

# FAVORITplus

The New Generation of Washer Extractors

**Kannegiesser®**

PARTNER IN LAUNDRY TECHNOLOGY



# FAVORITplus

The Advantages

## Savings of resources

- JET-rinsing for reduced fresh water consumption
- Exact water metering with Scaleton PLUS
- Weight dependent dosing of water, chemicals etc.
- Water recovery systems

## Increased output through time savings

- JET-rinsing for shorter process times
- Electric brake resistors for shorter braking times
- Large drains and valves for fast draining and filling
- Shorter extract times by "Optimized Process Spinning" OPS

## Improved ergonomics

- Side loading cylinder
- Ergonomic loading and unloading
- User friendly touch screen and intuitive menu navigation
- Manual chemical chute below eye level for improved safety

## Verifiable washing process

- Reproducible washing process by water metering with Scaleton PLUS
- Relevant Parameter documentation with DataFocus

## Pre-defined residual moisture extraction (OPS)

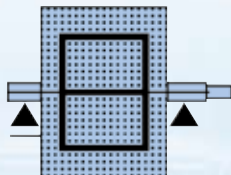
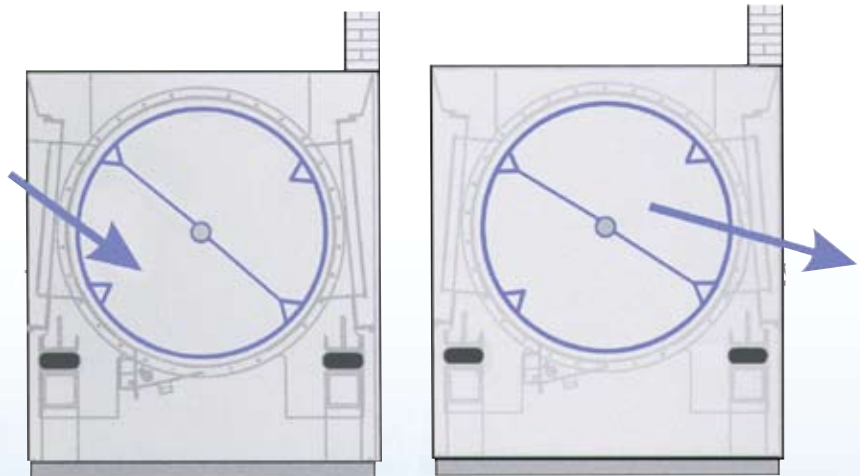
- Programmable residual moisture for all following processes such as ironer and tunnel finisher
- Even wipers can be washed in compliance with RKI guidelines

# FAVORITplus

Barrier-Wall and Industrial Version

## Applications

- Hospitals
- Scrubs
- Retirement Homes
- Nursing Homes
- Work Wear
- Wipers
- Hotels
- Special Articles



*Side-loader washer extractors with two-sided cylinder support*

*Soiled side:  
The Pullman-divided FAVORITplus features easy soiled-side loading into the deep cylinder pocket.*

*Clean side:  
The inclined cylinder position facilitates fast gravity assisted unloading operation.*

