### LABEL INDUSTRY Cleaning solutions





### **ABOUT US** Improving print quality worldwide

Flexo Wash is a leading cleaning solutions company specialized in cleaning equipment and eco-friendly cleaning liquids for the flexographic and converting industry.

We offer innovative and high-quality cleaning solutions to satisfy the individual needs of printers worldwide. Through our solutions, we ensure consistent print quality and high productivity with a focus on safe working conditions and sustainability.

With more than 30 years of developing innovative cleaning technology, we cover all types of cleaning machines for both solvent and non-solvent cleaning liquids – and also laser cleaning systems as a waste-free alternative.

Our journey began with a simple idea, born out of the daily challenges faced by printers, and it has evolved into a company with core values of innovation, flexibility, trust and sustainability.

That is why we say that our products are **made by** printers for printers.

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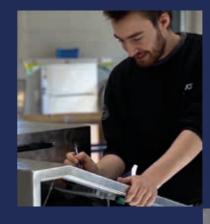
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years of innovation

cleaning solutions

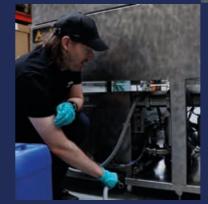
different countries

installations worldwide



### Flexibility





Being flexible, being innovative, being creative, taking care of the environment, and making sure that our customers can profit from our products. To be a trusted partner and a great place to work. That's the Flexo Wash DNA.

### Innovation





### **Sustainability**



**Trust** 

Anders Kongstad, CEO



## **Global service network**

### We will keep you running!

Our highly qualified team of service engineers is ready to help you with troubleshooting, service hacks, spare parts orders, maintenance, and installation of your Flexo Wash cleaning equipment. All to keep you running as effectively as possible and eliminate your downtime.

We travel the world to perform world-class service in more than 100 countries - but are also available for virtual installations, troubleshooting and guidance. Our cleaning equipment is an integral and important part of the optimum production workflow.

### **Re-order in our B2B webshop**

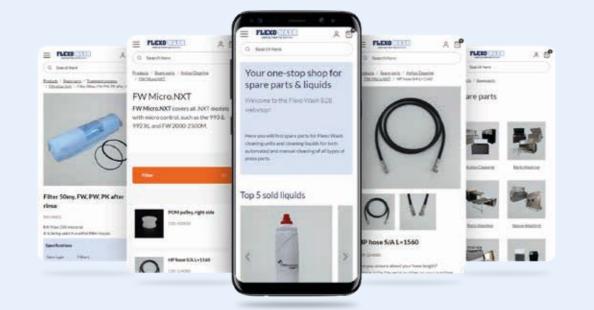
Your one-stop-shop for spare parts & liquids

- Personalized experience
- Faster check-out
- Easy re-order

To avoid running out, make sure to re-order your spare parts, filters & cleaning liquids quickly & easily in our B2B webshop.

Visit the shop at shop.flexowash.com or simply scan the QR-code  $\rightarrow$ 







- Remote service
- Real-time data
- Webshop access
- Operator app

Get access to real-time data and the status of the machine, all at your fingertips! Whether you're on the go or in the office, you can monitor the performance of your cleaning unit and make adjustments as needed. No more guessing or wondering if your machine is working properly - the CleanLink system gives you the peace of mind you need to focus on other important tasks. Plus, with remote service capabilities, you can have any issues addressed quickly and efficiently.

Read more at flexowash.com/cleanlink or simply scan the QR-code  $\rightarrow$ 

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- Specially designed to be used in FW cleaning units and ensure a long lifetime of your machines.
- Developed by cleaning experts with a focus on cleaning any type of ink or part without causing damage.
- Tailormade liquids for your specific needs.

With CleanSolutions we strive to create a one-stop-shop having more than 100 different high-quality liquids for various purposes. Automatic cleaning equipment is only as good as the liquid you use, which is why we do not compromise the quality, durability, and sustainability of our cleaning liquids.

## Sustainable Certified

Free of metals Minimal impact on environment ROHS ISEGA REACH

#### Customized

VOC-free liquids Premixed liquids Special requirements

#### One-stop-shop

Full portfolio Tailormade liquids On stock worldwide



Shop all CleanSolutions liquids on the Flexo Wash B2B Webshop!

shop.flexowash.com



### Developed to ensure high print quality

The Flexo Wash CleanSolutions liquids are of high durability and formulated for easy handling, troublefree operation, and long service intervals. This makes sustainable cleaning liquids an affordable alternative to solvents, thus providing a safer cleaning of press parts and a cleaner environment.

The Flexo Wash cleaning systems are built to clean with sustainable cleaning solutions and to consume as little cleaning liquid as possible. In all our machines the liquid is always filtrated and recirculated to be reused.

The solutions are developed to meet today's demands of high print quality and productivity. To obtain this if you make sure that your aniloxes, printing plates, and other press parts are kept clean.

#### Minimal impact on environment

Flexo Wash continues to develop cleaning solutions with a focus on minimizing the environmental impact and you will find both low VOC and VOC-free cleaning



solutions in the Flexo Wash product portfolio as well as food packaging-compliant solutions certified by ISEGA.

We also offer cleaning solutions with low COD (chemical oxygen demand), which reduces the oxygen demand for wastewater.

#### Specific inks require specific solutions

You need to use the right cleaning liquid, for the specific type of ink, in your cleaning machine to get the optimal cleaning results.

