

The WEKO logo consists of the word "WEKO" in a white, sans-serif font, centered within a black square.

WEKO Rotor Application System.



WEKO-SIGMA Rotor Carrier.
WEKO-FLOW_{paper} Fluid Supply.

WEKO Rotor Application System. Innovative.

Application System For Liquids Onto Material Webs Or Continuously Conveyed Products.

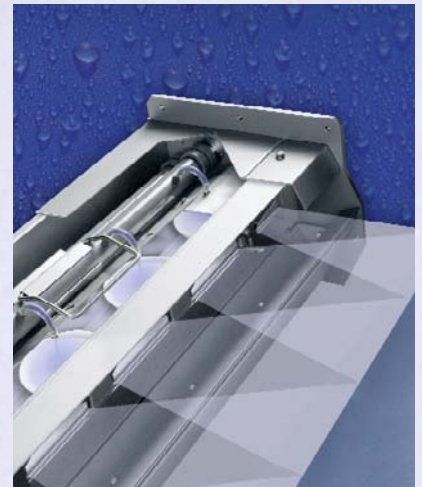
Function principle

Application occurs by specifically designed spray disks, called rotors, which are located one next to each other within a rotor carrier. The supply unit provides them with the desired liquid quantity. Rapid rotor rotation produces a uniform flow of microscopically small droplets. Adjustable sliders form a defined spray fan on each rotor, and the individual spray fans are

arranged next to each other without a gap and cater for a uniform application.

Applications

- Conditioning by remoistening after drying processes
- Finishing, coating and impregnating



WEKO-SIGMA Rotor Carrier. The New Generation.

For this new generation long-term stability, easy operating and maintenance have been brought into focus.

What is more is that the SIGMA rotor carrier is specifically designed for the use of functional and finishing substances.

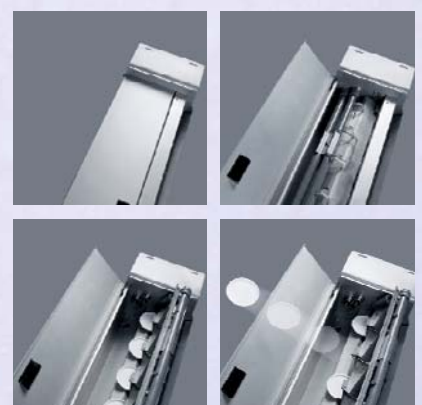
Advantages

- Quick change-over when changing chemicals
- High extent of long-term stability
- Easy to operate
- Low-maintenance
- Very long service life

Features

- Plug-type rotors, easy to remove
- Removable fluid supply system
- Driving components and bearings separated from the spray area
- Wide dynamic range with respect to application quantities
- Space-saving

Easy rotor replacement



WEKO-FLOW Fluid Supply Unit. Modular Design.

Objective of the FLOW supply unit is to provide the rotor carrier with the liquid required for the desired liquid application. Further the FLOW unit is responsible for the control of the entire rotor application system.

Function principle

A frequency-controlled rotary pump lifts liquid from the store tank to the rotor carrier via a prefilter. A flow meter monitors the supplied quantity according to the quantity specification and the rotary pump's speed is controlled. The quantity applied is automatically adjusted to the machine speed. Liquid not sprayed by the rotors in the rotor carriers is returned to the supply unit via a return filter. As a result it does not get lost and remains within the liquid circuit.



Main components

- Store tank
- Rotary pump
- Prefilter
- Hydraulic components for quantity control and liquid supply
- Touch panel to operate the application system and to visualize the system status
- PLC for system control and monitoring

Advantages

- Specifically designed for the supply to the SIGMA rotor carrier
- Compact space-saving design
- Modular design allows easy adjustment to applications and customer requirements
- Touch panel with user-friendly system interface
- Good accessibility for system service and liquid change
- Low-maintenance
- Flushing program programmable to specific applications and pump-out of residual liquid as standard
- Use of commercial system components



SIGMA & FLOW – Teamwork Of A New Generation.

Perfect Interaction Of Both Components.

This combination allows you to tailor the rotor application system to a variety of application-specific requirements. That is why an ideal extent of convenience and automation can be achieved.

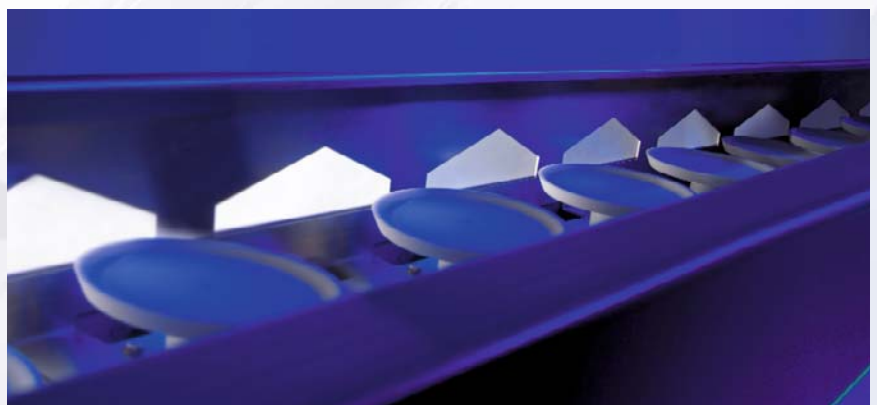
Some options

- Second rotor carrier for two-side application
- Automatic double filter switching for uninterrupted production
- Metering unit for automatic liquid preparation
- Additional monitoring functions for early system fault detection
- Special design adjustments for horizontally conveyed goods
- Kit for the use of nonconducting liquids
- Module throw-off system for automatic web infeed
- Downstream flattening or exposure roller
- Options for control station connection



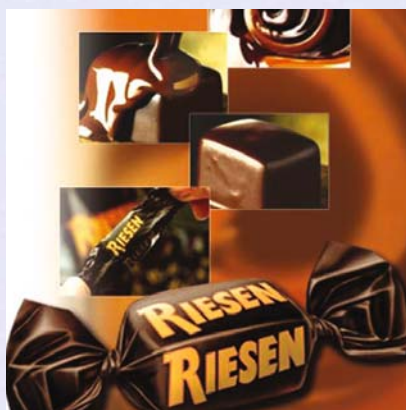
Advantages of the WEKO rotor application system

- Precisely defined application quantity, even in the minimum range
- Reproducible application quantities
- High long-term constancy of liquid quantity and distribution
- Economic use of applied mediums
- Contactless application
- Automatic speed adjustment
- Low energy consumption
- Easy to operate



Application Options – Increasing All The Time.

The proven application system is used in a wide variety of uses and can be adapted to many requirements because of its variability and the modular structure. This is an application system offering a wide dynamic range without system adaptations. Even small application quantities can be applied evenly and with reproducible results.



Primary use:

Conditioning by remoistening after drying processes. This provides flatness and dimensional stability.

Upgrading through coating and impregnation. For the functional equipment.

Example From The Practice



Decorative printing, finishing foils

After printing, the papers are surface-finished and upgraded. Drying causes the printed material to lose its original humidity and dimension. It also becomes brittle and curls which interferes with the subsequent processing steps.



Packaging rotogravure printing and flexo printing

Many packages are printed, coated or applied with functional layers on one side only. Drying processes lead to reduced paper moisture. The paper exhibits a typical curling behaviour and is prone to static charges.



Coatings and composite materials

Drying of function coating draws moisture out of the paper. It shrinks and curls. This effect is reinforced with composite materials of components with different basic moisture content.



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