## Barrier-wall version



## Industrial version

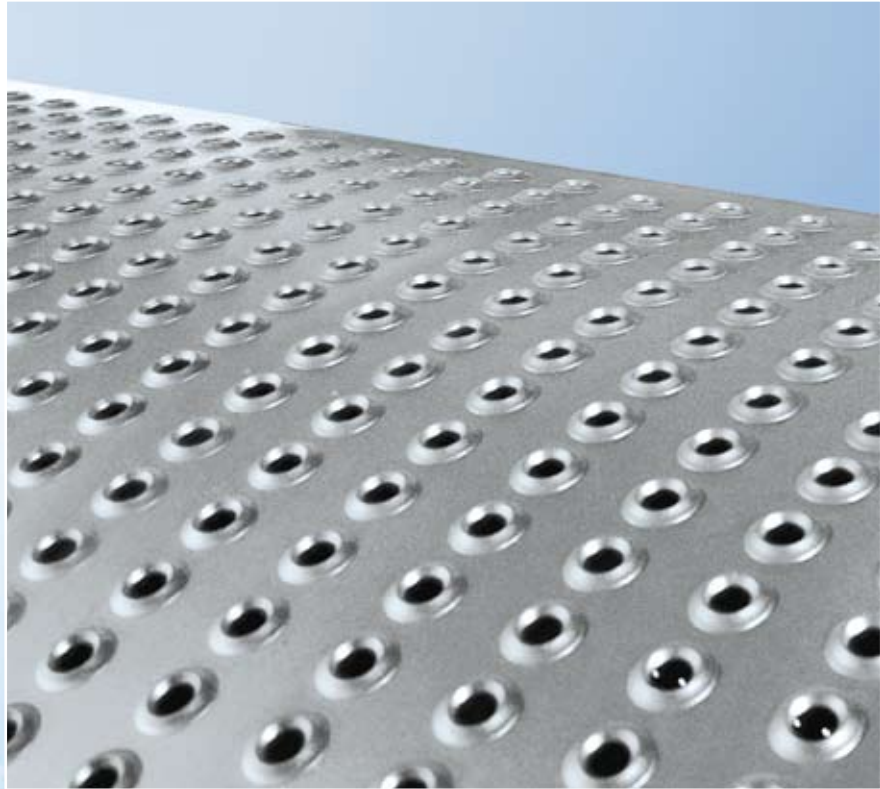


*Ergonomic loading and unloading*

# Carewash Cylinder Perforation

Proven Technology for Gentle Washing-Action

Considering the positive experiences in the last years, we did not want to do without the proven Carewash cylinder perforation for the FAVORITplus. All machines have inner cylinders with high-class perforations. The perforations are not manufactured with a conventional cylindrical punch, but perfectly embossed to the outside of the cylinder, eliminating goods being damaged by sharp edges of the cylinder perforations.



## Conventional punched cylinder perforation

### Washing:

Sharp edges of the cylindrical perforation cause detrimental chafing and wearing of the fabrics. The consequence is a higher tensile strength loss, excessive linting and a reduced linen life cycle.

### Extraction:

Fibers are firmly pressed into the cylinder perforations. The sharp edges of the cylindrical holes have a tendency to retain the goods in the drum, making it difficult for linens to release from the wash cylinder after high speed extraction.

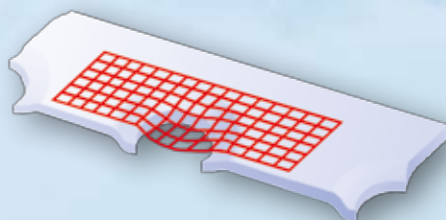
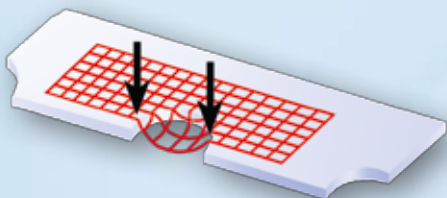
## Carewash recessed perforation

### Washing:

The surface of the inner cylinder with Carewash perforation is very smooth and ensures a most careful treatment of the fibers during the wash action. Textiles have a longer life and the amount of lint is noticeably reduced.

### Extraction:

Fabrics spread gently over the recessed cylinder perforations and the penetration of the goods into the cylinder holes is diminished. The unloading operation is much easier.



# FAVORITplus

The Specialist



Large inner drum door opening



Mechanical brake serves as holding brake only, resulting in long life with minimal wear

## Application range

Possible applications of the FAVORITplus range from the classic washer extractor for industrial laundries to barrier wall versions for healthcare linen. Our experience and our extensive range of options ensure that each machine – based on the textiles to be processed – is equipped specifically to the requirements of each customer. Each machine is designed and manufactured individually, from water recovery tanks and integrated weighing systems to complex industrial data collection.