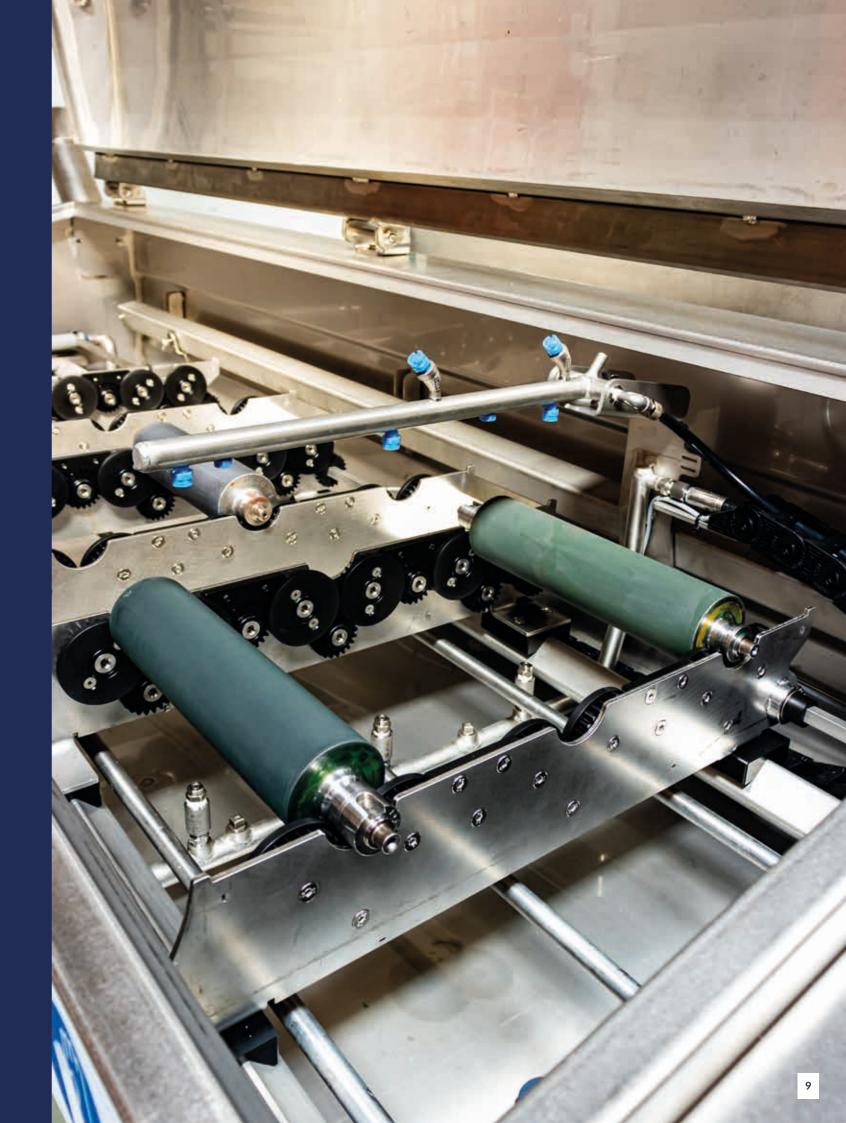
Among our wide portfolio of cleaning liquids you will find solutions suitable for cleaning all types of press parts and inks in both Flexo Wash and non-Flexo Wash cleaning systems.

We are always ready to guide you towards the best cleaning solution for you and your needs.

# Anilox Liquid Cleaning

If the anilox roll is the heart of the flexo printing process and critical to maintaining a well-run operation, proper cleaning, along with care and maintenance of your anilox inventory is essential to your business. The absence of good cleaning practices will always lead to inconsistent print results and increased downtime.

- Fully automatic cleaning
- Clean after 5-20 minutes
- No wear or tear on the aniloxes
- Wash up to 9 aniloxes simultaneously



## **Anilox Liquid Cleaning**

The Flexo Wash Way

The FW Anilox Cleaners work with environmentally friendly cleaning liquid, which is specially made for deep cleaning of aniloxes used with all types of ink.

The water from the high-pressure rinse is automatically led directly to the drain (depending on local legislation), to a tank for re-use or to one of our water reuse units.



### Washing

The anilox rotates while heated liquid is sprayed onto the surface. Due to the special tensides in the liquid, the ink can easily be removed from the anilox cells by high-pressure rinsing. The average washing time is 5-10 minutes.



The cleaning liquid is filtrated and recirculated to be reused to to minimize liquid consumption. The rinse water can also be led to a recirculation unit (optional) to be filtrated and ready for reuse.



### Drying

High-pressure air drying completes the cleaning process leaving the anilox ready for immediate use or storage. Duration is 1-3 minutes, depending on roll length.



J

### Draining

After the washing cycle, the liquid is drained back into the wash tank for re-use. The drain time is 2-3 minutes.



### Rinsing

High-pressure 120 bar adjustable water nozzles complete the cleaning process and remove any remaining ink particles and cleaning liquid.

### Case Story

Flexo-Graphics was having a problem – and it was a good problem to have. Business was growing rapidly, but they realized their internal processes were not keeping up with production demands. As their business grew and expanded, the need to clean their aniloxes effectively grew and expanded as well. Their problem was that the method of cleaning they used to clean their aniloxes "broke down too often and too fast." Due to this unreliable cleaning system, Flexo-Graphics employees spent a few hours a day cleaning rolls by hand as well.

Two employees were dedicated to the manual cleaning of not only the anilox rolls, but the trays and parts as well. They used a combination of solvents and other cleaners but were having a hard time getting everything truly clean. Tim McDonough President & CEO of Flexo-Graphics (an Inovar company) tells us that:

"Our eyes were really opened when an ink vendor showed us how dirty our 'clean' aniloxes were" despite all the time and effort they had put into cleaning them.

After performing a demo of their dirty anilox rolls in the Flexo Wash anilox cleaner and found the results to be "remarkable" and that their rolls "were not nearly as clean" as they thought they were, according to John Witmer, Operations Manager. They learned how just a slight change in the cleanliness of an anilox roll really affects the color. It was also clear that "staying at color" was dependent on the cleanliness of the anilox roll. McDonough explains:

"Much of our customer base was moving to tight color tolerances and we felt the Flexo Wash solution would give us the cleanest rollers and best chance to regularly reproduce spot colors within the acceptable Delta."

