



electrostatic
innovations



Top Class Remoistening WEBMOISTER 3000

1

NECESSITY

What do you actually need remoistening for?



In the heatset web offset process the inks are dried with hot air. This is rapidly followed by a reduction in the water content of the paper, leading to considerable problems in the following processes. Electrostatic remoistening increases the water content in the paper after drying, returning to the level required.

2 ADVANTAGES

What are the advantages of remoistening?

Electrostatic remoistening not only noticeably improves the quality of printed matter, but also increases productivity throughout the entire process chain.

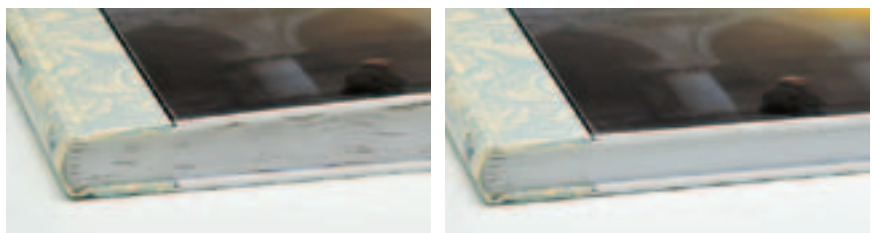
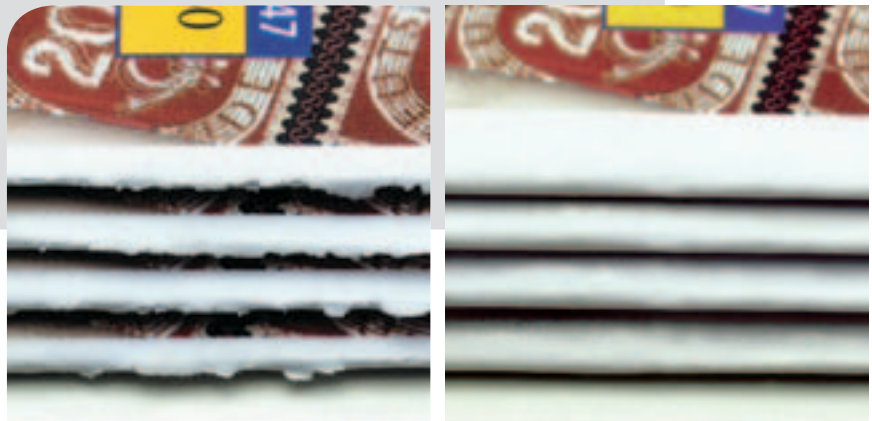
Quality advantages

- Eliminates buckling of perfect bound cross grain products
- Prevents fibre breaking
- No growing of pages
- No climate waves (waviness)

Remoistened signatures can be mixed with signatures printed in other printing processes without any problem. The signatures lie completely flat. Problems such as inner sheets dropping or creases at the folder perforation are a thing of the past. Remoistening ensures that the paper web remains elastic and is therefore far more resistant to mechanical stress.

The economical advantages

are to be found in the improved running properties of the remoistened paper. Fewer web breaks and higher speeds in the printing press as well as in the subsequent processes mean more efficient finishing and processing.

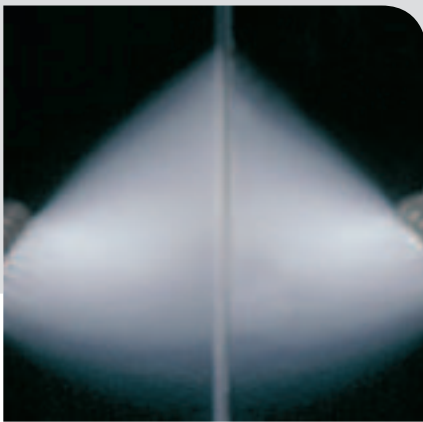




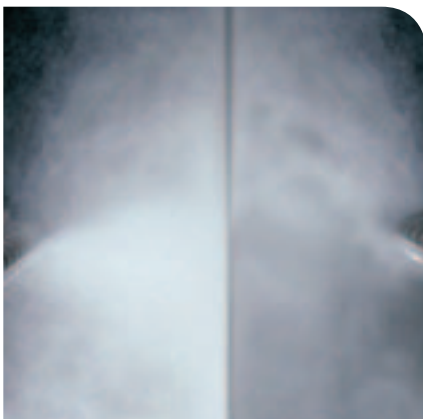
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PRINCIPLE