The new FAVORITplus series includes 10 models from 30 kg to 270 kg with a large variety of inner drum divisions and oversized cylinder doors. Furthermore, the series is renowned for its extensive option packages and the inverter controlled single drive motor with infinite speed regulation and individually programmable control.

## Characteristics

- Standard: Braking by electrical resistance (40 sec from extract to complete stop)
- Frequency inverter controlled single drive motor
- Substantial inner cylinder design made of stainless high-strength steel 301 LN with Carewash cylinder perforation
- Outer cylinder made of high quality stainless steel 301 LN
- Two-side cylinder support with heavy duty roller bearings
- High ribs for optimum pick-up and drop of linen
- Pneumatic dosing hopper (optionally) for fast and clean dosing
- Infinite wash and extract speed regulation
- Careful textile extraction by electronically controlled smooth acceleration speed
- Consistent high extract with 350 G
- No clutches, no gearbox (ease of maintenance)
- No electric peaks
- Individually programmable mechanical wash action for each work classification
- Air-bag suspension for gentle machine operation
- Noise level during high-speed extraction under 70 dB (A)
- No special foundation required



Electrical brake resistors and frequency inverter

# JET-Rinsing

for Maximum Output and Excellent Rinsing Results

## HOHENSTEIN

### Summarising Statement

to test no. 09.L9.0093.

The Forschungsinstitut Hohenstein (Hohenstein Research Institute), Textile Services and Innovations Division, has been instructed by the company Kannegiesser to make in a textile service company an evaluation of the washing processes for white and coloured professional clothing using the JET rinse technology on the washer extractor machines from the Kannegiesser FAVORITplus series. The process advantages of this technology in terms of reduction of water, energy and detergent consumption and increase of productivity in operational conditions, should be investigated and evaluated in a holistic way.

The studies, carried out on a 3-bath procedure for slaughterhouse linen have proven to effect a significant resource economy in water and energy and at the same time an increase of productivity, while maintaining the same levels of quality and hygiene security. More specifically an economy till 27 l/kg of fresh water is made and the cycle time can be reduced till 24 minutes compared to the hitherto applied procedure.

Director of the Department  
Function and Care  
pp:



Dr. Jan Beringer



Technical Expert of the Department  
Function and Care

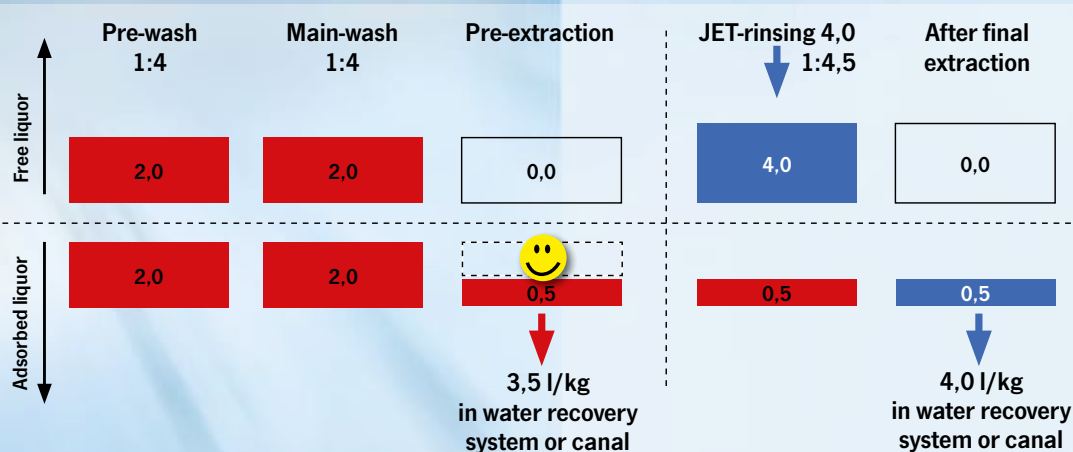


Andreas Janning

### The revolutionary principle of the PowerTrans JET transferred to our washer extractors!

- Excellent washing and rinsing results
- One or maximum two rinsing operations
- Utility savings due to low water usage
- Minimal fresh water usage, especially in combination with a water recovery system
- Production increase due to shortening of total process times
- Shortened non-productive times due to electric braking resistors
- Simple and fast programming with our individually programmable control

