



# **MONTEX** JV

Stenter

**G E R M A N T E C H N O L O G Y**





## Montex JV (Joint Venture)

The stenter frame presented here is manufactured by Monforts Fong's Textile Machinery Co. Ltd., Hong Kong in Shenzhen. This Joint Venture company was founded in 1998 and has become one of the largest suppliers of stenters in the PR of China. The Montex JV model is Monforts design and largely identical with the stenter frame marketed under the name of Monfongs in China, of which almost 800 machines have been sold.

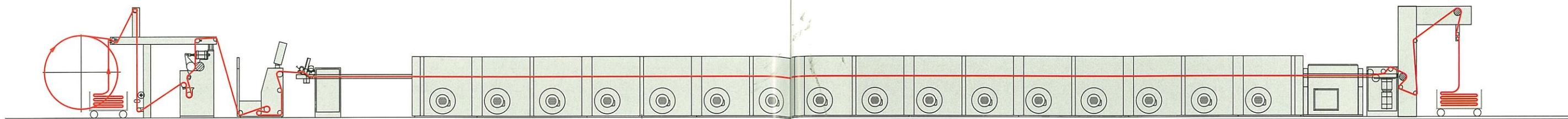
Buyers outside China get a stenter with some minor technical modifications to suit local conditions. Customers receive the stenter frame Montex JV exclusively from A. Monforts Textilmaschinen GmbH & Co. KG with CE conformity declaration, if required. Installation and service, operation and maintenance manuals as well as replacement parts and parts subject to increased wear and tear are provided by the well known

service team of A. Monforts Textilmaschinen in Mönchengladbach with the diligence and high quality you are accustomed to.

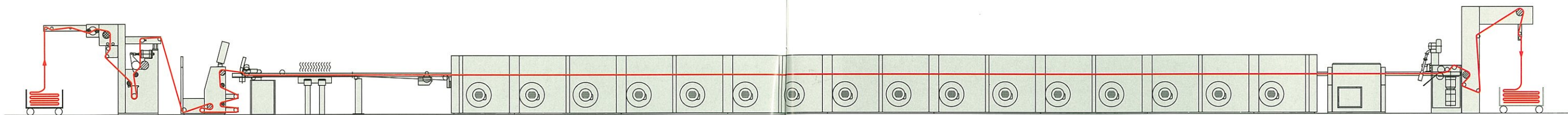
We are sure that this additional quality product, which is good value for money, is a valuable complement to the Monforts product portfolio.



# Modular Design



Montex JV for woven fabrics with 8 chambers and 200 cm nominal width



Montex JV for knitted fabrics with 8 chambers and 260 cm nominal width

## Configurations available from 4F with four treatment chambers - 10F with ten treatment chambers

Stenter for all drying and heat setting processes. With the corresponding configuration the machine can be practically used for all types of fabrics.

### Stenter range for

- Dehydration
- Drying
- Finishing
- Curing
- Heat-Setting of woven and/or knitted fabrics

### Technical data

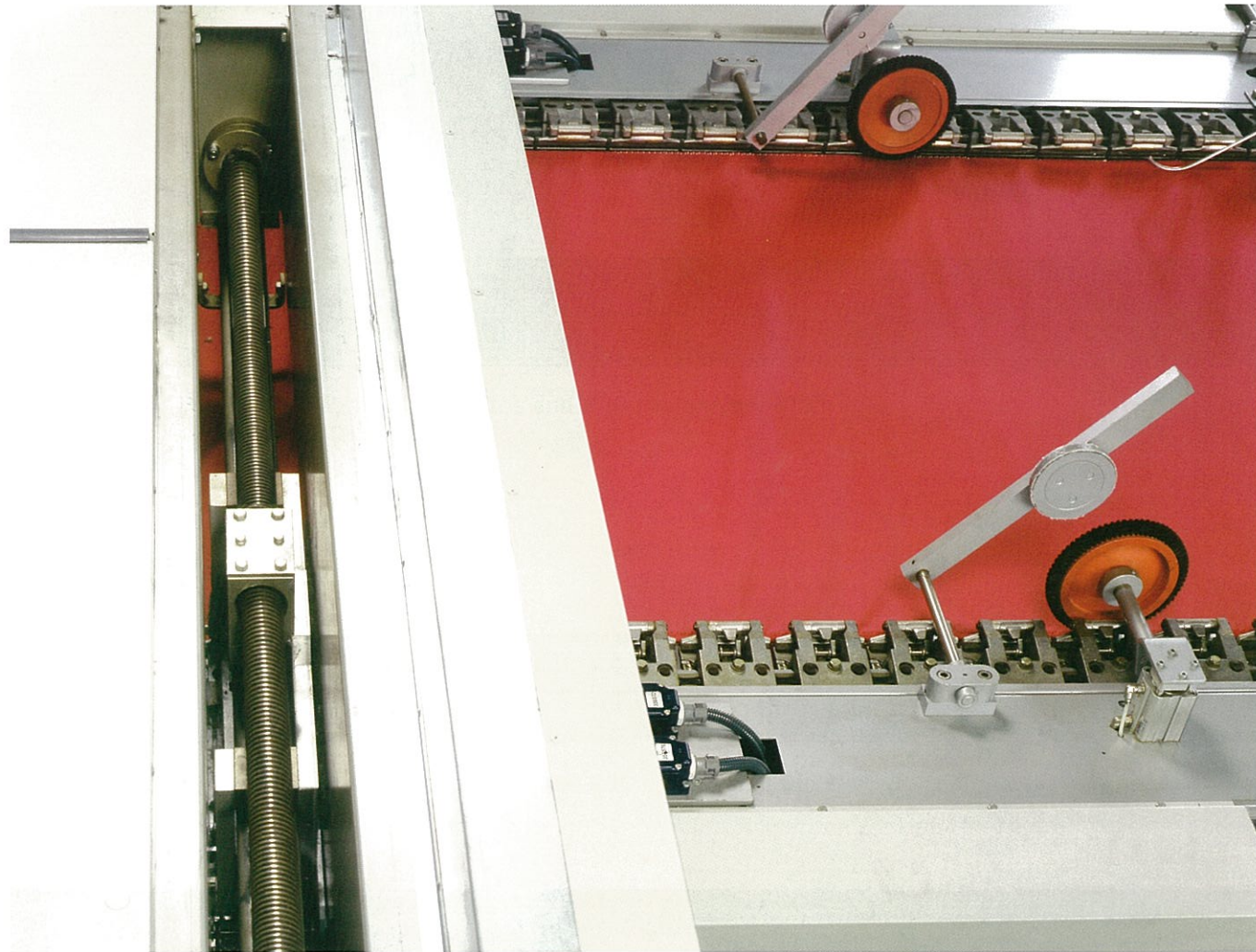
The following executions are available

- number of chambers available: 4F - 10F
- for woven fabrics
- for knitted fabrics
- for woven and knitted fabrics
- working width range available: 180 cm and 240 cm
- minimum working width: 60 cm
- max. chamber temperature: 220°C
- stentering chains: Hercules horizontal with long term lubrication
- machine speeds: 5 - 100 m/min (other speeds upon request)