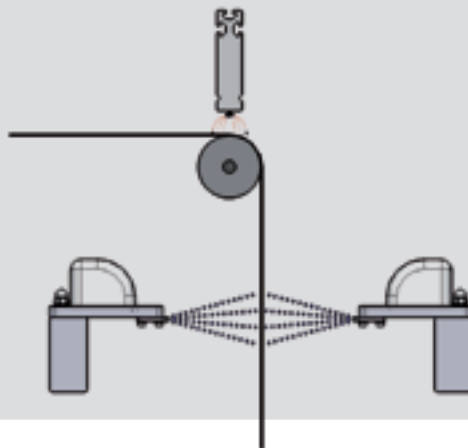
How does electrostatic remoistening actually work?



with electrostatic



without electrostatic



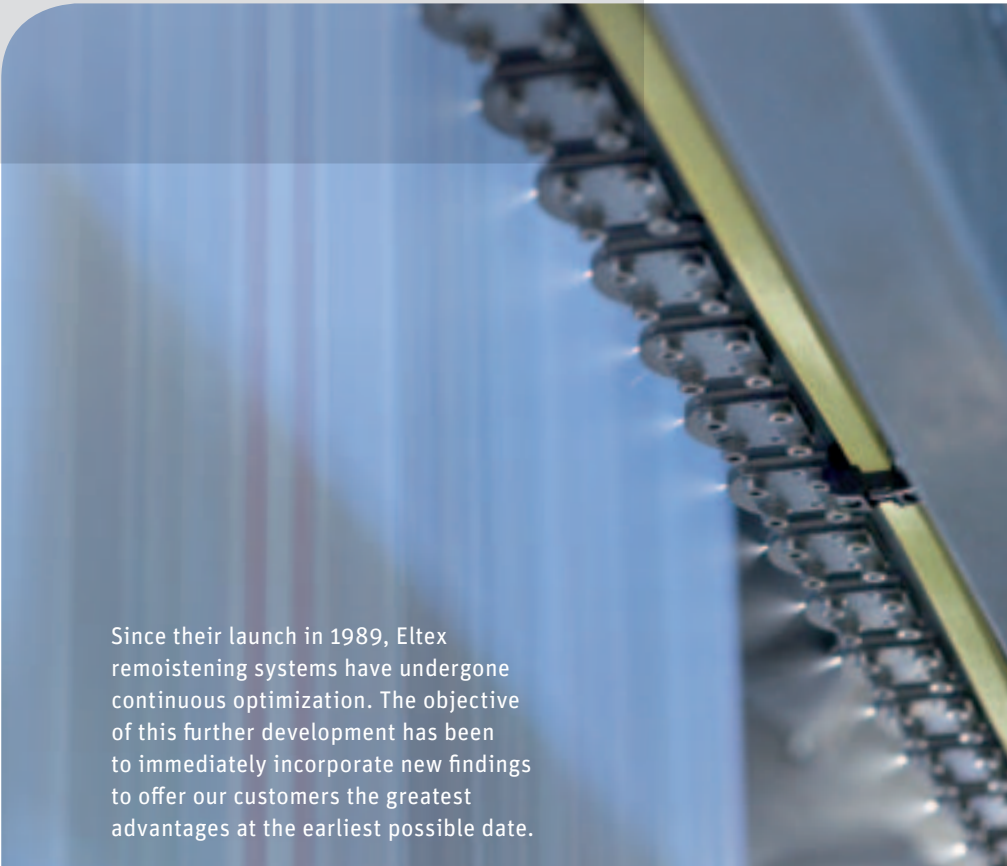
Electric voltage and water – does it go together? Yes, it does!

