

# WEKO rotor application system

#### **Function principle**

With the WEKO rotor application system, various finishing liquors can be applied to different textiles without contact. The contactless minimal application of WEKO fluid application systems (WFA) combines cost efficiency and resource conservation. The goal is to make textile production more sustainable and to reduce the consumption of freshwater/wastewater, chemicals, energy and waste.

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 rotation produces a uniform flow 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.

### **Advantages**

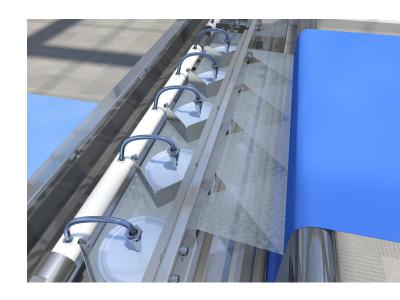
This WEKO rotor application system offers numerous advantages for many fields of the textile finishing:

- even and adjustable distribution of the applied
- careful fabric treatment of low tension, maintenance of the fabric structure due to contactfree application
- fast changing of the liquor
- reduced pollutant content in effluent wastes
- also suitable for application on both sides
- energy saving during drying (dry-on-wet application); substantial production increase of the
- easy processing of wet-on-wet application
- no dilution of the liquor during wet-on-wet application

### **Application fields**

This well-proven liquid application system is used in a variety of applications and can be adapted to many different requirements thanks to its variability and modular design. So WEKO rotor application systems can easily be incorporated in already existing finishing lines.

Due to this spray technology not only re-wetting with water is possible, but several chemical products like softeners, additives to support processing, hydrophilic, hydrophobic or antistatic agents can be applied.



## **Application examples**

#### Calender

other surface effects by defined moisturing.

#### Sanforising process

sanforising agents optimum shrinkage effect.

#### Stenter frame

achieve

Improving the surface shine and Wetting the fabric with water or Use in front of the stenter to replace the padder and applying different finishes.



# CHT products for WEKO application

## **Antistatic agents**

AVISTAT 3 P	а	Efficient thermo stable antistatic agent based on phosphoric acid esters
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## **Deaerating agents**

KOLLASOL CDO	n	Highly efficient deaerator to avoid foam during spray application
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#### **Gloss finish**

ARRISTAN 1901*	sc	Semi-macro emulsion of a functional polysiloxane
ARRISTAN 66*	sc	Semi-macro emulsion of a functional polysiloxane
POLYAVIN PEN	n	Polyethylene emulsion
POLYAVIN bPEN	n	Biobased polyethylene emulsion
TUBINGAL RNJ	n	Compound of fatty acid condensate, polyethylene and waxes
TUBINGAL FMH	n	Amino-amido functional silicone micro emulsion

All gloss finishing agents have to be applied in combination with a mechanical finish e.g. calander.

### **Hydrophilizing agents**

ARRISTAN AIR	n	Polyester-copolymer for synthetic fibres
ARRISTAN rAIR*	n	Polyester-copolymer on recycled base for synthetic fibres

## **Hydrophobic finish**

# **Raising aids**

POLYAVIN PEN	n	Polyethylene emulsion
POLYAVIN bPEN	n	Biobased polyethylene emulsion
TUBINGAL HWS	sc	Hydrophilic silicone compound
TUBINGAL RNJ	n	Compound of fatty acid condensate, polyethylene and waxes
TUBINGAL RSK	sc	Silicone compound softener

# Sanforizing agents

POLYAVIN PEN	n	Polyethylene emulsion
POLYAVIN bPEN	n	Biobased polyethylene emulsion
TUBINGAL HWS	sc	Hydrophilic silicone compound
TUBINGAL PURE	n	Hydrophilic softener based on polyurethane chemistry, silicone free
TUBINGAL RNJ	n	Compound of fatty acid condensate, polyethylene and waxes

n = non-ionic / sc = slightly cationic / c = cationic

<sup>\*</sup>Addition of KOLLASOL CDO recommended for foam inhibition, control liquor dwelling time.

# **Softening agents**

ARRISTAN 1901*	sc	Semi-macro emulsion of a functional polysiloxane
ARRISTAN 66*	sc	Semi-macro emulsion of a functional polysiloxane
ARRISTAN 7220*	n	Semi-macro emulsion of a functional polysiloxane
TUBINGAL 3S	n	Silicone emulsion especially for synthetic fibres
TUBINGAL 9223	sc	Silicone micro emulsion of selected modified polysiloxanes, concentrated
TUBINGAL ACE	sc	Hydrophilic silicone compound
TUBINGAL BSM	sc	Micro emulsion of a functional polysiloxane
TUBINGAL FMH	n	Amino-amido functional silicone micro emulsion
TUBINGAL GSI	sc	Hydrophilic emulsion of a modified polysiloxane
TUBINGAL HWS	sc	Hydrophilic silicone compound
TUBINGAL ISP	sc	Micro emulsion of an aminopolyether functional polysiloxane
TUBINGAL PURE	n	Hydrophilic softener based on polyurethane chemistry, silicone free
TUBINGAL R 20	n	Universal fatty acid condensate product
TUBINGAL RGH	С	Micro emulsion of an organo functional polysiloxane
TUBINGAL RISE*	n	Hydrophilic emulsion of a functional polysiloxane, recycled base
TUBINGAL RMG	n	Universal silicone compound
TUBINGAL RNJ	n	Compound of fatty acid condensate, polyethylene and waxes
TUBINGAL RRW	sc	Silicone compound softener
TUBINGAL RSK	sc	Semi-macro emulsion of a functional polysiloxane

# **Sewability aids**

POLYAVIN PEN	n	Polyethylene emulsion
POLYAVIN bPEN	n	Biobased polyethylene emulsion
TUBINGAL RNJ	n	Compound of fatty acid condensate, polyethylene and waxes

n = non-ionic / sc = slightly cationic / c = cationic

\*Addition of KOLLASOL CDO recommended for foam inhibition, control liquor dwelling time.

(Picture material was provided by Weitmann & Konrad GmbH & Co. KG)