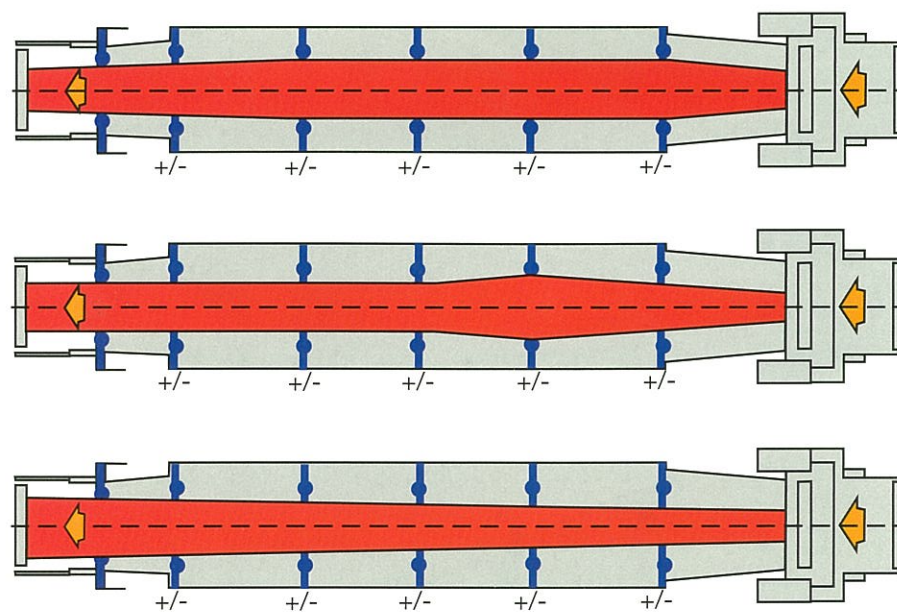




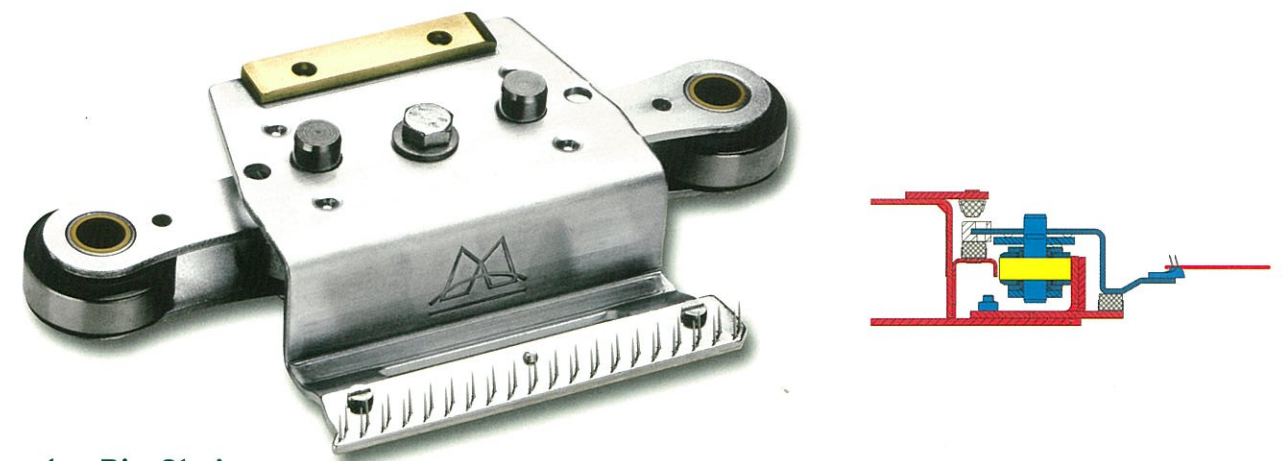
## Chain track width adjustment



Any width profile can be pre-selected by individually driven lubrication-free spindles. The adjustment is being made from a central control panel.



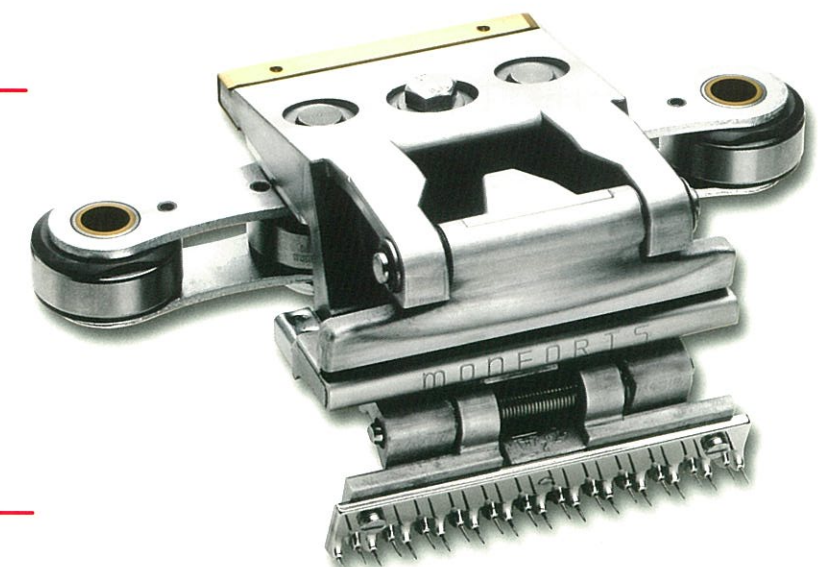
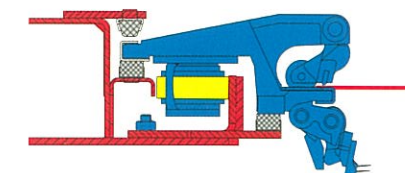
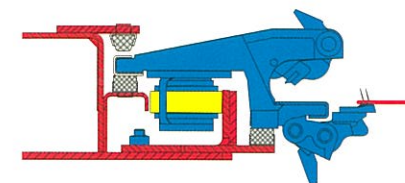
## High Tech stentering chains



Hercules Pin Chain

### Hercules Horizontally Return Stentering Chain

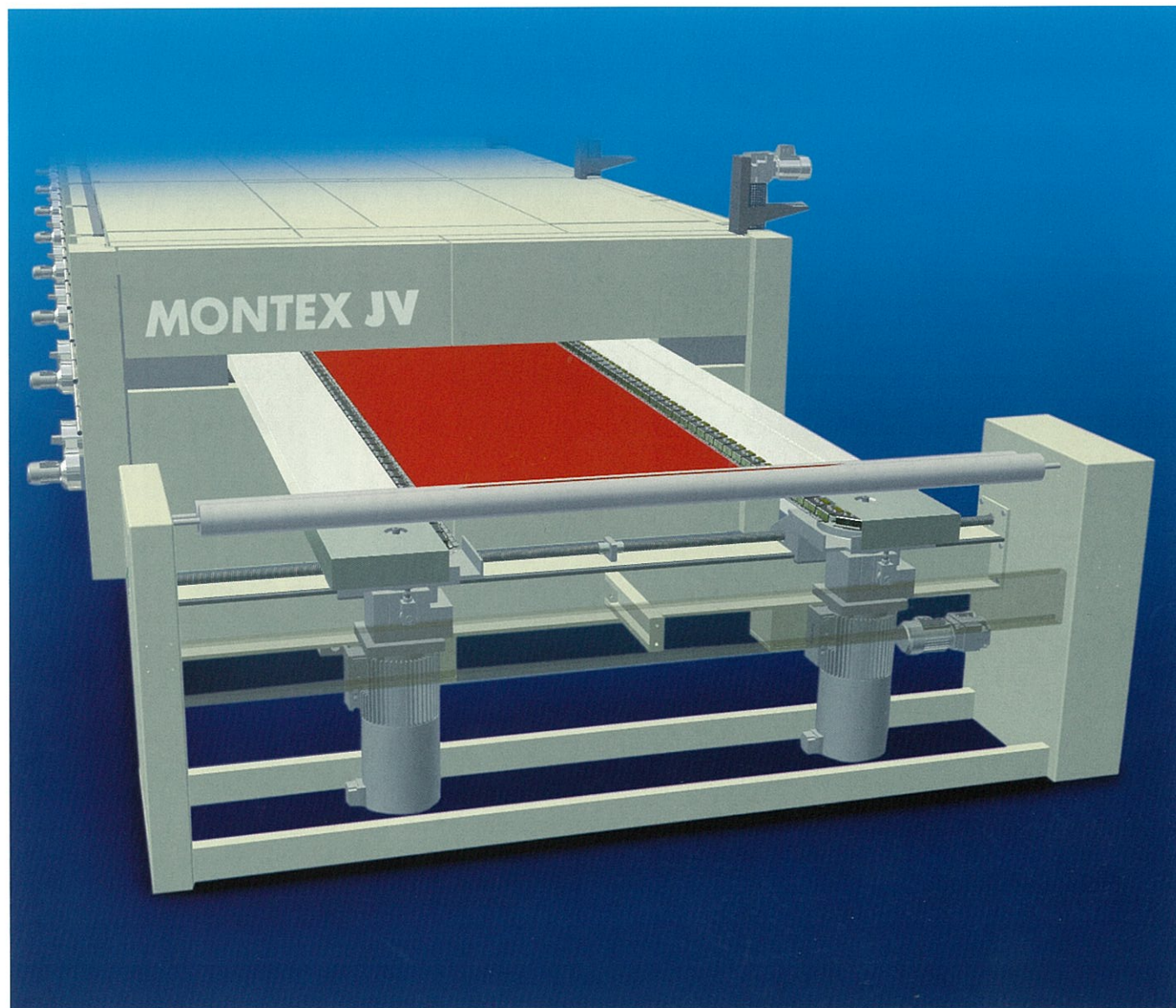
- Roller chain which runs absolutely dry through the machine with fully encapsulated ball bearing and long-life lubrication for years (depending upon the process)
- For highest running speeds
- Available as Pin Chain or Combined Pin/Clip Chain
- Optionally depinning protection available for Pin Chain version: With protection bars