Time was also a huge factor in their decision. Before, determining the time to clean the anilox rolls took some planning, because it would mean the press was down for an hour. Figuring out when the cleaning would take place during the day, between jobs and all while trying to keep up with an increased production schedule. Also they could only clean two anilox rolls at a time in their ultrasonic cleaner and it would take one hour.

> "We spent far less time at the sink which resulted in more time running the press. In addition, clean rolls led to more repeatable color and tones which is critical in a highly repetitive business." Our ability to easily hit color led to more press up time due to less time spent dialing in color or changing anilox rolls."

In 2017, they purchased their first anilox cleaner, a FW Handy 2×2. It could clean four rolls at a time with a much shorter turnaround time of 15-20 minutes maximum.

In 2018, they purchased a new press, which was a 17" press with 10 colors. This new press, and the fact that their work was much more in the "UV World", taxed their ability to keep everything clean. Flexo-Graphics went from a negligible use of UV Ink to using UV Ink 50% of the time, in just three short years.

The improvements in their system were evident:

"We spent far less time at the sink which resulted in more time running the press. In addition, clean rolls led to more repeatable color and tones which is critical in a highly repetitive business. Our ability to easily hit color led to more press up time due to less time spent dialing in color or changing anilox rolls."

McDonough also cites that:

"We also improved press run time by not having to clean an anilox roll that was already in the press. Prior to Flexo Wash it was not uncommon for us to run up a job with a "clean" anilox only to see that color was lacking and that we need to give the anilox another cycle to try to get it cleaner. Now a roller is either clean or it is not. There no longer is almost clean".

#### Here are some statistics of their results:

- They print 250 days a year.
- They used to spend 10 minutes prepping each roll and then one hour cleaning in the old system. After the cleaning, they would rinse the roll again.
- Now they spend about five minutes to load and unload four rolls into the Flexo Wash unit. The cleaning process takes 15 to 20 minutes.
- Upgrading to the Flexo Wash system took them from two rolls per hour cleaning capacity to a potential of 12 to 16 rolls an hour.
- Cleaning supply cost was 1800 EUR a year. The first year with Flexo Wash system, the cost was 1590 EUR, but they cleaned four times more anilox rolls.
- Cleaner rolls have improved their print quality.

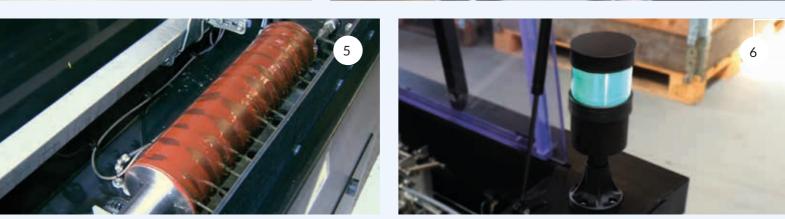
## **Anilox Liquid Cleaning**

Quick & gentle washing process

The Flexo Wash system is based on liquid and high-pressure water. Therefore, the system is effective even for high-line aniloxes. The quick and gentle cleaning process leaves the aniloxes clean and ready for immediate use after just 5-20 minutes of cleaning without causing any wear or tear to the anilox. This makes it possible to always keep your aniloxes clean ensuring a high and consistent print quality and a long lifetime of the aniloxes.



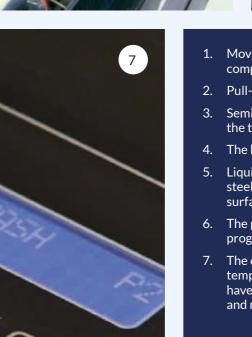




### Before









200 50

1. Moving spray bar with both air and liquid nozzles, leaving the anilox completely dry and ready to use.

2. Pull-out liquid tank for easy maintenance.

3. Semi-automatic liquid filling. The filling will automatically stop when the tank is full.

4. The high-pressure nozzles clean with a pressure of 120 bar.

5. Liquid and water are sprayed onto the anilox through the stainlesssteel high-pressure nozzles. Afterwards, the blue nozzles air-dry the surface leaving the roll dry and ready for immediate use or storage.

6. The process indicator lamp lights green when the cleaning cycle is in progress.

The control system gives you the opportunity to see cleaning time, temperature, number of washes etc. Furthermore, it is possible to have several cleaning programs with different settings set up and managed from the microprocessor.

## **Anilox Liquid Cleaning**

### Which machine should I choose?

The Flexo Wash Anilox Cleaners come in many different models which can be modified by combining the standard unit with one or more of the various options.



#### **FW Handy Series**

Our cost-efficient FW Handy models have been developed to serve a broad part of the label industry. The FW Handy-products are fully automatic units designed to deep clean/restore aniloxes of all sizes and provide you with a very good and costefficient tool for the daily cleaning and maintenance of aniloxes.



#### .NXT Generation

With the .NXT units we present a new generation of anilox cleaning systems. All are produced with the .NXT features which mean easier handling, improved technology & focus on sustainable solutions.

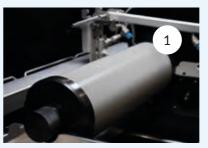
	Max. aniloxes per wash	Max. diameter
FW Handy Mini 2	2	150 mm (5.9")
FW Handy Midi 2X2	2* or 4	150 mm (5.9")
FW Handy Midi 2X2 XL	4	150 mm (5.9")
FW Handy Maxi	1 or 2*	230 mm (9.1")
FW 993 XL.NXT	3, 6*, or 9*	150 mm (5.9")
FW 993 XXL.NXT	3, 6*, or 9*	150 mm (5.9")
* Requires option		

#### **Options and Accessories**

- Adaptor for sleeves
- Gear Covers

\*\* Including shafts

• Extra traction stations





1: For anilox sleeves, an adaptor can be made according to the specific measures of the anilox. 2: For anilox rolls, the units can be made with gear covers to protect the shafts. 3: By adding extra traction stations in the FW 993 units, you can wash up to 9 aniloxes in one cleaning cycle.



