core yarns
- · worsted siro-spun

MOISTAIR®

An innovative air splicer using a very small quantity of water, endowed with very precise moistening dosage and characterised by outstanding versatility.

8451

Especially suitable for:

- · TENCEL®
- fine compact yarns
- elastic core yarns
- dual core

TWIN SPLICER

Mechanical splicer providing very good splice strength and appearance. The twin splicer on core yarns preserves the elastomeric filament entirely inside the splicer.

Main application range:

- · 100% regular cotton
- effect yarns
- · compact yarns
- elastomeric yarns

In addition to different yarn splicers, an automatic Fishermans knotter is available as well, model 4101.

YARN CLEARER

The Polar Evo Wind-Lab is equipped as standard with the **YarnMaster Zenit** F clearer, an optical yarn clearer built by Loepfe, Switzerland. Beside detecting the conventional yarn faults (thick, thin, clustered faults, etc.) YarnMaster Zenit F detects also the coloured foreign fibers.



Technical main characteristics:

- suitable for Ne 2,5 147 count range
- · independent from raw material
- · compatible to all splice technologies
- detects and divides in classes the finest yarn irregularities (IPI diameter-related imperfections like thin and thick places) and yarn faults (like neps, hairiness, etc.)
- · detection of "off-standard" bobbins
- · foreign fibres detection (both dark and bright)

- colour hue detection (ideal for melange yarns control)
- up to 99 different article-related settings can be saved and edited
- results are not influenced by environment temperature and humidity conditions
- · independent of climatic ambient conditions
- · 152 thick place and 36 thin place classes
- in case of special clearing requirements, additional sensors may be fitted, for instance for polypropylene detection (white or transparent), model Zenit+ FP (optional)

POLAR EVO WIND-LAB

HEADSTOCK

- · Control Panel for pneumatic setting (counterweight unit, airsplicer settings, package braking)
- · Control panel with knobs, On/Off push buttons
- · PC with touch screen
- · USB port
- · Display for checking the electronic settings of winding speed, package yarn length, data collection, yarn defects, classification and auto-diagnostic
- · Alarm signal lamps

TECHNICAL DETAILS TO BE DEFINED AT ORDER

- \cdot Two kinds of cylinder are available, depending on the count range:
- · range Ne 8-30
- · range Ne 24-120
- (in case of a very wide yarn range, one cylinder can be fitted on the winder and the other added as optional) $\,$
- \cdot Take-up package shape: 5°57' or 4°20' or 3°30' (three samples of take-up cone tubes to be sent for machine's testing)
- \cdot Feeding tube length: from 180 to 280 mm
- \cdot Feeding tube internal diameter: from 15 to 25 mm
- \cdot Feeding bobbin magazine: either 9 positions (32-45 mm hole diameter), or 6 positions (46-67 mm hole diameter)
- · Type of yarn splicer
- · Power supply to be defined at order

Photographs and descriptions of the present leaflet have to be considered as purely indicative and not binding

WINDING HEAD

- · Technological air suction unit with motor
- · Winding speed: 400-2200 m/min
- Individual winding unit, driven by individual electrical motors with steplessly adjustable speed by means of inverter
- Package holder with pneumatic control of package density
 (3 Positions: Soft/Medium/Hard) and instant package lifting
- · Independent and adjustable package and drum braking
- · Start-up with controlled speed acceleration
- · Tension sensor "Tensor"
- · Anti-Ribboning device
- · Bobbin yarn and package yarn movable suction pipes
- · Optical central feeler
- \cdot Automatic Anti-Snarl Device for empty bobbin discharge and new bobbin loading from magazine
- · Bobbin Carousel Magazine with 9 positions (alternative 6 positions)
- Built-in electronic yarn clearer Loepfe Zenit* Foreign Fibers Detection Sensor for total yarn quality control
- \cdot Wax Device inclusive of wax consumption controller
- · Splice control
- · Take-up tube length: from 170 mm min., up to 175 mm max.
- · Package Shelf
- · Working room conditions: 35°C temperature and 70 RH% maximum

DIMENSIONS / POWER SUPPLY

Weight: 340 kg

Dimensions: (L) 1000 (W) 1100 (H) 1900 mm Installed power: 4 kW - Electrical consumption: 2 kW Compressed air consumption: 8 normal litres Current Starting: 8 A (current running: 4 A)