Hercules Combined Pin and Clip Chain



## Fabric Transport Drives



### Drives

- All fabric transport drives are equipped with frequency-controlled 3-phase AC motors

### Technology

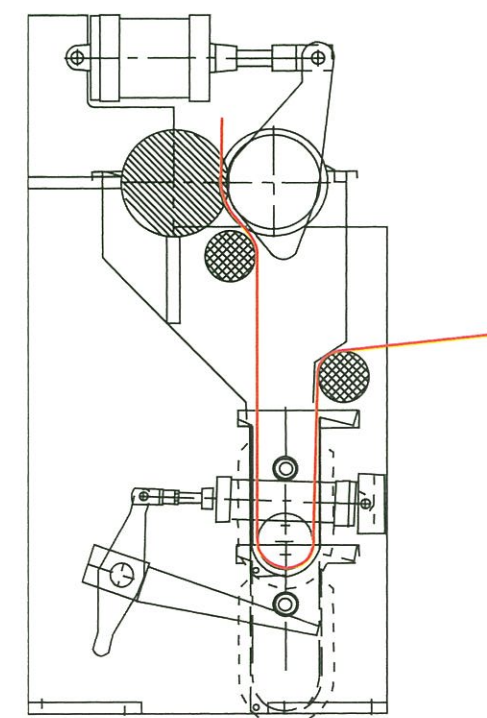
- Protection class IP 54
- Completely enclosed 3-phase AC standard motors
- No soiling in the motor thanks to cooling air
- All 3-phase AC motors with separate surface ventilation
- Large control range
- Higher efficiency (less energy needed)

## Padder Matex 5000



### Padder Matex 5000

Two bowl pad mangle. Suitable for finishing and dehydration processes. For woven and/or knitted fabrics.





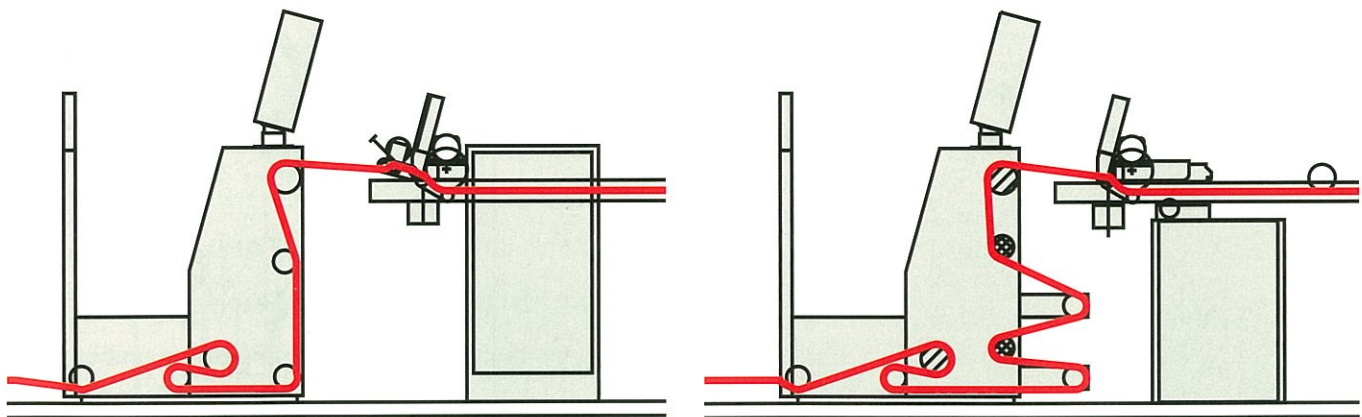
**Stenter infeed section**

Short controlled fabric guidance for optimum feeding of even extremely delicate knitted fabrics.  
Uniform pinning by two driven draw rollers in the infeed unit.



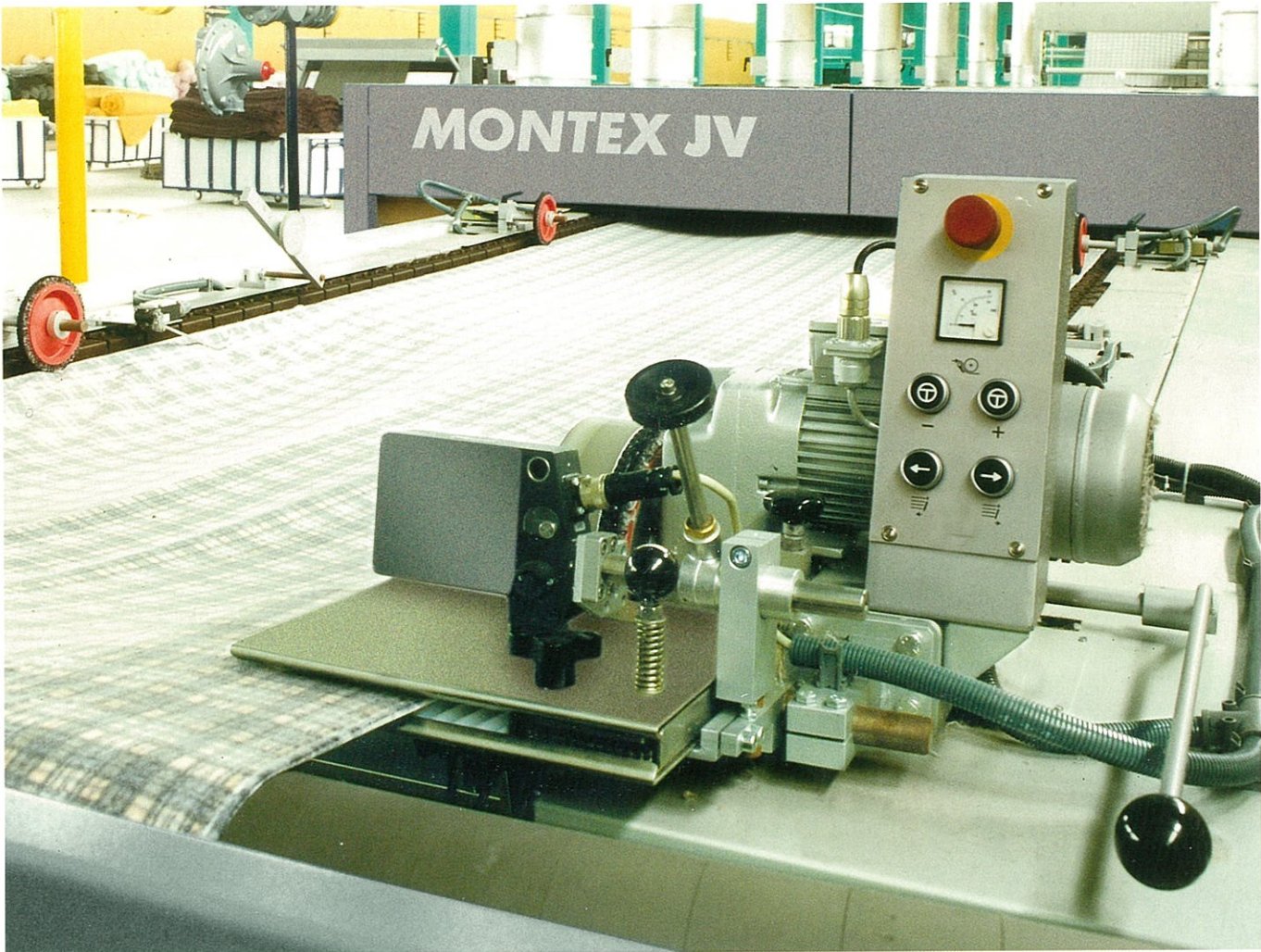
**Infeed track lengths**

Up to 6 m to take auxiliary equipment; e.g. selvedge gumming device, steaming unit etc.