It is a commonly known fact that electrostatic charge attracts dust. This effect can be exploited with water on a running paper web by the controlled generation of high voltage. A fact known by the users of over 350 Eltex remoistening systems which have been installed worldwide. The paper web is charged via a charging bar – prior to remoistening. Pneumatic atomizing nozzles arranged in opposition spray water droplets which are aligned by the electric field and accelerated in direction to the web.

The droplets hit the web in the form of finely atomized micro aerosols. Due to the characteristics of the droplets and the high voltage field, the droplets are able to overcome the air boundary layer and penetrate into the fibre structure of the paper. The water is absorbed by the substrate.

5 INNOVATIVE STRENGTH


How does the
WEBMOISTER 3000
differ from
previous models?



Since their launch in 1989, Eltex remoistening systems have undergone continuous optimization. The objective of this further development has been to immediately incorporate new findings to offer our customers the greatest advantages at the earliest possible date.

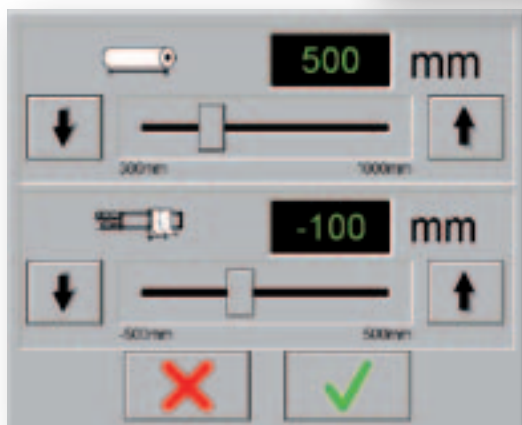
Optimized technology by new nozzle concept

Benefits

- no waste water
 - reduced water specifications
 - wider web widths
 - lower operating costs
- 

6 CONTROL

Is the system easy to operate?



The unit is operated via a new touch-screen remote control. The display provides the operator with information on the status, correct functioning and any possible faults of the system.

The operator is carefully guided through the menu via key symbols with clearly allocated functions. Only the operating symbols actually required are displayed on the screen.

7 COMPONENTS

8 COMPACTNESS

Which elements make up the unit?

The WEBMOISTER 3000 basically consists of three parts:

➤ Remote control

The remote control operates via a new touch-screen monitor integrated in the press control desk or mounted directly to the remoistening system.

