Fully-Automatic Winders

NX-100
BA-4U/140
ML-100

Control and Accuracy in the winding process

RATERA®

Founded in 1942

Your Braiding Industry

NX-100

- Fully-automatic winding machine of 4 spindles
- Distribution box to adjust the pitch between 0 to 5 mm
- For flanged bobbins from Ø 38 mm to Ø 80 mm and 100mm to 220 mm traverse
- Head speed from 1,000 rpm to 5,300 rpm
- Yarn speed from 100 to 500 meters per minute
- All the movements are controlled by a PLC
- Automatic bobbin feeding
- Meter counter

BA-4U/140

- Fully-automatic winding machine of 4 spindles
- Distribution box to adjust the pitch between 0 to 16 mm
- For flanged bobbins from Ø 55 mm to Ø 78 mm and 170 mm to 280 mm traverse
- Head speed from 77 rpm to 3,000 rpm
- Yarn speed from 60 to 330 meters per minute
- All the movements are controlled by a PLC
- Automatic bobbin feeding
- Meter counter

Discover the electronic distribution of ML-100

ML-100

new
ELECTRONIC DISTRIBUTION

- Fully-automatic winding machine of 4 spindles
- Electronic distribution system with lineal motor to adjust the pitch between 0.3 to 8 mm
- For flanged bobbins from Ø 38 mm to Ø 78 mm to ø 80 mm and 100 mm to 220 mm traverse
- Head speed from 1,000 rpm to 5,300 rpm
- Yarn speed from 100 to 500 meters per minute
- Electronic control of traverse length and pitch
- Storable recipes database
- Automatic bobbin feeding
- Multi type bobbin capacity
- Meter counter

Touch screen

The new winder touch screen enables on the fly adjustments of the different parameters by storing recipes, saving time and providing an user friendly operation.

Precision

Winding pitch can be set with a precision up to cents of millimeter. With the new winder yarn scrap is reduced to the minimum as the machines exactly stop to the programmed meters. The winding speed is the same in both winding directions avoiding yarn breakages and undesired yarn accumulations.

5 Minutes flexibility

The new ML-100 is able to use different bobbin sizes (within the limits of traverse and flange size).In just 5 minutes a new bobbin size can be set up by just changing some small supplements. The new recipe can be selected and the machine is ready for a perfect winding.

Operation

Depending of the fibers a mechanical or electric cut can be selected. There is an option for an automatic insertion of clips to hold the yarn after the cut.

Technical Characteristics

Standard

	NX-100	BA-4U/140	ML-100
Nº of spindles	4	4	4
System	Uhing	Uhing	Linear Motor
Flange Ø	From 38 to 80 mm	From 55 to 78 mm	From 38 to 80 mm
Traverse	From 100 to 220 mm	From 170 to 280 mm	From 100 to 220 mm
Pitch adjustment	From 0 to 5 mm	From 0 to 16 mm	From 0.3 to 8 mm
Head speed	From 1,000 to 5,300 rpm	From 77 to 3,000 rpm	From 1,000 to 5,300 rpm
Yarn maximum speed	500 meters / minute	330 meters / minute	500 meters / minute
Motor power	1.1 Kw	1.1 Kw	1.1 Kw
Tensioners	1 x bobbin	-	1 x bobbin
Knock off switches	4 x bobbin	-	4 x bobbin
Air pressure	6b minimum	6b minimum	6b minimum
Cutting system	Yes	Yes	Yes
Cutting with electrical resistance	Yes	Yes	Yes
Touch screen	Yes	Yes	Yes
Meter counter	Yes	Yes	Yes
Layer counter	No	No	Yes
Recipe menu	No	No	Yes
Multi bobbins	No	No	Yes
Length in mm. (A)	1,810 mm	2,400 mm	1,810 mm
Width in mm. (B)	1,420 mm	1,800 mm	1,420 mm
Height in mm. (C)	1,800 mm	1,750 mm	1,800 mm
Weight Kgs.	580 Kg	700 Kg	580 Kg
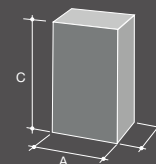
Options

	NX-100	BA-4U/140	ML-100
Other bobbins sizes	Yes	Yes	Yes
Constant yarn speed	Yes	Yes	Yes
Knock off switches (maximum)	8 x bobbin	10 x bobbin	8 x bobbin
Tension control	Yes 1 yarn x bobbin	Yes 1 yarn x bobbin	Yes 1 yarn x bobbin
For suture yarns	Yes	No	Yes
For composites fibers	Yes	Yes	Yes
Clip feeder assembly	Yes	Yes	Yes
Creel feeding system	No	No	No

NOTE: According to machinery directive 89/392 about safety for the European market, machines must be protected. However, in order to allow for a better display some of this catalog's illustrations have been made without the mandatory protections.
The company reserves the right to modify and improve the characteristiques of its products without notice.