

NOVELTY

mahlo
trendsetting technology. worldwide

ORTHOMAX RFMB-12

Fusion of pin wheel and roller straightening system



WWW.MAHLO.COM
ORTHOMAX RFMB-12 84-010414-002 en
Technische Änderungen vorbehalten!
© Mahlo GmbH + Co. KG



Removing all types of distortions

Asymmetrical distortions (wavy, S-shaped, etc.) in textiles have always represented a huge challenge in the textile industry. Distortion always means that the perpendicular structure of warp and weft threads is distorted resembling something like a parallelogram.

Solution

To restore the warp and weft threads to their original state, a defined lateral tension is generated in the Orthomax using free-wheeling pin wheels inclined toward each other. This cross-tension stretches the warp threads. The distortion, no matter whether wavy or S-shaped, will be corrected. The residual distortions are eliminated with the subsequent roller straightening system. On wet fabric teflon-coated feed rollers are used.

Special Mahlo® Know-How

Inclined positioning of the wheels is carried out pneumatically, which ensures a constant straightening effect. A counter-force – generated by a spring – compensates friction losses and causes the uniform and symmetrical wheel alignment. Elaborate lever constructions requiring intensive maintenance and typically used here are not required.

Special features

The fusion of pin wheel and roller straightening technology perfectly combines the advantages of both technologies and provides amazing straightening results.

Unclipping roller with infinitely variable adjustment: Minimises residual bow and edge distortions.

Intelligent drive station with special tension control for smallest product tension activates or deactivates automatically (e.g. in case of blockages). A **bypass function** is available at the push of a button for products that cannot be straightened with the pin wheel.

Intelligent wheel following: Product loss is nearly prevented entirely. The control immediately compensates product offset, poor seams, fringes and dents on the edges.

Width jump function: New wider products do not need to be pulled in separately when changing products. Sew the new product to the old one, pull in, done! No more downtime!

Break function: Reduces the lateral tension to a preselected level when the line is stopped, e.g. during breaks or when working on other machines in the line. Preserves the product!

Product highlights

- ✓ Fusion of pin wheel and roller straightening system
- ✓ High lateral tension possible
- ✓ Adjustable unclipping device
- ✓ Bypass function
- ✓ Intelligent drive
- ✓ Comprehensive software with touchscreen control
- ✓ Pinning width adjustable during operation with software



The "Coffe break" function preserves the product during standstill

Customer benefits

- ✓ Reliable, quick distortion correction
- ✓ Effective also with asymmetric distortions
- ✓ Less waste

Technical Data	
Type	Orthomax RFMB-12
Straightening mechanics	2 pin wheels, 1 roller straightener each with 2 skew and bow rollers (on wet fabric: teflon-coated feed rollers)
Nominal width	1200 – 3200 mm (larger widths upon request)
Min. product width	800 mm
Max. product speed	80 m/min
Max. possible lateral tension	1500 N
Max. possible product pull (drive station)	1000 N
Theoretically max. possible straightening effect (pin wheels) (at nominal width = 2000 mm)	450 mm
Theoretically max. possible straightening effect (straightening rollers) (at nominal width = 2000 mm)	Bow rollers: 200 mm Skew rollers: 700 mm
Product guidance	Needle strips on straightening wheels
Straightening wheel diameter	800 mm
Drive of traversing movement	Asynchronous motor
Drive of straightening wheel swivel movement	Pneumatic cylinder
Weight (at nominal width = 2000 mm)	Approx. 3400 kg
Mains connection	400 V / PE; 3 AC; 50/60 Hz;
Max. power consumption	6.3 kVA
Ambient temperature	5 - 45 °C
Sound pressure level	< 80 dB (A)

Measuring systems, control systems, automation:

MAHLO[®] ENSURES QUALITY. WHEREVER YOU ARE IN THE WORLD.

Best-possible technical support and transfer of know-how are written in capital letters at Mahlo. Thanks to many international representatives and service stations, customers around the world are never far from expert assistance. 365 days a year, 24 hours a day – we're there for you. Get in touch with us!

- ✓ Over 40 service stations worldwide
- ✓ Direct service and spare parts delivery within 24h
- ✓ Remote diagnostics system
- ✓ Service-Hotline: +49-180-5062456



Mahlo GmbH & Co. KG Germany

Donaustr. 12, 93342 Saal/Donau
Tel.: +49-9441-601-0
Fax: +49-9441-601-102
info@mahlo.com

Mahlo España S.L. Spain

C/ Santa Margarida, s/n – Nave nº13
Poligono Industrial Riera de Caldes – Boada Vell
E08184 Palau Solità i Plegamans (Barcelona)
Tel.: +34-938-640-549
mahlo.espana@mahlo.com

Mahlo Italia S.R.L. Italy

Via Fiume 62, 21020 Daverio
Tel.: +39-03-32-94-95-58
Fax: +39-03-32-94-85-86
mahlo.italia@mahlo.com

Mahlo Ouest S.P.R.L. Belgium

Quantum Center
Hütte 79 - Bte 10
4700 Eupen
Tel.: +32-87-59-69-00
Fax: +32-87-59-69-09
mahlo.ouest@mahlo.com

Mahlo America Inc. USA

P.O. Box 2825, Spartanburg, S.C. 29304
Tel.: +1-864-576-62-88
Fax: +1-864-576-00-09
mahlo.america@mahlo.com

Mahlo do Brasil Controle de Processos Ltda.

Brazil
Rua dos Lírios 849 e 851
Cidade Jardim II - Americana – SP
Brasil CEP- 13466-580
Tel.: +55-19-3407-7954 / +55-19-3601-7363
Fax: +55-19-3405-4743
mahlo.brazil@mahlo.com

WWW.MAHLO.COM



Quality made
in Germany