640 mm (25.2")

1120 mm (44.1")

480 mm (18.9")

<u>2 aniloxes:</u>

<u>4 aniloxes:</u>

<u>1 anilox:</u>

<u>2 aniloxes:</u>

<u>3 aniloxes:</u>

<u>9 aniloxes:</u>

<u>3 aniloxes:</u>

<u>6 aniloxes:</u>

<u>9 aniloxes:</u>

915 mm (36")

553 mm (27.7")

1120 mm (44.1")

477 mm (18.8")

1600 mm (63") 6 aniloxes:

715 mm (28.1")\*

420 mm (16.5")\*

2000 mm (78.7")



940 mm (37")

<u>2 aniloxes:</u> 1425 mm (56.1") <u>4 aniloxes:</u>

709 mm (27.9")

480 mm (18.9") 859 mm (33.8")

<u>1 anilox:</u> 1425 mm (56.1")

<u>2 aniloxes:</u> 630 mm (24.8")

<u>3 aniloxes:</u> 1860 mm (73.2")

<u>6 aniloxes:</u> 930 mm (36.6")

<u>9 aniloxes:</u> 620 mm (24.4")

<u>3 aniloxes:</u> 2260 mm (89")

<u>6 aniloxes:</u> 1130 mm (44.5") <u>9 aniloxes:</u>

753 mm (29.6")

15 kg (33 lbs)

Max. weight per anilox

<u>2 aniloxes:</u> 15 kg (33 lbs)

<u>4 aniloxes:</u> 15 kg (33 lbs)

15 kg (33 lbs)

<u>1 anilox:</u> 50 kg (110 lbs)

<u>2 aniloxes:</u> 25 kg (55 lbs)

15 kg (33 lbs)

15 kg (33 lbs)

• Double tank system for 2nd cleaning liquid

- Systems for reuse of rinse water
- Automatic liquid filling system





## **Reuse of rinse water**

### with the Recirculation system

The FW Recirculation System is designed for re-use of the rinse water in a closed-loop system. The system is controlled by several sensors constantly measuring the pH and liquid levels. The process runs independently of the washing unit.

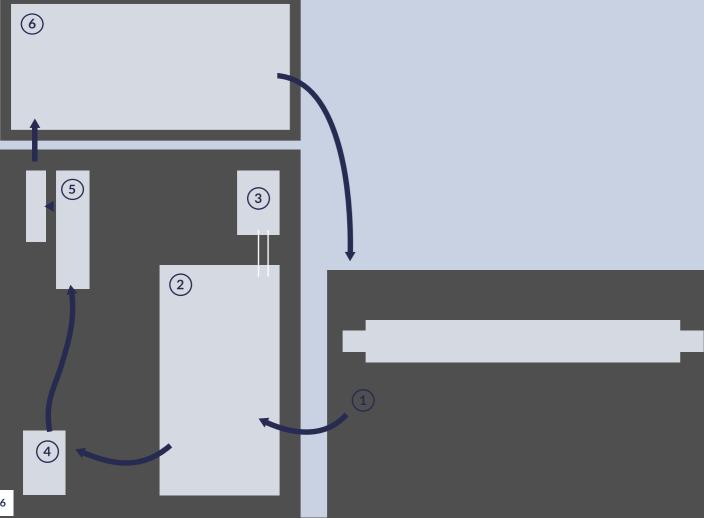
The process of the Recirculation system will ensure that the rinse water can be reused in the FW cleaning unit, reducing the amount of wastewater to a minimum. In this way, you will still have high-quality cleaning.

- 1. The rinse water runs from the Anilox Cleaning machine to the mixing tank.
- 2. In the mixing tank the water is automatically treated with phosphoric acid and FW Antifoam.
- 3. The dosing pumps regulate the mixture of phosphoric acid and FW Antifoam ensuring a consistent quality of the rinsing proces.
- 4. The pump transfers the rinse water from the mixing tank to the filters.
- The rinse water is passed through two high-performance filters, which 5. removes ink particles and other solids.
- The filtered and treated water is pumped to the holding tank from 6. where the water is reused for rinsing in the anilox cleaner.

#### **Recirculation benefits**

The Recirculation System elevates your anilox cleaning to an even more sustainable solution. In re-using the rinse water in your cleaning cycle, you achieve several benefits:

- You reduce your water consumption which saves you both money and is better for the environment.
- The system allows you to have up to 150 washes (depending on the number and size of aniloxes, water quality, ink type etc.).
- You can put the Anilox Cleaner anywhere as the Recirculation System eliminates the need for freshwater supply and draining.
- The system ensures a completely hands-free operation as the closedloop system is fully automatic.





- Secures high-quality cleaning with reused water
- Reuse of rinse water reduces water consumption significantly
- Hands-free fully automatic and environmentally friendly.



# Anilox Laser Cleaning

Get a waste-free, completely safe, and automatic anilox cleaner that will give you a more sustainable cleaning solution. The FW Laser Anilox Cleaners can be installed without requiring water supply, drain or safety equipment.

- Waste-free and completely safe
- Only requires air and power
- Sustainable cleaning method



## **Anilox Laser Cleaning**

### The Flexo Wash Way

The FW Laser Anilox Cleaners are developed with the newest laser technology and software systems. It is a waste-free and sustainable cleaning method with no liquid handling or consumption.

### **Anilox Laser Cleaning** How does it work?

Get a waste-free, completely safe and automatic anilox cleaner that will give you a sustainable cleaning solution. The FW LASER Anilox Cleaner only requires air and power.

