



NK – 06 Ball winding machine (paper string)



Machine application:

The appropriation of the ball winding machine NK-06P is to wind paper of cords to commercial bobbins in a form of none-tube balls, which have a very persistent structure, look very aesthetic and are easy to unwrap.

Machine description:

The ball winding machine has 4 spindles, which means that it winds 4 bobbins simultaneously. In base execution the re-rolled raw material is located in cylindrical cans placed next to the machine. It is also possible to equip the machine with separate creeling frame, which allows unwrapping the material from cylindrical and conical bobbins. The winder works in semi-automatic mode. Removing of wound balls and clamping the cord requires manual interference, while all other activities are realised automatically.

The raw material is guided from the cans through the guide pieces, detectors, tension units and compensators to the yarn guides. The guides wind the cord to the hexagonal spindles.

The machine is provided with a microprocessor driver, which realises functions such as:

- programming the full length of the cord
- programming the length of the cord for the filling layers
- measurement of wound cord
- executing of following phases of winding according to the specified algorithm
- stopping the machine after winding the previously programmed length of the cord
- stopping the machine in case of tearing the cord off or if no cord is available
- stopping the machine in case of finding too big knot
- stopping the machine in case of executing the permissible length of the diameter of the ball
- stopping the machine in case of opened security cover

The microprocessor driver has two group the user defined parameter in to memory saving and running 10 factory programs ball production.



Technical data of ball winding machine NK-06P:

Description:	Unit:	Quantity:
Number of winding spindles	pcs	4
Feeding bobbin (free beams cross-cylindrical):		
- hole diameter	mm	18 / 42
- outside diameter	mm	260 / 260
- length	mm	100 / 100
Receive bobbin:		ball
- max. length	mm	130
- max. diameter	mm	125
Dimension of the winding spindle	mm	6kt 32
Rotary speed of braiding wing	rpm	140 – 350
Rotary speed of the spindle	rpm	2,1 – 21,0
Paper cord thickness	mm	1,4 – 2
Theoretical productivity for balls 56m long, 154g weight from 4 spindles:	pcs/h	220
Overall dimensions (length x width x height)	mm	1500 x 970 x 1270
Weight of the machine	kg	230
Power installed	kW	0,8
Power supply	V	3Ph 400/230 N/PE
Control voltage	VDC	24
Supply voltage frequency	Hz	50 – 60
Noise level in the place of work	dB	70