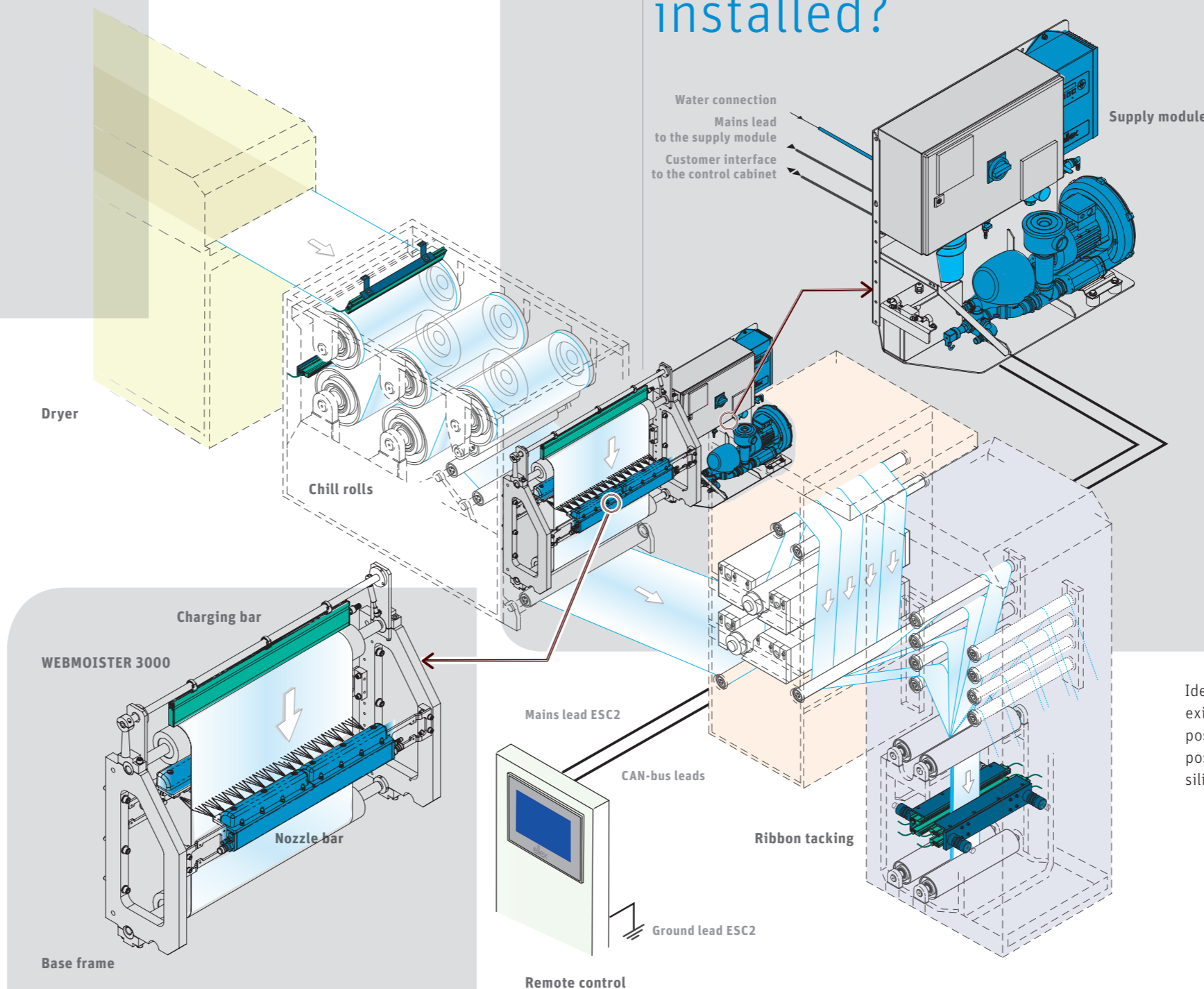
➤ Base frame

The base frame includes the components of the system, the configuration of the bar, the nozzle bar and the paper web guide roller.

➤ Control cabinet and supply modules

The control cabinet is designed for direct mounting to the base frame and includes control elements, the high voltage generator and the water supply. The pneumatic atomizing nozzles are supplied with water via a water flow controller.

Where is the WEBMOISTER 3000 installed?



Ideally the unit is installed at the exit of the chill roll stand. If this is not possible, it may be fitted in another position between the chill rolls and the silicone applicator.

9

SAFETY

Isn't high voltage dangerous?



The reliable Eltex charging bar is used to generate the high voltage field. The shockless bar guarantees an optimum field generation and field distribution. The Eltex high voltage generator supplies controlled and target-specific high voltage. This guarantees the highest degree of safety and optimal electrostatic field.

**10 ECONOMY**

Does the WEBMOISTER 3000 cause high operating costs?

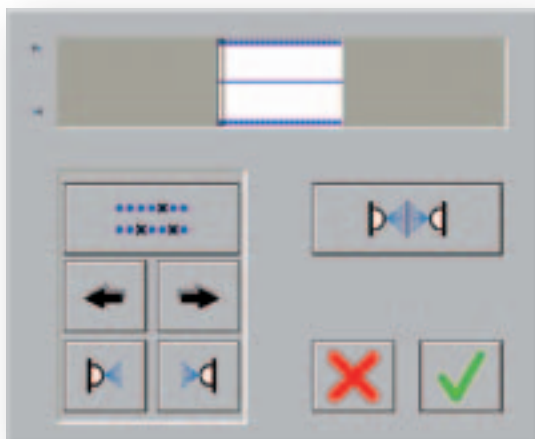
Just the opposite!