### Loading

Place the anilox on the traction stations. Choose the anilox from the database where all the properties are defined (diameter, length, lines)



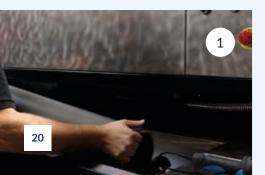
### **Extraction**

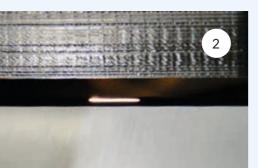
The extraction system removes all dust and fumes, making sure no nanoparticles will enter the room. The cleaning program stops automatically when the cleaning and extraction process is finalized.

### Cleaning

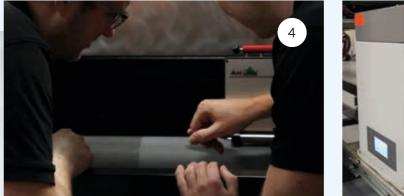
The high-frequency laser will clean the anilox with a precisely defined pulse which ensures an even distribution of energy.

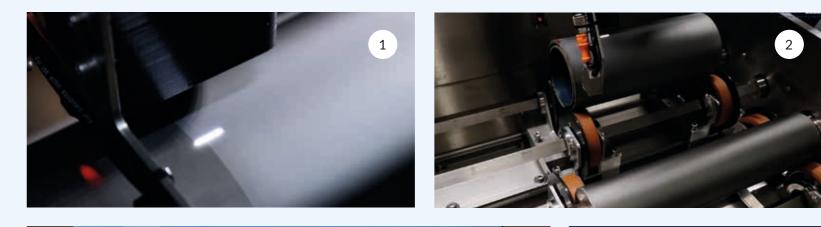


















- 1. Class 1 laser system which is safe under all conditions of normal use - no need for safety goggles or other safety equipment.
- 2. Clean multiple small aniloxes of variable sizes in one machine.
- 3. Database over with anilox inventory that contains data regarding cleaning and alarms. The data is available directly on screen but can also be accessed via LAN connections.
- 4. Before and after: The laser cleaning system provides high-quality cleaning results.
- 5. The easily accessible filter consists of two different combination filters. Both a filter mat, a HEPA & an active carbon filter are integrated ensuring that all particles are collected within the unit by the extraction system.

## **Anilox Laser Cleaning**

### Which machine should I choose?

Factors like cleaning speed, how many aniloxes you wish to clean per cleaning cycle etc. determine which laser unit you should choose. On these pages, you will find a brief introduction to the different units and their specifications - for more info ask your FW sales representative.

	Max. aniloxes per wash	Max. diameter	Max. cleaning length	Max. anilox length**	Max. weight per anilox
FW 850 Laser	1 or 2*	197 mm (7.75")	800 mm (31.5")	850 mm (33.5")	50 kg (110 lbs")
FW 850-2 Laser	2 or 4*	197 mm (7.75")	800 mm (31.5")	850 mm (33.5")	50 kg (110 lbs")
FW 850 LaserX	1 or 2*	197 mm (7.75")	800 mm (31.5")	850 mm (33.5")	50 kg (110 lbs")
FW 850-2 LaserX	2 or 4*	197 mm (7.75")	800 mm (31.5")	850 mm (33.5")	50 kg (110 lbs")

\* Requires option. Reduces max lengths. \*\* Including shafts.



#### FW Laser

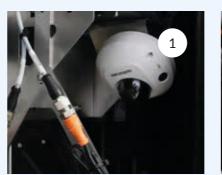
The FW Laser Anilox Cleaners are developed with newest laser technology and software systems. It is a waste-free and sustainable cleaning method with no liquid handling or consumption.

#### FW LaserX

Improved technology makes it possible for the LaserX to perform efficient cleaning with the high degree of safety the Flexo Wash laser cleaning systems are known for, but twice as fast. The LaserX is the optimal choice for customers wanting to invest in new technology with reduced cleaning time and still keeping the high degree of safety that Flexo Wash is known for.

#### **Options and Accessories**

- Q-cam
- Barcode Reader
- Automatic anilox identification (RFID) possible





Automatic anilox identification (RFID). 3: Cleaning data on each anilox is registered in the database.

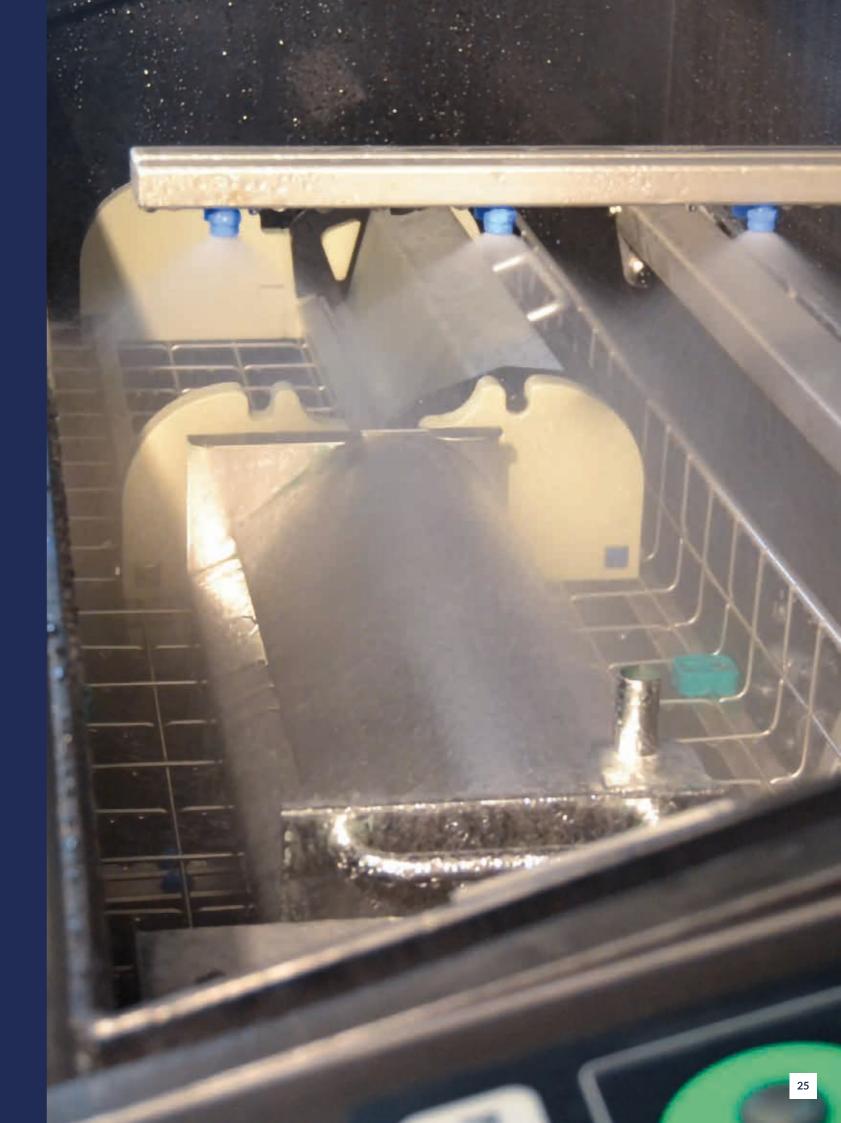
1: Camera - watch the cleaning process in real-time on the display. 2: Easy access to the anilox details in the database either by Barcode Reader or

