



BK/BW/BC Bushing winding machines
OIP or RIP insulation bodies with craft or crepe paper and aluminum foils can be produced on our bushing winding machines.

Efficient production and excellent operating comfort.

FM foil winding machines



The bushing winding machines are used to wind insulation bodies for condenser bushings made from craft or crepe paper and aluminum foil. To keep the diameter of the body constant and to avoid an electric flashover oscillating knives cut the paper tracks. Both ends of the insulation body can be steplessly conically or stair-shaped cut. Efficient paper drying systems do reduce the moisture content in the paper to a minimum. Aluminum foil can be cut and insert in a fully automated mode or manually.

Winder with diameter measuring system

The winding part consists of a massive, welded steel construction. Main component is the triple roller arrangement consisting of transversely moveable lower drive rollers and one upper pressure roller. The pressure force is stepless adjustable. During the winding process the diameter is continuously measured and monitored.

Aluminum foil cutting and inserting system

Our machines can be equipped with fully automated aluminum cutting and inserting systems. With this system the aluminum foils will be cut to the required size directly on the machine. The cutting process is followed by the automated inserting of the foil into the bushing. Alternatively automatic laterally moveable line lasers show the manual insertion position for the aluminum foil.

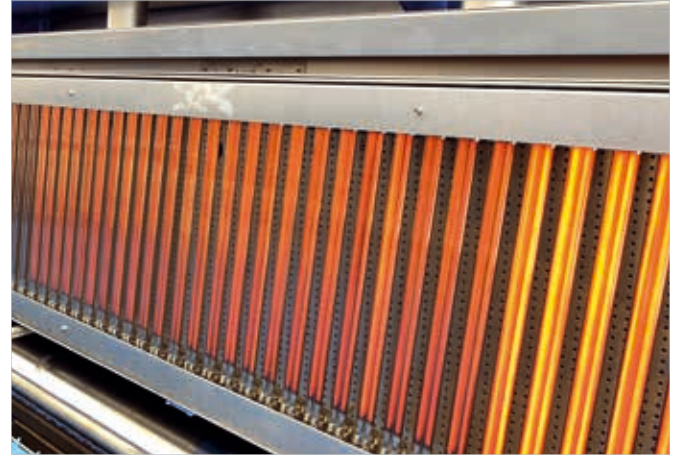
Benefits at a glance

- Automatic aluminum foil cutting and inserting
- Efficient paper drying system
- Automatic diameter measurement system
- Automatic positioning of cutting knives
- Constant controlled insulation tension
- Flexible software, simple programming, operator guidance on the touch screen
- Remote support
- Swiss quality, long machine life time



Automated paper cutting system

When using several paper webs side by side the overlap is cut by oscillating knives without producing any gaps. For each cutting position a motor-driven waste paper rewinder is provided. Both ends of the insulation body can be stepped conically or stair-shaped cut by horizontal traversing knives. The feed rate speed is programmable and synchronal to the winding speed. Every paper trimmer is equipped with a motor-driven waste rewriter.



Paper drying system

The moisture content in the paper can be reduced to a minimum by the use of electrical heated and oil filled deflection rollers or/and in combination with controlled infrared heating fields.

Paper decoiler

The number of required decoilers is determined according to customer specified requirements and the length of the insulation body. For easy set-up of the decoilers on bigger machines, the decoiler unit can be moved to a loading position.



Technical data

		OIP	RIP	OIP & RIP
Machine for:				
Length	m	1 - 14	1 - 14	1 - 14
Insulation				
Paper type		craft paper	crepe paper	craft or crepe paper
Paper tension (programmable)	Nm	500 - 800	80 - 100	OIP: 500 - 800 RIP: 80 - 100
Winder				
Winding revolution	rpm	0 - 20	0 - 20	0 - 20
Diameter measurement		x	x	x
Paper cutting				
Conical cut		x	x	x
Stair cut		x	x	x
Straight cut		x	x	x
Sinus-shaped cut		x	x	x
Drying system				
Heated deflection roller		available	available	available
Infrared heating system		available	available	available
Aluminium insertion				
Manual		x	x	x
Semi-automatic		x	x	x
Automatic incl. cutting		x	x	x

Available options

Automatic cutting and inserting of aluminum foil

Paper drying system

Winding of two insulation bodies in parallel

Vision system

Customized solutions on request

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