The operating costs of the WEBMOISTER 3000 are lower than in all predecessor models. The energy consumption is negligible. The unit atomizes only the quantity of water which the paper needs; no waste water. Maintenance costs are extremely low.



11 SIMPLICITY

How much training will our printers need to operate the unit?

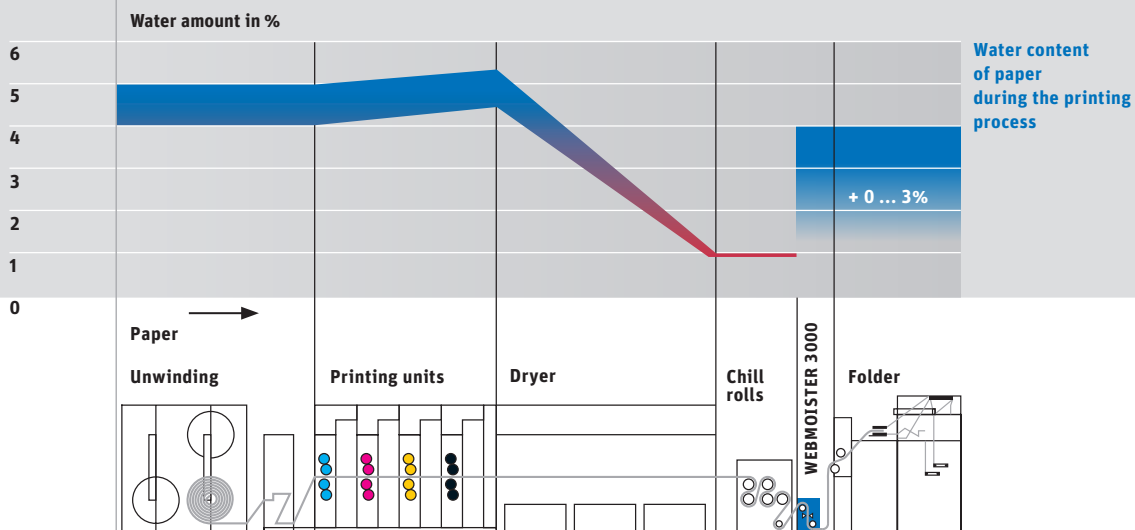


The unit is very easy to operate; no need for complex training. In the basic version of the remote control, only the web width and the desired remoistening level need to be entered.



12 MONITORING

How can I assess the effect of the WEBMOISTER 3000?



The best proof are satisfied customers who are pleased to receive top quality heatset products. In order to ensure customer satisfaction during the production process, we recommend making spot checks of the water content of the paper. The WEBMOISTER 3000 always sprays the amount needed. Moisture variations in paper are quite common and can be identified by regular measurements.

13 REFERENCES

Who uses electrostatic remoistening?

Eltex remoistening units are used with the latest, extra-wide heatset web offset presses operating at highest production speeds, as well as on printing presses with normal web widths and speeds.

Even if the print run is rather small and it is not worth operating at maximum speeds, the WEBMOISTER 3000 achieves a homogenous and linear remoistening. Today, over 120 printing houses worldwide already appreciate the advantages of Eltex remoistening systems.



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KOMORI
Kando: Beyond Expectations