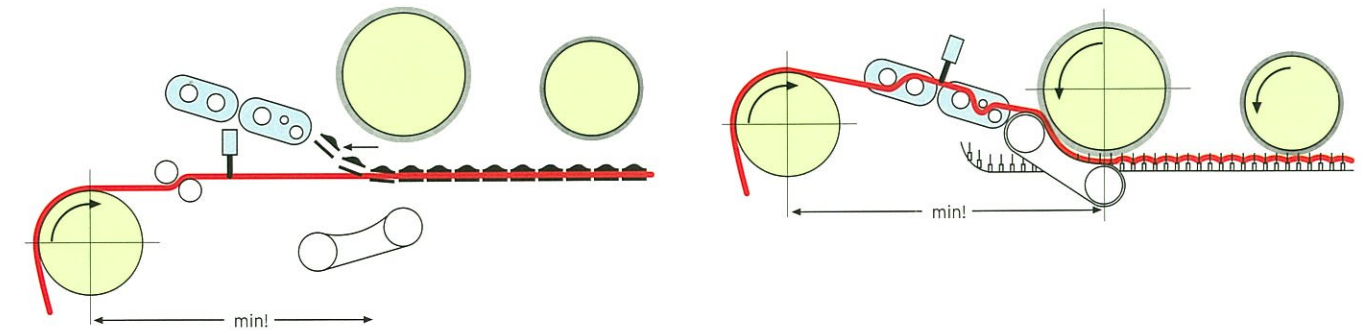
For woven fabrics: 2 guide rollers

For knitted fabrics: 2 correction rollers  
and 2 scroll rollers



**Fabric preparation**

- Large overfeed pinning adjustment range (-10% to +60%)  
to accomodate the various amounts of shrinkage encountered in different fabrics.
- The selvedge tension can be set separately for the left-hand and right-hand side control

