

The functions, workability, space, and cost required for a rewinding machine have been optimized.

For Bonding Wire Rewinding Machine

# BW-RW series



●The type of 4 Heads BW-RW4B



●The type of Single Head BW-RW1



●The type of 4 Heads BW-RW4L

## Next-generation Rewinding Machine for shipping spools

The new BW-RW series is a next-generation rewinding machine developed to support the predicted growing trend toward smaller-diameter wires. This machine has been developed to optimize all requisite features of a rewinding machine for shipping spools, such as functions, workability, space, and cost. Because the machine can operate at high speeds of 300 m/min, the rewinding process is sped up, owing to which fewer such machines are required. In addition, the machine can be extended to be able to collectively transfer data entered using special software to a computer.



# For Bonding Wire Rewinding Machine **BW-RW** series

## ■ High-speed winding and high-precision positioning

Adoption of a servomotor enables high-speed, large-pitch traverse operation. A field-programmable gate array (FPGA) is employed for digital control in the processors of the positioning controller and the speed controller of the winding motor. This results in a significant improvement in the speed control, traverse positioning ability, and speed stability of the winding motor. At a winding speed of 300 m/min, operation is possible for a maximum of pitch winding of 7 mm.

## ■ Ultra-low-tension winding control allowing taper tension setting

An electromagnetically controlled variable-load dancer roll is adopted, which enables free tension control digitally in increments of 0.1 cN, even at ultra-low tensions (0.5 cN and higher); this in turn allows easy management of the rewinding machine. A taper tension curve, including two points at the beginning and end of the winding, is needed for each type of product to set the taper tension.

## ■ Easy pitch setting for each interlayer

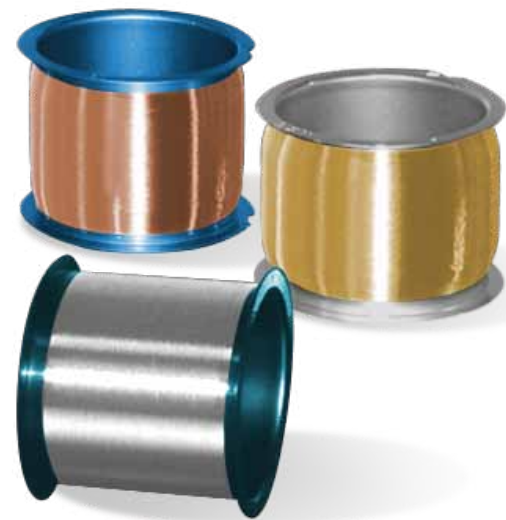
The traverse pitch can be set to a desired value for each interlayer, enabling control of winding angle adjustment during multilayer winding and maintenance of high unwinding ability. Fifty such interlayer settings are supported for the machine. Furthermore, the number of layers can be set as desired, thus enabling setting of various conditions. It is also possible to vary the pitch for each layer.

## ■ Multi-type setting

A touch panel is used for establishing the setup and monitoring, thus enabling easy machine operation. Up to 50 types of settings and storage (e.g., winding condition, desired value of taper tension, etc.) are permitted in order to enable compatibility with various types of wire diameters and properties. Further-more, the rewinding machine can be extended to be able to collectively transfer data entered using special software to a computer, enabling easy multi-type setting of the winding conditions as well as easy multi-type storage and management (management software is optional).

## ■ Setting the pausing angle

The starting position in each layer is varied by pausing the traverse operation with the set angle, and the wire jamming caused by its parallel overlapping is suppressed.



## ■ Inverse/reverse winding supported

The provision of both inverse winding and reverse winding enables adherence to each customer's specifications, such as inside-outside or outside-outside application of the tape or handsfree packaging without loss of workability. In the case of a spool with a notch, the operator is able to apply the tapes without touching the wires, by selecting the automatic hook operation for the notch area when the winding is completed.

## ■ Specification

Type	BW-RW4B(The type of 4 Heads)
Wire Materials	Au, Ag, Cu, and other bonding wires
Wire diameter	φ15um~
Bobbin specification	Unwinding : φ100 spool, etc. Winding : AL-2/AL-4
Tension	0.5~7.0cN(separately settable)
Traverse pitch	~7mm/rev
Traverse width	~50mm
Speed	~300m/min(1900rpm)

※Derailment detection function: Detecting the rotation of each roller and sensing a derailment.

Inquiry

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We offer testing by using various demonstration machines.