### The JET-principle



# Scaleton PLUS

More than just weighing

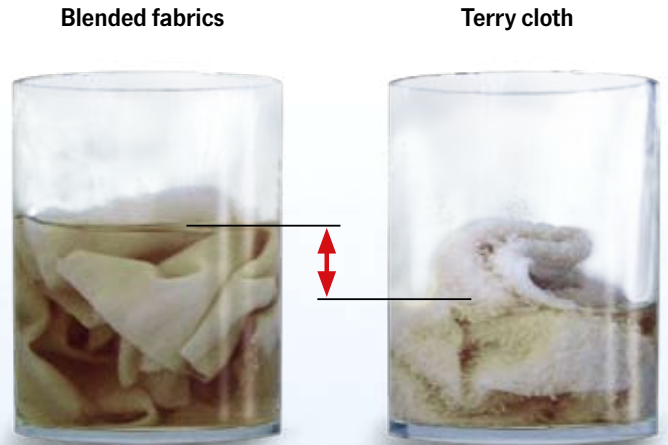
## The innovative solution for cost savings and high-quality laundry processing

The integrated electronic weighing system measures continuously during the soiled linen loading and shows the weight at the display of the FAVORITplus. Separate floor scales are no longer required. The system is also accurate in machines with cylinder divisions.

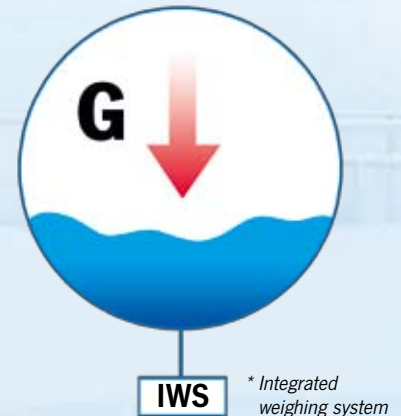
### The advantages

- Batch weighing and loading is combined to one operation only
- Reproducible washing results
- Measuring of free **and** adsorbed liquor
- Ratio metric control considering additional stream injection and adjustable predetermined detergent content
- Water amount is exactly metered by four weighing load cells – superior method to all other level measurements concerning accuracy and durability
- Water and chemical consumption in exact proportion to the actual batch weight of each individual work load
- Automatic adjustment of RPM for optimized mechanical wash action
- Optimum utilization of machine loading capacities by programming minimum and maximum load limits with predetermined deviation tolerances
- No imbalance loading because of exactly equal batch weights in each cylinder compartment
- Data transfer of exact individual batch weights and consumption figures of water and chemicals to the central management data system

The detection of the absorbed liquor enables a defined constant liquor ratio – even with mixed batches where textiles have different water absorption characteristics. This feature is impossible with a conventional measurement.



Equal amount of water



Proportional autocomputing	Full batch load 100 kg	Minor batch load 80 kg	
Bath/linen ratio 1:4	400 litres water	320 litres water	
Water consumption 12 l/kg	1.200 litres water	960 litres water	Saving 240 litres water
G-factor	1.0 G	0.9 G	
Chemicals dosing 25 g/kg	2.500 g	2.000 g	Saving 500 g

### Optimized process spinning OPS

- Productivity increase due to shorter extraction times
- Definition of desired residual moisture
- Repetitive optimum residual moisture for the following process (i.e. finisher)
- Validated control for processing wipers

