



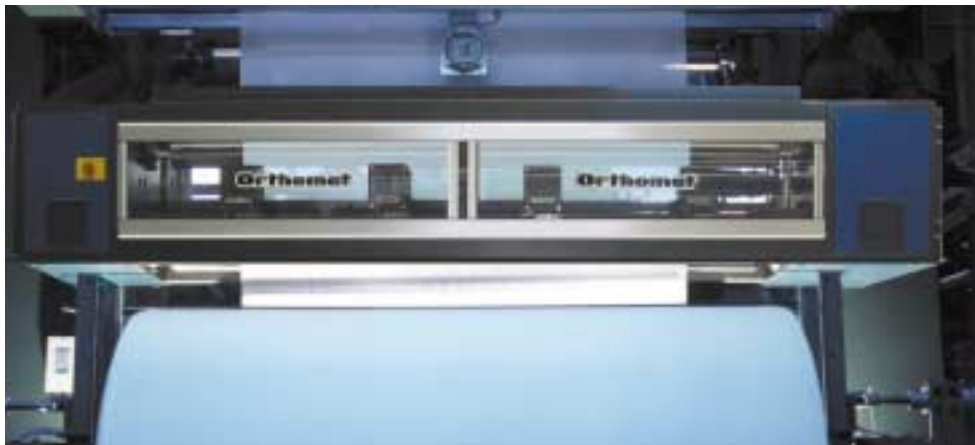
ORTHOMAT MFRC/DFRC

Fine-tune straightening with an modular straightener

Measurement

Control

Automation



ORTHOMAT MFRC/DFRC

The product

The MFRC modular straightener is a very well-established type of weft-control system. Its particular strong point is its ability to realign very accurately relatively minor degrees of bow and skew. It does so with the help of a curved, dual-purpose roller. This is mounted in a centrally pivoted frame and, as a result, works simultaneously as a bow and skew straightener. The arrangement enables the roller to apply a very fine degree of corrective effort within a module of exceedingly modest dimensions.

The scanner assembly, electronics, display and control terminal, etc. match those of a standard RFMC Orthomat. It copes with processing speeds ranging from 3 to 150m/min.

In order to satisfy the most exacting demands in respect of residual bow and skew tolerances, an MFRC straightening module can be linked to a standard RFMC to form an inlet/outlet "combi-system".

A modified version of the well-established Orthomat MFRC module, the Orthomat DFRC, can correct greater degrees of bow and skew than the MFRC.

The new version has not one, but two dual-purpose straightening rollers in one frame, effectively doubling the module's capacity to straighten. The dual-purpose rollers are adjusted in smaller increments, thereby reducing still further the risk of creasing.

Usage

Since the material runs over a single roller only, an MFRC module contains a minimum amount of cloth, and can therefore react sharply and precisely to any bow and skew. By virtue of these features, it is the ideal system for fine-tuning minor degrees of residual bow and skew, and in that respect, has a slight advantage over a full-size straightener. In spite of all its merits, an MFRC should not be seen as a general substitute for a standard straightener. Its domain is correction of residual bow and skew wherever there are stringent requirements for adherence to tight weft-line tolerances.

Standard features

MFRC straightening modules are available in working widths of 1400 – 3200mm and, in GMFRC heavy-duty form, 3400 – 5000 mm.

Optional extras

Available with back-tension control – with or without mounting stands – scroll-roller spreader (also at outlet end), safety extras, alarm output, weft-line data logger, lateral positioning device, and much more.

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Applications

Delivery end of stenters

An MFRC module is able to correct the residual distortions which often appear at the delivery end of a stenter following a drying process, and ensures in doing so adherence to even the tightest weft-line tolerances.



An modular straightener MFRC at the delivery side of a stenter

Sanforizers

Any residual bow and skew must be removed before the material is fed into a sanforizer. If the latter lacks an MFRC straightening module, the fabric might well have to be run through the stenter a second time. An MFRC ahead of a sanforizer can help prevent the considerable costs entailed by a second run, and ensure weft-straight fabric at the end of the sanforizing process.



An modular straightener MFRC ahead of a sanforizing range

Printing machines

Weft-straight fabric is one of the most essential prerequisites for printing. A straightening process directly in front of a printing machine is the very last opportunity to correct any bow or skew. With an MFRC module there, the risk of any deterioration in quality as a result of printing on distorted fabric is drastically reduced.



An modular straightener MFRC with a traverse assembly supported by stands (at the printing machine)

A traverse assembly with photoelectric selvage sensors aligns the web with the edge of the blanket.

