



## WIRE WINDING MACHINE FOR DISTRIBUTION TRANSFORMERS



### TARGET

The BOB ER-SP is a simple machine which gives the possibility to properly wind a wide range of coils for distribution transformers.

### MAIN FEATURES

The machine can perform windings using full width insulation and edge strips. The machine is equipped with a AC 3-phases Inverter duty motor with mechanical reduction gear unit, providing smooth and high torque starting even at low speed. The operator can smoothly control the mandrel speed by a foot-pedal.

The wire-guiding carriage runs on large diameter round guides. It is electronically controlled by the computer.

A tensioning device allows to wind with constant tension of the wire.

Working cycle is controlled by a Siemens industrial PLC, the operator interface is a Siemens brand Operator Panel, colours LCD, touch screen type, that allows to easily program the coils to perform.

The machine can be equipped with a second free carriage which can be coupled to the main carriage in order to wind two coils at the same time.





### MACHINE COMPOSITION

<b>MAIN MACHINE :</b>	<b>ACCESSORIES :</b>
(a) Headstock and Transmission system with AC 3-phases Inverter duty motor	(1) Expandable mandrel
(b) Tailstock	(2) 1 <sup>st</sup> Full width insulation decoiler & rolls
(c) Wire guiding carriage with tensioner	(3) Dereelers for edge strip
(d) Control pedal	(4) Unwinding unit for round wire
(e) Electronic control system	(5) 2 <sup>nd</sup> Full width insulation decoiler
(f) Internet teleservice	(6) Supplements for double coil
	(7) Flat wire dereeler & guide
	(8) Modem teleservice

### TECHNICAL DATA

<b>GENERAL</b>		
Weight of basic machine	approx.	1000 kg
<b>WINDING (STANDARD CONFIGURATION)</b>		
Length	max	800 mm
Diameter	max	600 mm
<b>WINDING (WITH SUPPLEMENTS FOR DOUBLE COIL - OPTIONAL)</b>		
Length single coil	max	900 mm
Diameter single coil	max	600 mm
Length double coil	max	400 mm
Diameter double coil	max	400 mm
<b>MANDREL</b>		
Mandrel rotation speed	max	450 rpm
Mandrel torque	max	310 Nm
Total weight between centres	max	300 kg
<b>CONDUCTORS</b>		
Round wire diameter	min/max	0.3 / 5 mm
Flat / rectangular wire	max	40 mm <sup>2</sup>
<b>INSULATION</b>		
Full width insulation width	min/max	35 / 700 mm
Full width insulation thickness	min/max	0.1 / 0.5 mm
Edge strip width	max	30 mm
Edge strip thickness	min/max	0.1 / 1.0 mm