# Parts Washing

The Parts Washers can all be customized according to your specific needs. In the standard machines, the various press parts are placed on a grid and cleaned by nozzles spraying from underneath and above.

To improve operation, the washing machine can be made with customized racks for chambers, buckets, ink trays etc. along with various high-performance nozzles.

- Fully automatic and extremely gentle cleaning process for all types of ink
- Time-saving and user-friendly plug'n'play technology
- Minimal maintenance is required
- Environmentally friendly cleaning



### **Parts Washing** The Flexo Wash Way

The Parts Washers from Flexo Wash have a Wash & Rinse system with two separate tanks (or one tank and one open-rinse) which offers an automatic two-stage cleaning process, where the first stage is for cleaning and the second stage is for rinsing.

The parts are cleaned by a moving nozzle arm, spraying cleaning and rinse liquid from below and above.

### Washing

Liquid is sprayed onto the parts by nozzles placed below and above the grid/holders.



The draining takes approx. 5 minutes and is designed to ensure that as much liquid as possible comes back through an automatic drain valve to the tank to be reused. No matter the number of tanks all liquid will be filtered and reused.



### Rinsing

The parts are rinsed with water or the same liquid as for wash, leaving the parts ready for immediate use (WR). In WRO-units the parts are rinsed with fresh water from local water supply.

### Case Story

Leading narrow web press manufacturer, Mark Andy, has installed a Flexo Wash PK Eco Maxi WR Parts Washer in its new high-tech showroom and demonstration facility in Warsaw. The Warsaw centre is set up to demonstrate top quality printing on Mark Andy's extensive range of flexo and digital printing systems.

Speaking for Mark Andy, Tom Cavalco (Managing Director Europe) said:

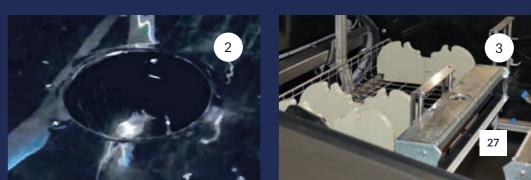
### Draining

At the end of the wash cycle, the cleaning liquid is drained back to the tank for re-use.



1: Washing, 2: Draining, 3: Rinsing





"In today's highly competitive market nothing but top quality is accepted by the brand owners, so we have to supply the very best technology to allow our customers to meet those standards.

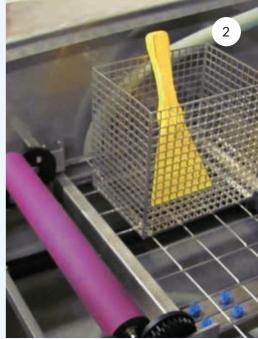
We chose Flexo Wash because we believe its equipment matches the quality of our own in terms of consistent performance and reliability."

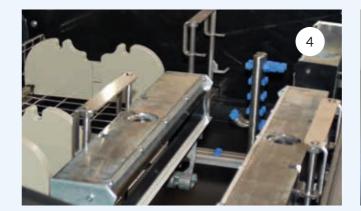
"In today's highly competitive market nothing but top quality is accepted by the brand owners, so we have to supply the very best technology to allow our customers to meet those standards."

### **Parts Washing** How does it work?

The fully automatic washing solutions are designed to wash ink trays, doctor blades, buckets and other removable press parts used with water-based ink, solvent-based ink or UV ink. The quick and easy wash operation allows press operators to focus on press make-ready functions, thus reducing the changeover time and the labour involved with manual washing. This results in reduced downtime, consistent print quality and a safe and healthy cleaning and working environment.











### Before













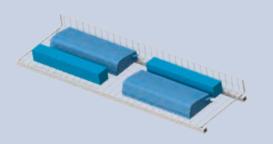
- 1. The wash room area can be completely custombuilt after your specific parts and needs.
- 2. Small parts can be placed in a basket and rubber rolls can be placed in designated <u>holders.</u>
- 3. The slide-in grid ensures easy transport and handling of the parts.
- 4. Chamber holder made for this specific type of chamber can be placed on the grid.
- 5. The parts are cleaned by the moving spray arm with high-pressure nozzles.
- 6. The PK TrolleyLoad with two trolleys also comes with 1 or even 3 trolleys according to your needs and parts.
- 7. The process indicator lamp lights green when the cleaning cycle is in progress.
- 8. A rotating nozzle can be placed below the flat grid to clean buckets.

## **Parts Washing**

Custom-built to fit your needs

Below you will find different layouts of the many parts loading possibilities in our narrow web Parts Washers. Some configurations may require additional options. For illustration purpose only.