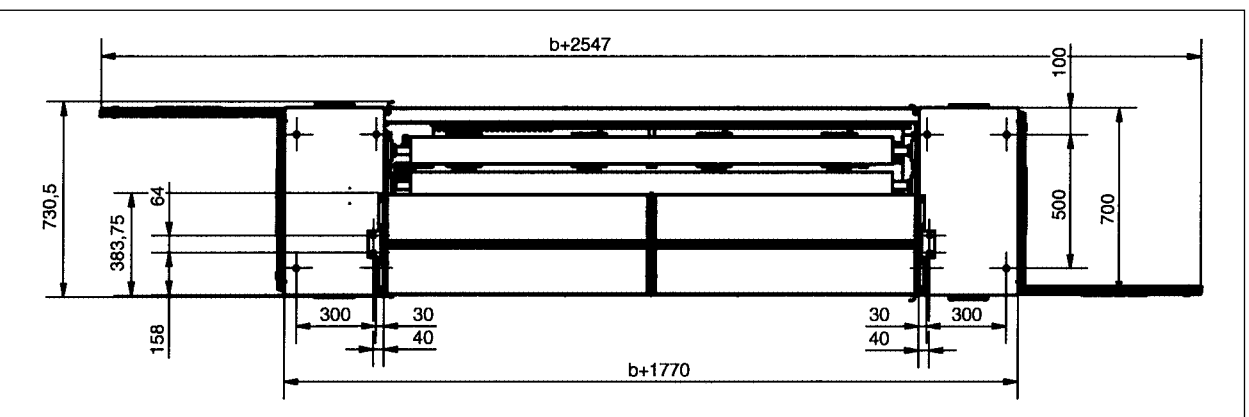
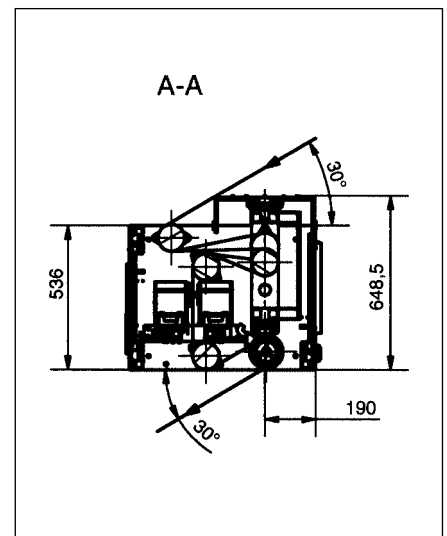
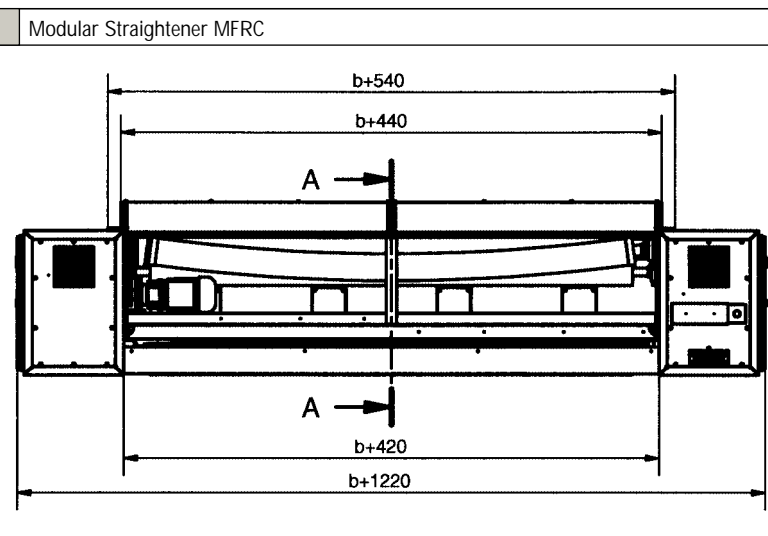
Flame-laminating ranges

On flame laminators, the material must be fed onto the laminating roller in a perfectly weft-straight state. Correction is out of the question once it has left the range. By placing an MFRC directly ahead of the laminating roller, the quota of seconds can be reduced by some 80%.

As it could conceivably be used for many more applications, we suggest you discuss your requirements with our sales or application-technology personnel.

ORTHOMAT MFRC/DFRC Technical data

Weft detection:	Lie of weft monitored by a process of photoelectric sensors using oscillating optics.	
Number of scanners	4-8. A servomotor controls their position in relation to the given cloth width. MFRC models adjust automatically to different cloth widths.	
Weft realigner:	A single cambered roller in a centrally pivoted frame to correct both bow and skew.	
Roller control:	Hydraulic; infinitely variable	
Assembly dimensions:	See above	
Computer panel dimensions:	520 x 400 x 252 mm (B x H x T)	
	MFRC	DFRC
Weight (b = 1800 mm):	~700 kg	~780 kg
Material content:	~1500 mm	~2400 mm
Power supplies:	380/400V 3~ 50/60 Hz without neutral line, ca. 1kVA	



b = web width