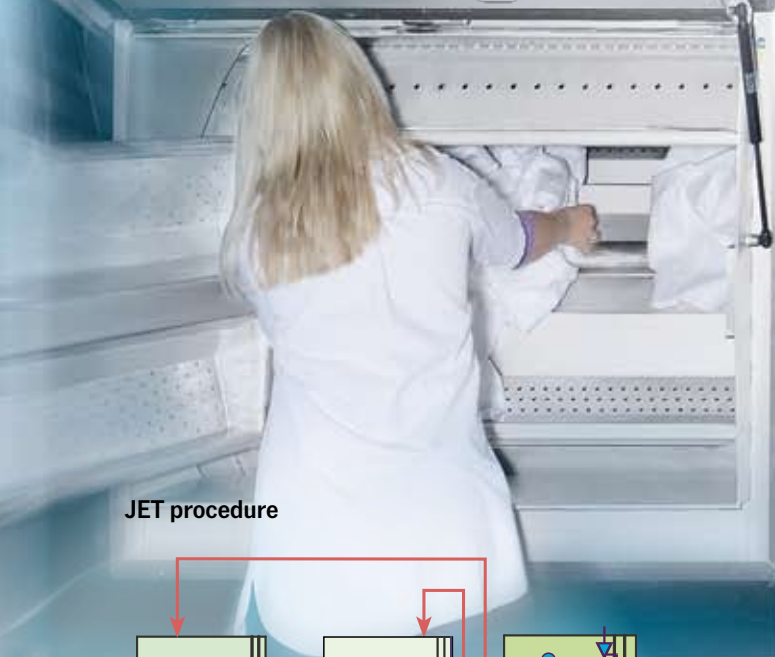
# OnTop

## Water and Energy Recovery System

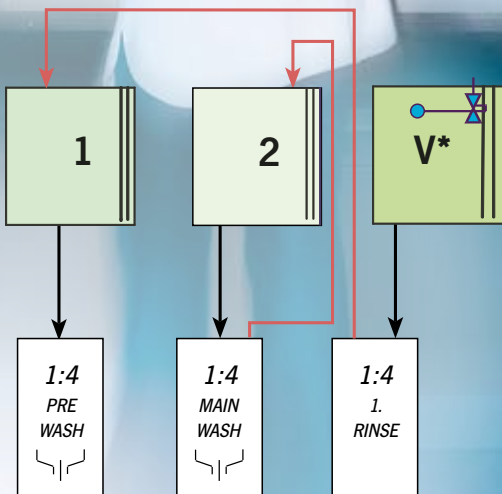
*FAVORITplus complete with OnTop 2-tank water and energy recovery system*

The FAVORITplus can be equipped with OnTop water and energy recovery systems. These systems enable **water consumption values of 6-9 litres per kg linen**, values which can normally only be reached with batch washer systems. Stainless steel recovery tanks, pre-filter, pumps and piping are individually laid out according to the special requirements. The PLC of the washer extractor automatically controls the reuse of the reclaimed water for the subsequent wash processes depending on each individually washing program.

Based on the local cost conditions, considerable savings in water, steam and chemicals are achievable. The OnTop water and energy recovery system is a space-saving solution and a valuable contribution to the environment.



### JET procedure

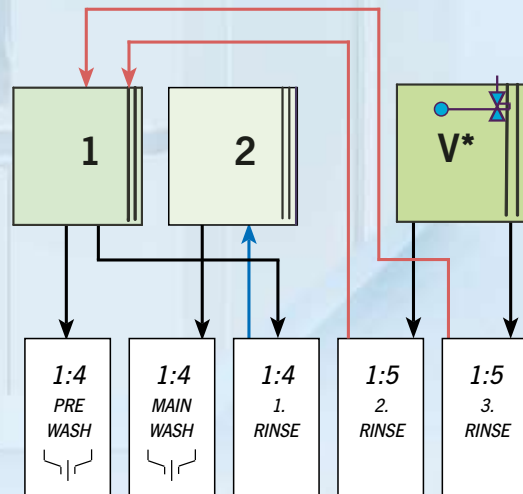


V\* = Vorlauf tank

*Example of an OnTop system with 2-tank water recovery system and JET-rinsing. One fresh water storage tank, if necessary.*

*The "sponge effect" that results from the JET-rinsing process enables a lower liquor ratio.*

### Conventional procedure



V\* = Vorlauf tank

*Example of an OnTop system with 2-tank water recovery system. One fresh water storage tank, if necessary.*

*The OnTop system can be adjusted to any other concept.*

# FAVORITplus

with Modern Control Engineering

Operator-prompted, individually programmable industrial PLC for up to 99 programs. Easy programming via control panel or downloading via external PC.