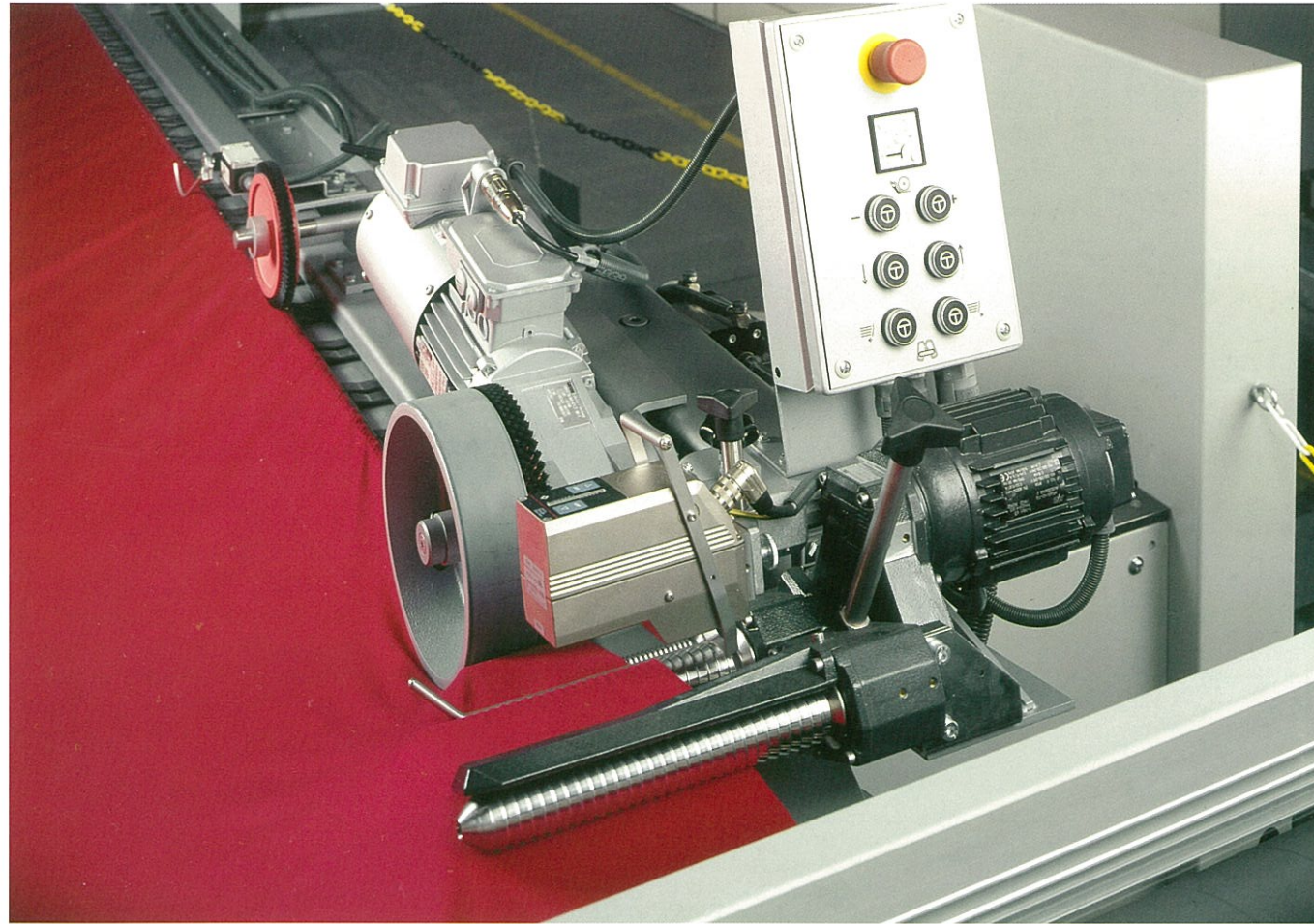


Fabric run: Clip operation

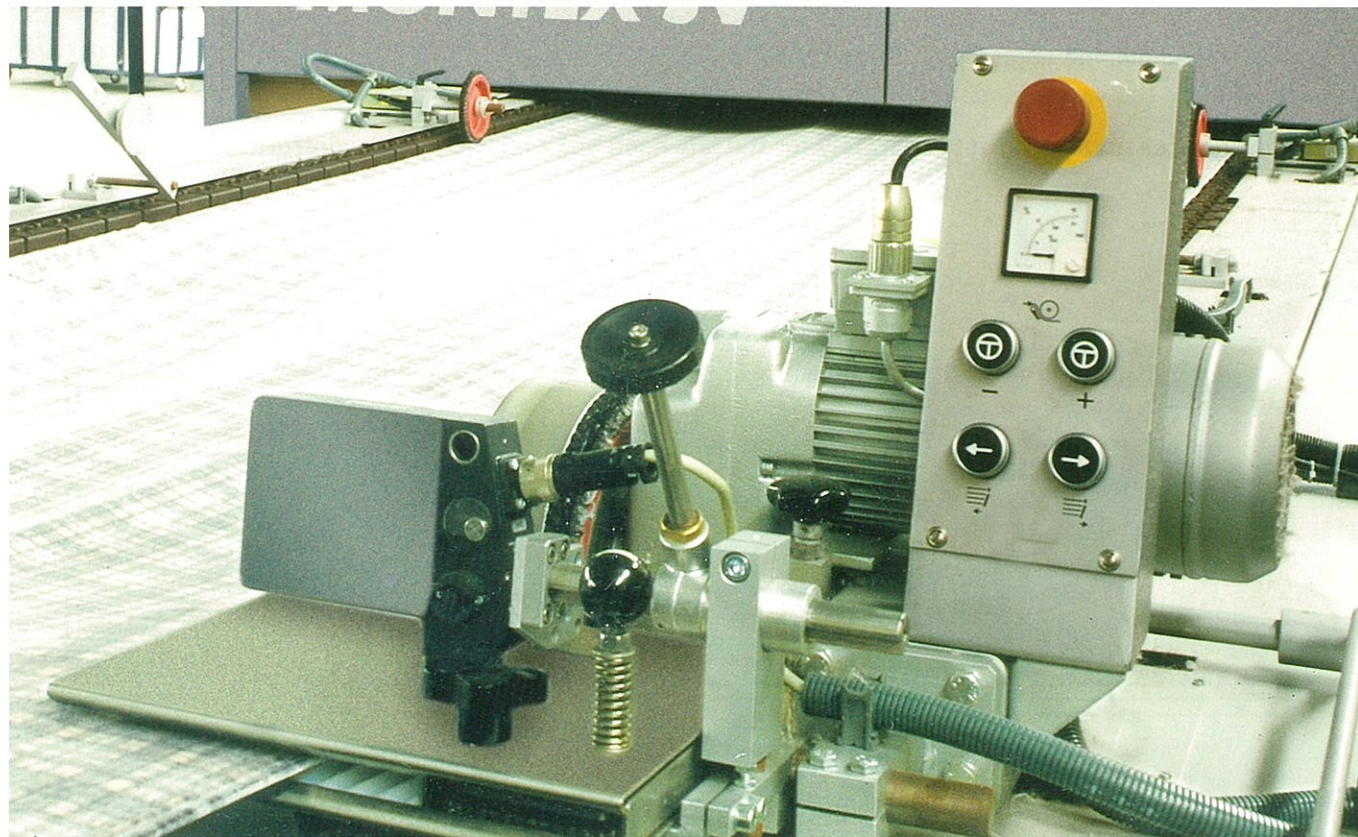
Fabric run: Overfeed during fabric pinning



## Selvedge uncurlers



Mechanical scroll spindles. For woven or knitted fabrics



Mechanical spreading unit. For knitted fabrics

## Air Circulation Control

**TwinAir**

### The TwinAir System

Characteristics:  
Separately controlled air flow  
for top and bottom air

Operating setting:  
Top / bottom air adjustable  
in any desired ratio

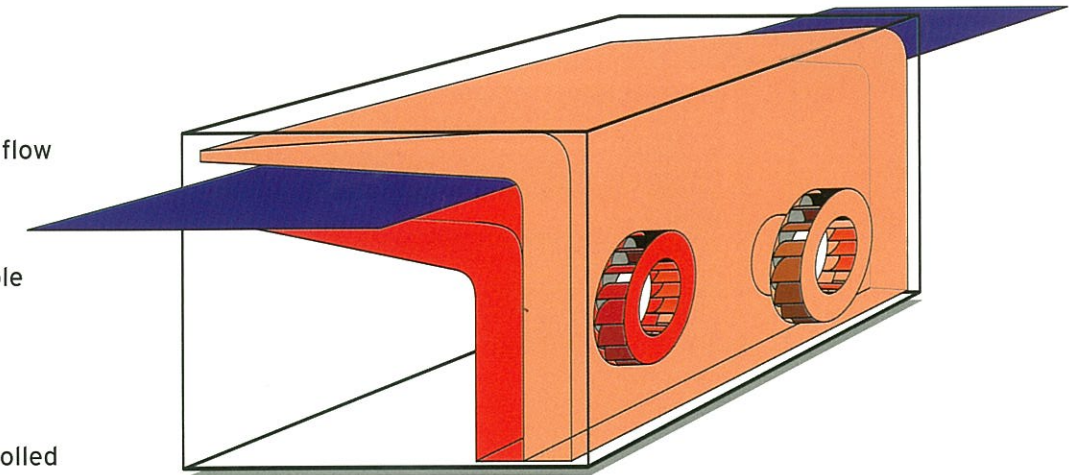
TwinAir with inverters  
(standard feature)

Air volume is being controlled  
by frequency inverters

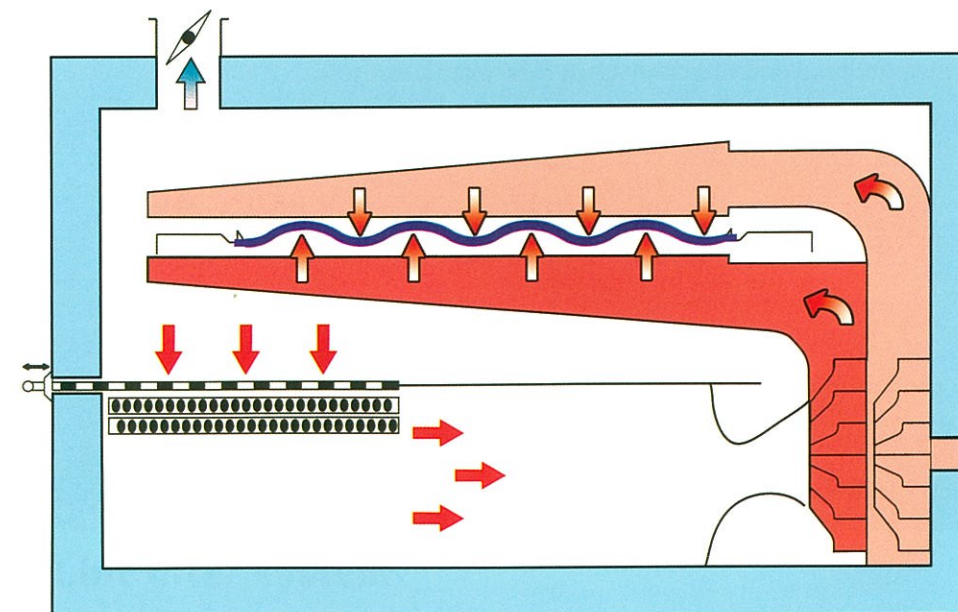
Advantage: Reproducible fabric results at any time. Individual exact setting by speed-controlled fans even at low speeds. Ideal for delicate fabrics such as knitted goods, coated fabrics, viscose, micro-fibres, pile goods and silk. The TwinAir system is based upon a Monforts patent.

#### Service

- Motors are accessible from outside the chamber
- The use of standard components provide benefits in maintenance and inventory for the user