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OFFSETDRUCK

Mohn media
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LEYKAM
LET PRINT

Bydane Verlag
Köln

offset alpine printing

14 QUESTIONS

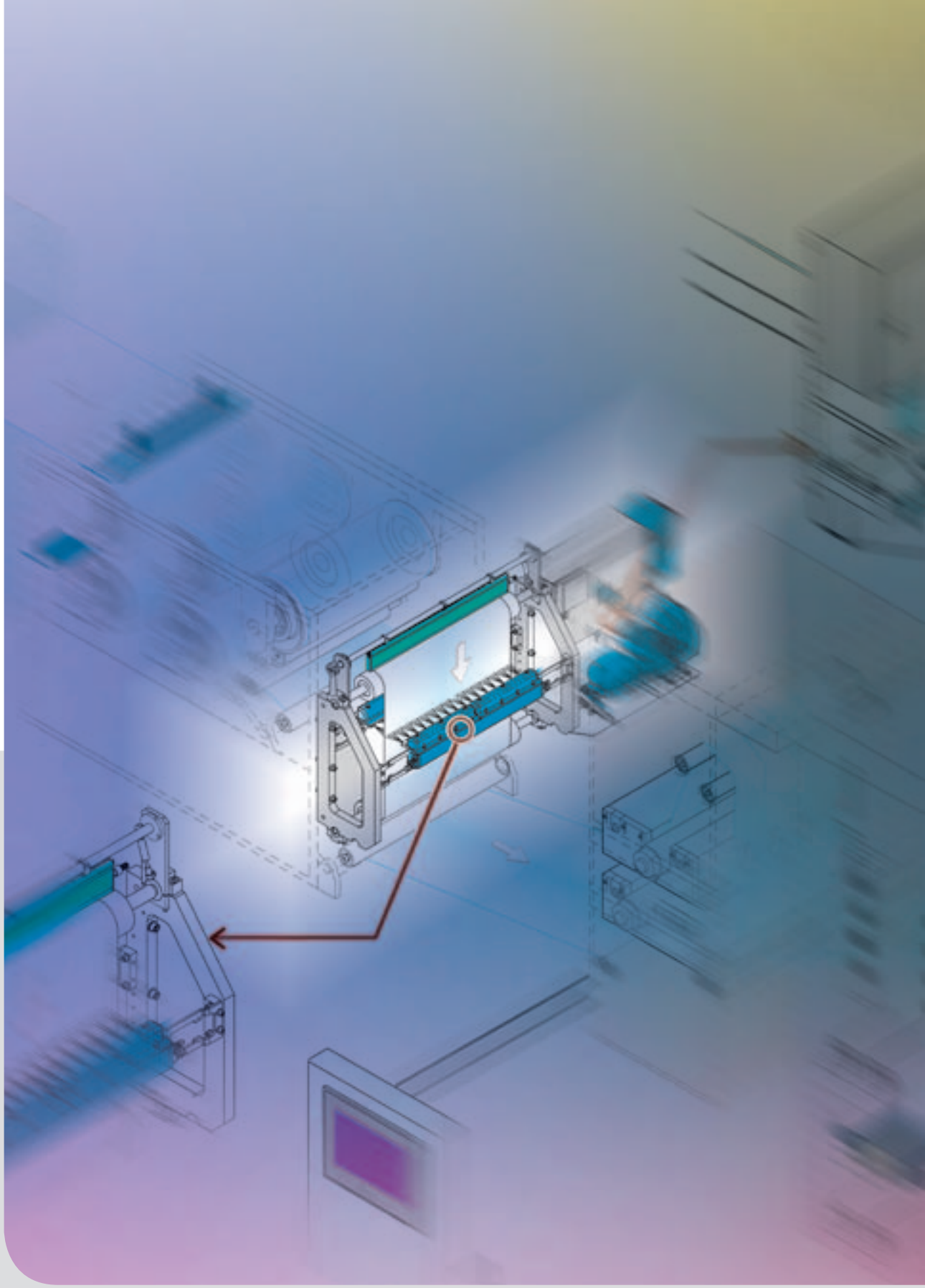


What can we do for you?

You still have some questions?

Don't hesitate to ask your nearest Eltex consultant, the Product Manager for remoistening or contact the Eltex headquarters in Weil am Rhein. You may also see our website www.eltex.com for the latest information.

The desire to know what our customers want and to find solutions for them is what drives us on. This is the basis of our expertise, enabling us to develop a wide range of pioneering electrostatic solutions and specific applications for you. Maintenance and support round off our range of services for your Eltex systems.



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www.eltex.com