## Individually programmable parameters

- Touch screen with intuitive menu navigation
- Wash, extract and reversing cycles
- Wash and extract speeds
- Infinite liquor level control
- Cooldown modes with control of cooldown speed °C (°F)/min, target temperature, water level, water source, linear cooling, progressive cooling
- Infinite temperature control in one °C steps

- Chemical supply:
  - controls up to 30 injections per program
  - controls up to 15 injections per wash operation
  - manual control of dosing hopper
  - control of up to 6 external dosing pumps of a central dosing system (optionally up to 12 pumps)
- Simple manual control of basic operations: water inlet, washing, draining, extracting and dosing
- Fault indication including failure diagnostics
- Control of service intervals
- Possible data transfer of daily statistics (water consumption and weight per program) to USB-stick
- Program backup to USB-stick

# WET-edit

Remote Programming

The WET-edit software enables the operator or a chemist to create washing programs on his PC and transfer them via USB-stick to the machine or back from the machine to the PC.



Display

# DataFocus

Management Data Logging

The Datafocus Data Logging System for management and process data comprises hardware and software for washer extractors.

Management and machine data can be saved up to several days. Two-wire Bus (CAN) connection via interface converter to a remote PC for permanent data logging or read out.

The software includes the organization, evaluation, storage and print-out of all data in tables:

- Weights and consumption data per customer
- Water consumption data of each machine per program, per kg of linen, per day or as total
- Process times
- Data of chemical dosing
- Malfunctions / down times
- Selective data of a single washing process
- Temperature control per process °C/min

All parameters are saved in a separate data bank and can be saved and printed in a spreadsheet.

Additionally the washing process can be monitored as a graph on the control screen.

## Following machines can be integrated:

- Futura 1100 NBW
- Futura
- FAVORITplus
- Favorit
- PowerSwing



The following parameters can be colour-displayed in a time diagram (optional):

## As continuous graphic display:

- Temperature
- Water level
- pH-value (optional)

## As active process conditions:

- Water valve functions
- Washing/Rinsing
- Chemical Dosing (product, compartment)
- Heating/thermo stop
- Outlet (drain/reuse tank)

The entire wash process is completely logged per batch, corresponding to real cycle time and customer data.

## Savings of Resources











Pre-Defined  
Residual  
Moisture  
Extraction







Increased Output

Verifiable  
Washing Process

Improved Ergonomics

Model	FA+ 300	FA+ 400	FA+ 600	FA+ 800	FA+ 1000	FA+ 1150	FA+ 1450	FA+ 1900	FA+ 2250	FA+ 2700
										
Loading capacity*	[kg] 30	40	60	80	100	115	145	190	225	270
Drum diameter	[mm] 820	820	1060	1060	1060	1294	1294	1294	1650	1650
Drum volume	[ltr.] 300	400	600	800	1000	1150	1450	1900	2250	2700
Drum length	[mm] 630	830	764	1014	1274	974	1224	1664	1150	1380
Drum compartments barrier-wall type	1/2	1/2	1/2	1/2	1/2/2+2	2	2	2/3/2+2	2/3	2/3/2+2
Drum compartments non-barrier-wall type	1/2	1/2	1/2	1/2	1/2	2/3	2/3	2/3	2/3	2/3

\* Loading ratio approx.: 1:10 kg

Drum divisions	1	2	3	2+2
				
	1 cmt	2 CMPTs: Pullman-division	3 CMPTs: Y-division	4 CMPTs: 1 vertical division + Pullman-division

Subject to changes by development  
Brochure shows optional equipment