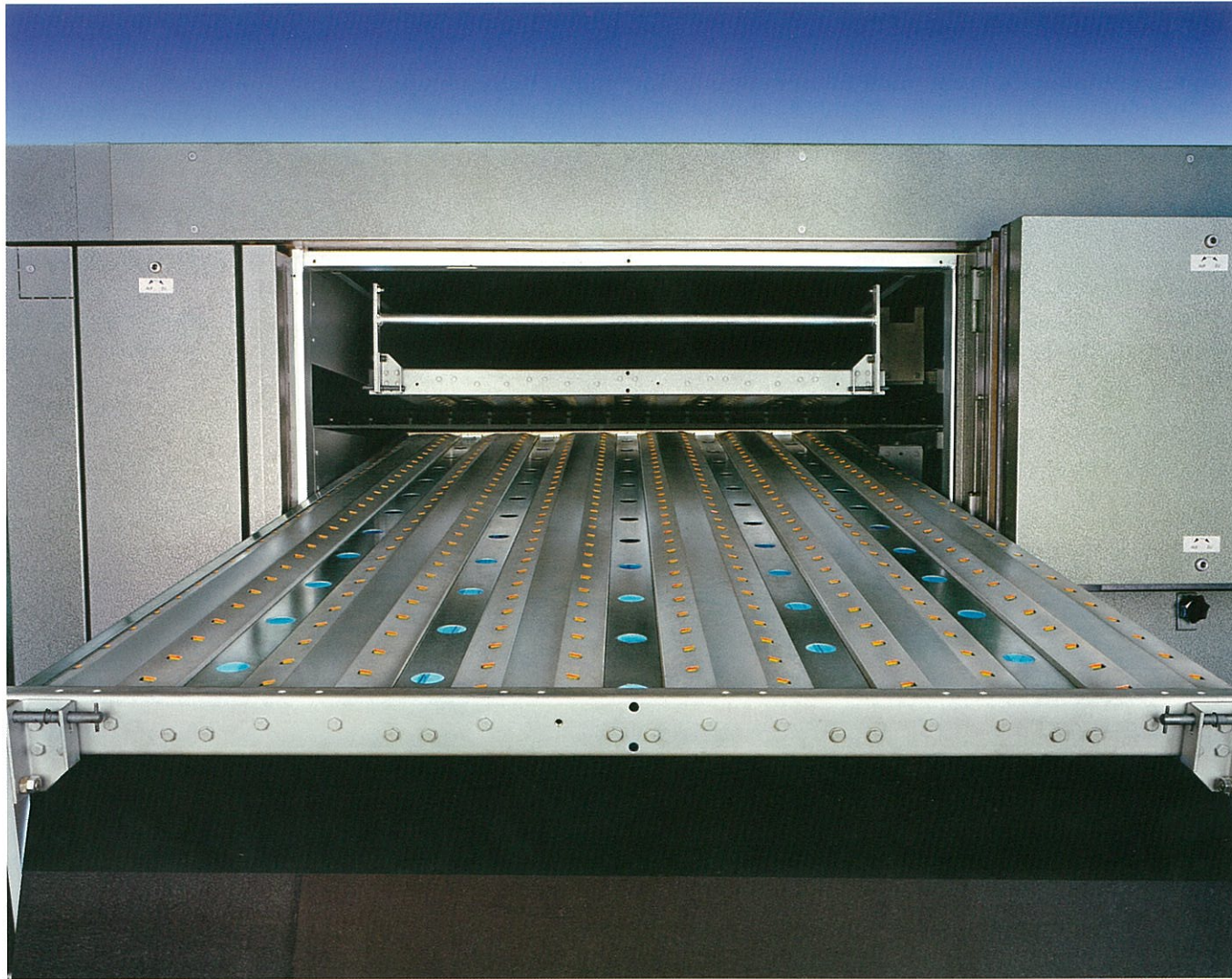


### Chamber Design



- Modular and space saving design with optimum accessibility
- Overall chamber height 1650 mm
- Oil, steam or gas heating
- 150 mm chamber insulation





## Nozzle System

### CAD Stream

"Lay-on-Air" fabric supporting properties with bulking effect through increased volume.

- Even drying over the full machine length
- Outstanding energy utilization
- A staggered arrangement of the nozzles is therefore not necessary

### Feature

- Universally applicable for maximum production flexibility
- Outstanding supporting properties even with minimum air circulation (e.g. during heat-setting)
- Easy to be pulled out for maintenance service

### Advantage

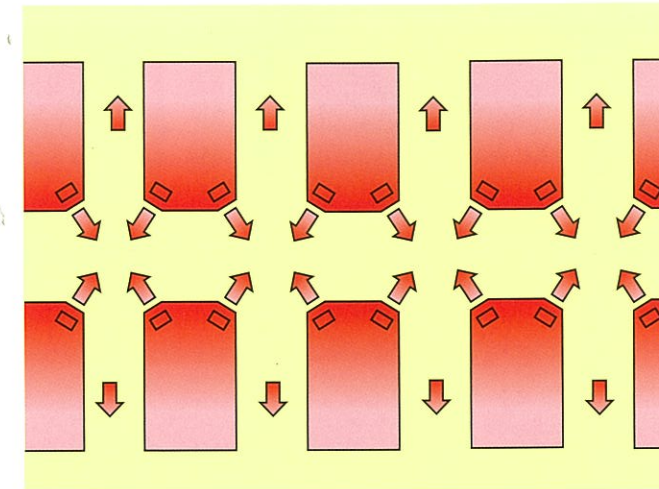
- Attractive cost/benefit ratio is possible thanks to faster air transport with microtumbler effect

### Higher evaporation rates

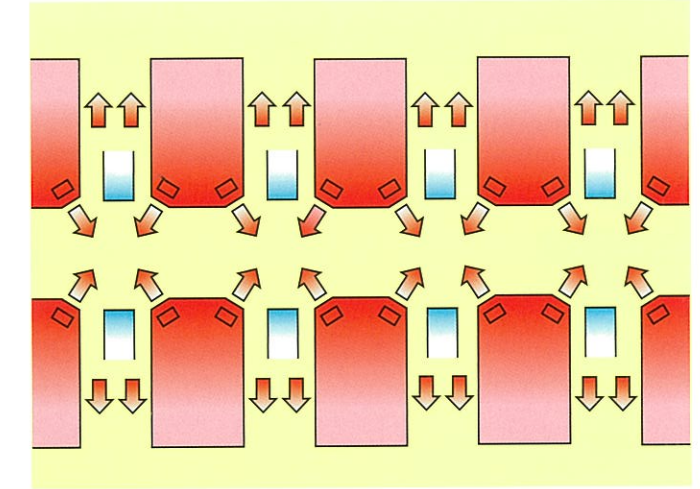
- Continuous fabric support even at chamber transition points
- Reduced energy input
- Gentle heat treatment

### Application versatility

- Highest production speed for woven fabrics
- Gentle treatment of delicate fabrics
- No distortion of knitted goods
- Engineered to finish pile fabrics and technical textiles