### **PK ECO Midi**



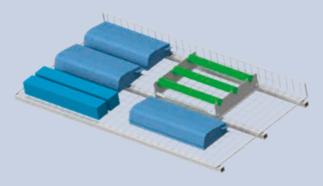
Mark Andy P7

2 doctor blade chambers & 2 chambers



**MPS 410 EF** 4 doctor blade chambers





Mark Andy P7 2 doctor blade chambers, 3 rubber rolls & 3 chambers



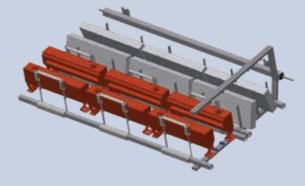
Gallus EM 410

6 chambers



**Nilpeter FA 6** 

4 chambers



Gallus EM 410 6 ink trays & 6 chambers

### **PK ECO Maxi**



3 ink trays & 4 doctor blade chambers





8 chambers

### **Parts Washing** Which machine should I choose?

We supply parts washing equipment in all sizes for all segments of the labels industry. The Flexo Wash Parts Washers come in many different models which each can be modified by combining the standard unit with one or more of the various options.



#### **PK ECO**

Our cost-efficient PK ECO models have been developed to serve a broad part of the label industry. The PK ECO-product line are fully automatic units designed to clean all kinds of parts. The machines are controlled by a microprocessor, where it is easy to set the different programs such as wash time.



#### PK TopLoad

If your needs require a larger wash area than the PK ECOseries can provide, a PK TopLoad is your top choice. The stainless-steel units also come with a custom-built wash area solution. The PK TopLoads comes either with a fixed or slide-in grid.



#### **PK TrolleyLoad**

The PK TrolleyLoad provides with its trolleys easy handling of your press parts. Simply place the press parts on the trolley at the press. Drive the trolley to the washing machine and push the grid into the machine. It is possible to wash doctor blade chambers, ink trays and other removable press parts. This stainless-steel unit also comes with a custom-built wash area solution.

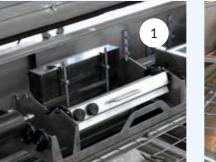
	Wash area (LxWxH)	Standard	ATEX**
PK ECO Midi	1400 x 415 x 275 mm (55.1" x 16.3" x 10.8")	Х	-
PK ECO Maxi.NXT	1400 x 765 x 275 mm (55.1" x 30.1" x 10.8")	х	-
PK 160 TopLoad*	1450 x 900 x 250 mm (57" x 35.4" x 9.8")	х	-
PK 200 TopLoad*	1850 x 900 x 250 mm (73" x 35.4" x 9.8")	Х	х
PK 200 TrolleyLoad	Wash area per trolley: 1 large trolley: 1750 x 900 x 250 mm (69" x 35.4" x 9.8") 2 medium trolleys: 800 x 900 x 250 mm (31.5" x 35.4" x 9.8") 3 small trolleys: 500 x 900 x 250 mm (19.7" x 35.4" x 9.8")	X	X
oth models come with either a slide-in grid for easier handling or c	one flat fixed grid for even		

\* Bo more wash area space.

\*\* Pneumatic version.

#### **Options and Accessories**

- Flexible jets to focus spray on difficult to clean items.
- Racks for ink trays, rolls and doctor blades.
- Automatic lid operation.
- Chamber holders
- Bucket wash





1: Chamber holder for Gallus chambers, 2: Chamber holder for Nilpeter chamber, 3: Rotating nozzles can be placed on the grid for cleaning of buckets.



### **Filtration Unit** Reduce liquid consumption

Our Filtration Unit will prolong the lifetime of the liquid. It is designed to separate ink residues from the cleaning liquid, thus making it possible to reuse the liquid and prolong its lifetime.

The Filtration system can easily be connected to the Flexo Wash Parts, Screen & Plate Washers. Press automatic on the Filtration System and liquid from the wash tank will automatically be pumped into the Filtration Unit.

#### **Filtration benefits**

The FW Filtration unit is designed for reuse of the liquid. The process runs independent of the washing unit. The process of the Filtration unit will ensure that the liquid can be reused in the FW cleaning machine, reducing the amount of liquid waste to a

in the FW cleaning machine, reducing the amount of liqu minimum and halve the cost of removing ink waste.



#### **Filtration Unit**

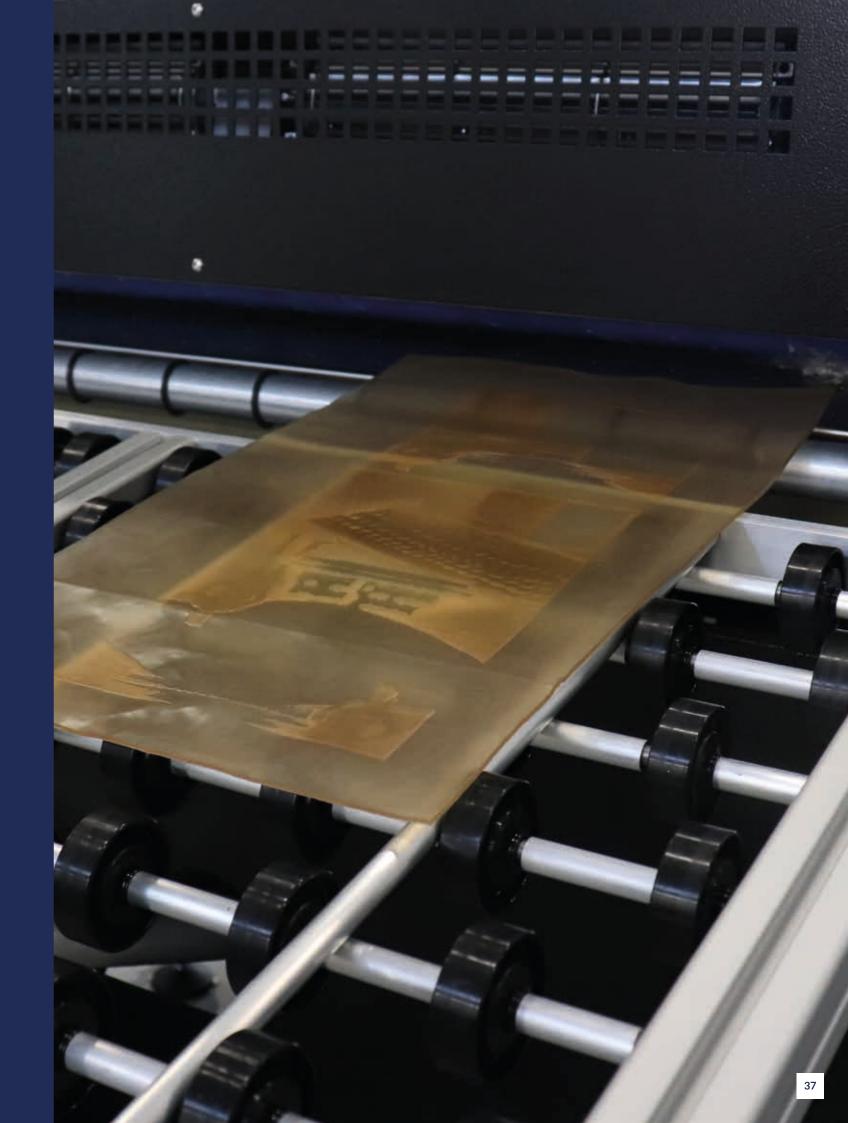
- Fully automatic and reduce cost on liquid waste
- Leaves only solid waste in powder form
- Halve the cost of removing ink waste