Nozzle design for woven fabrics



Nozzle design for knitted fabrics



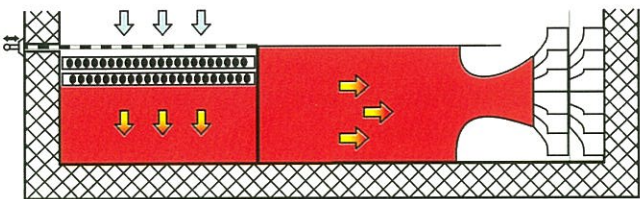
## Lint filter system

### Double Layer Lint Filter Secuclean

Allows pull-out of the top filter for cleaning during operation



# Heating Options



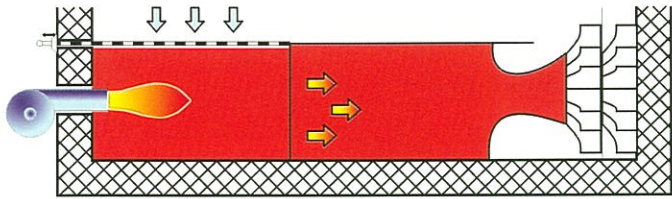
Circulating Oil Heating

## Circulating oil temperature control

- Large heat exchanger surface areas for quick heating up

## Energy Input as required

- Direct gas heating
- Circulating oil heating
- Steam heating



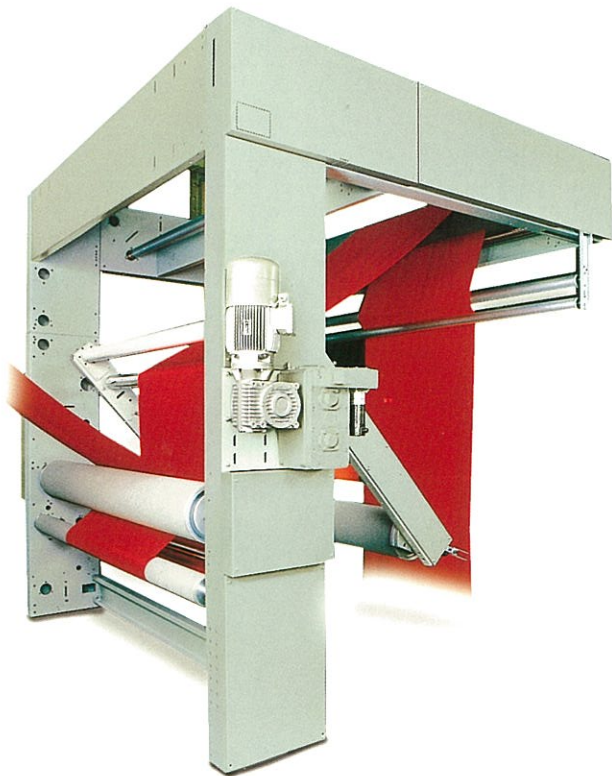
Direct Gas Heating

## Direct gas-fired heating

- Easily accessible burner arrangement with optimum fresh air supply

# Machine Colour

RAL 7038 agate grey



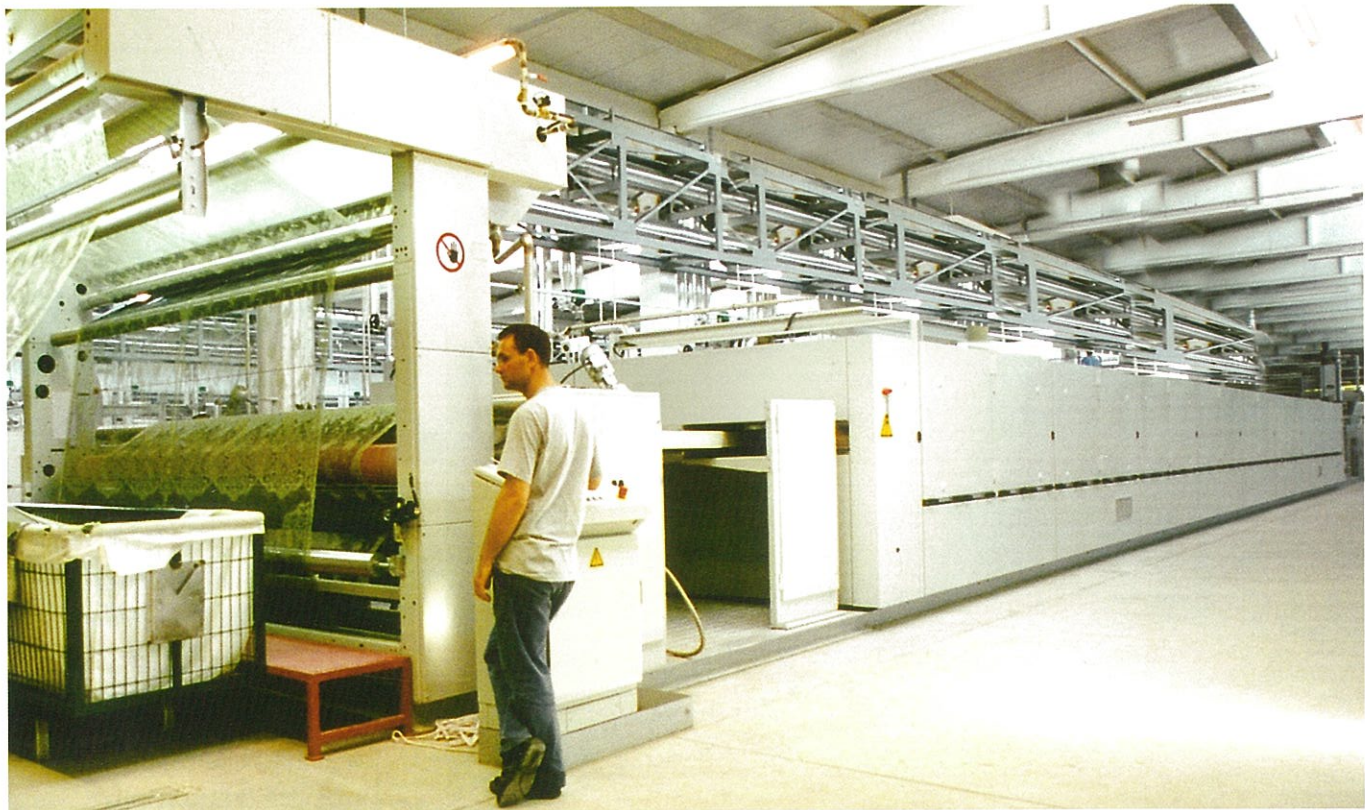
## Note:

The illustrations and figures contained in this brochure have merely informational character and are not binding for the technical design. Modifications in line with technical progress are reserved. In some case the illustrations show special machine configurations. Many designs are protected by Monforts patents.

# Electrical equipment



Central operation from the control desk via push buttons and selector switches



Frequency controlled systems for all transport drives and for fan drives. Air conditioning for switch cabinet as option.



## Electric/Electronic Options

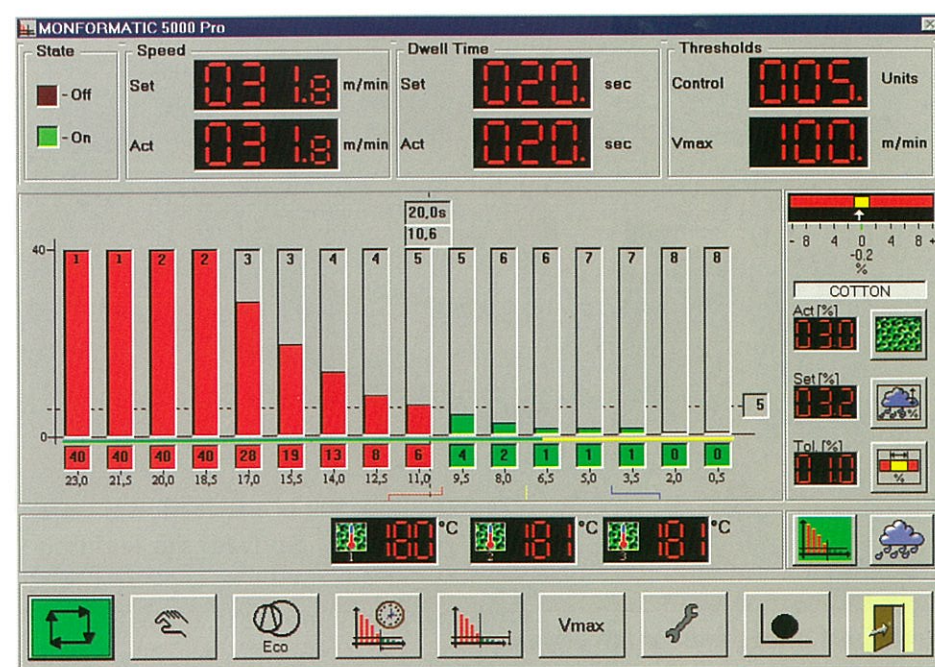
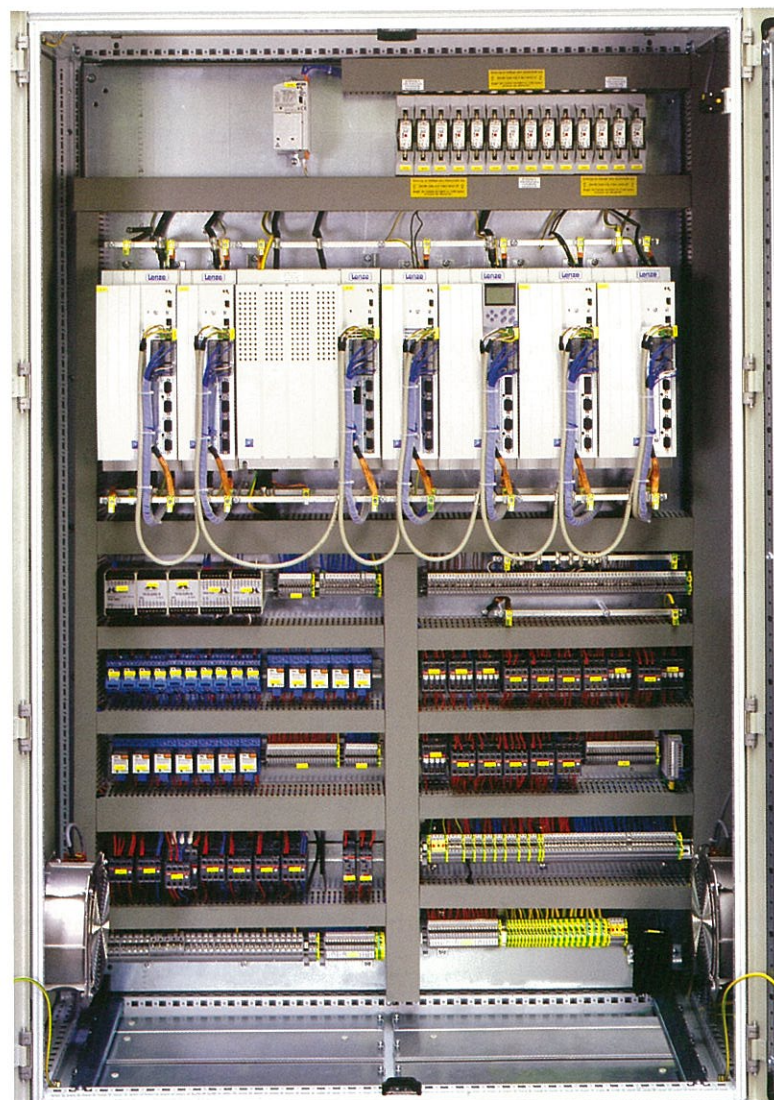
- Mastermind PLC control
- Monformatic computer-aided monitoring and control system

For cost effective operation with optimized dwell time and fabric speed.

The system prevents unnecessary overdrying during heatsetting process and thus contributes to reducing the operation costs.

Better reproducibility than with manual control.

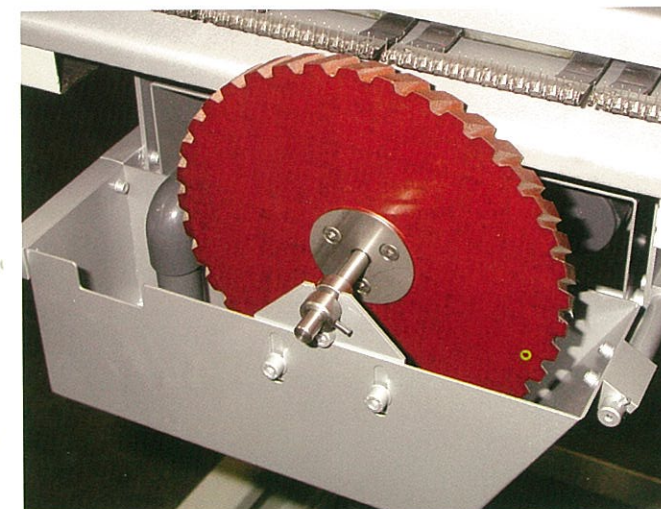
- Aeromatic
- Exhaust air with frequency control
- Exhaust air moisture measurement
- Intercom system
- Fabric monitoring by outlet camera supervision
- Air condition for switch cabinets
- Residual moisture measurement
- Antistatic for plaiter
- Antistatic for batcher (woven only)



## Further options

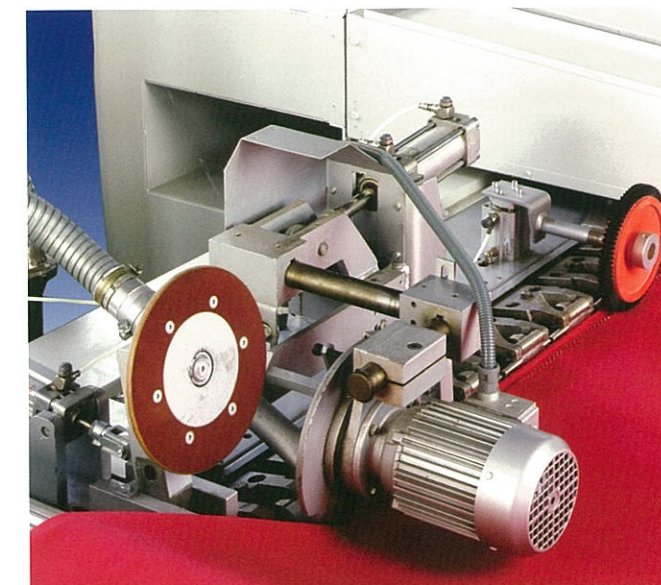
- Bypass flaps
- Combined pin/clip chain
- J-scray for inlet (woven only)
- J-scray for outlet (woven only)
- Two cooling cylinders at the outlet (woven only)
- Surface driven winder (woven only)
- Single roller batching device (knitted only)

## Accessories for knitted fabrics finishing



### Selvedge gumming unit with reservoir for minimum glue application

Small-volume working tank with automatic filling level control airtight reservoir (interchangeable). Thus no drying-out of the glue.



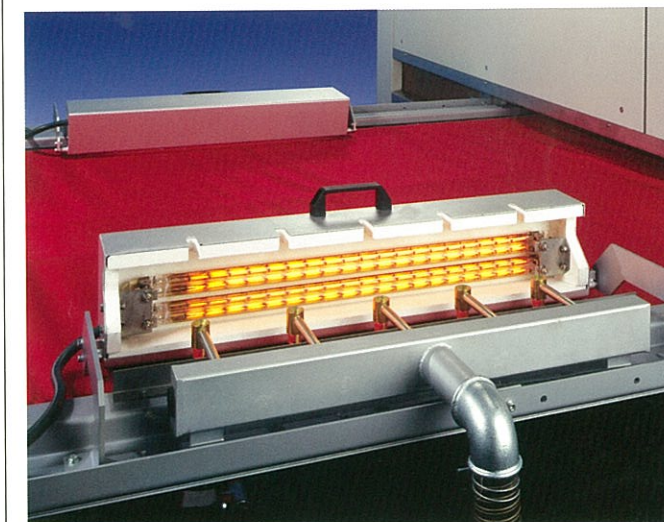
### Selvedge cutting device

For minimum cut of the glued selvedges by rotating cutting blades. High performance suction system for waste removal

Without illustration:

- Steaming device at stenter inlet section
- Fabric supporting rope in the infed section
- Depinning protection bars

## Options for knitted fabrics finishing



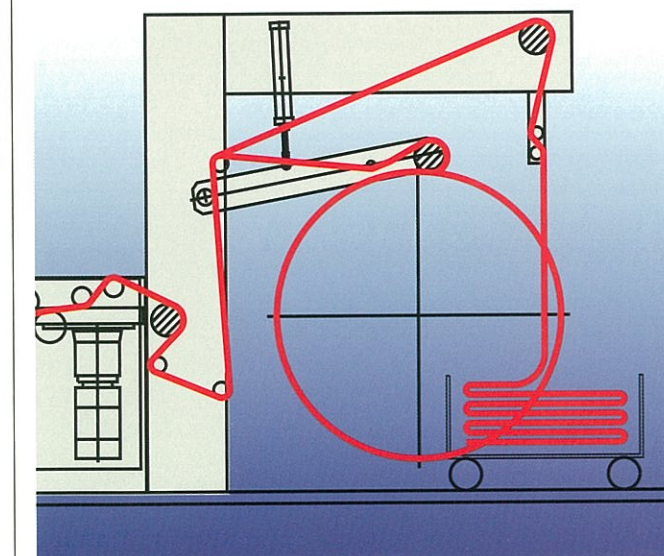
### High performance selvedge dryer

- For energy-saving supplementary drying of glued and salt-impregnated selvedges
- Heating up and cooling down within seconds
- Suitable for woven and knitted fabrics

### Outlet for knitted fabrics

With driven pulling roller and plaiter. Also available with ascending batch winder on cardboard tubes up to 600 mm diameter.

### Outlet for woven fabrics with surface driven winder







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Monforts Fong's Textile Machinery Co. Ltd. · Shenzhen · PR China

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