# Plate Washing

Damaged plates due to improper cleaning is an expensive and critical factor in the printing industry. Cleaning plates properly and in a gentle and safe way is essential. With unclean or broken plates you will have quality issues with your print.

- Designed to clean all types of inks.
- Belt conveyer for easy loading of plates.
- Clean and dry plates after a few minutes.
- Controlled by a microprocessor and it can easily change various settings.



### **Plate Washing** The Flexo Wash Way

The fully automatic Plate Washers are designed to wash flexographic polymer plates and letterpress plates very gently, leaving them 100% clean and dry; ready for immediate reuse. The system has a Wash & Rinse two-stage cleaning process, where the first stage is for cleaning and the second stage is for rinsing. The machines are made of stainless steel and other highly resistant quality material, which ensures a long lifetime of the product and a very low degree of maintenance.



### Washing

Easy loading of the plate by the conveyer belt. Cleaning liquid is sprayed on to the plate. Gentle washing and cleaning of the plate by oscillating soft brushes.



Draining

Continuous draining ensures the

reuse of liquid.

Drying

After the rinsing process, the plates are dried in two steps: Sponge roll • Warm air knife

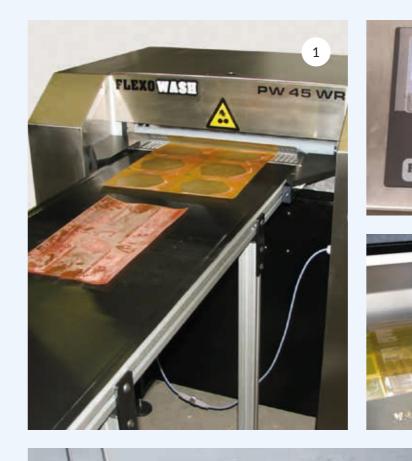
### **Rinsing**

The rinsing of the plate is done by water to remove the remaining ink and cleaning liquid residues. WRO version: Fresh water WR version: Water from the closed-loop wash tank



### **Plate Washing** How does it work?

After the print job, all plates are placed on the conveyor belt, which automatically takes them through the entire wash process. Using the ecofriendly cleaning liquids from Flexo Wash, the Plate Washers are specially developed to efficiently remove different types of inks from the plates in only a few minutes.











- 1. The inlet table transports the plate into the cleaning unit, making it possible to prepare several plates for cleaning at once.
- 2. The PW unit is controlled by a micro control from where different cleaning time, temperature, etc. can be managed.
- 3. The outlet tray collects the clean plates. The plates are dry when leaving the machine which makes it possible to collect several plates in the tray without them sticking together.
- 4. The washing unit can also be made with an outlet roller conveyor for unloading.

### **Plate Washing** Which machine should I choose?

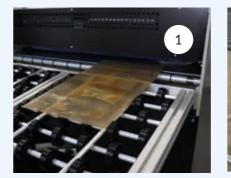
We supply plate washing equipment in all sizes for all segments of the labels and flexo industries. The Flexo Wash plate washers come in many	PW 45	450 mm (17.7")
different models which each can be modified by combining the standard unit with one or more of the various options. Our range of models cover plate widths from 45 cm up to 130 cm.	PW 62	620 mm (32.2")
All units are available as both: <ul> <li>WRO-version: Fresh water</li> </ul>	PW 82	820 mm (32.2")
WR-version: Water from the closed-loop wash tank For cleaning of laser engraved plates after engraving Flexo Wash also	PW 92	920 mm (36.2")

For cleaning of laser engraved plates after engraving Flexo Wash also supplies special DLE Plate Washers, which gently remove the dust from the engraving without damaging the plate. A special filtration system is made to handle large quantities of engraving dust.



#### **Options and Accessories**

- Table for unloading of plates
- Sponge roll holder
- Extended inlet conveyor belt
- Extra tank capacity
- DLE version (only PW 92)





1: Insted of a tray you can add a table for unloading of plates. 2: Sponge roll holder for easy and safe storage of the sponge preventing it from drying out when not used over a longer period of time, 3: With the DLE version you can clean laser engraved plates.

Min. plate length	WR	WRO	DLE
140 mm (5.5")	х	Х	-
220 mm (8.7")	х	х	-
220 mm (8.7")	х	Х	-
220 mm (8.7")	х	Х	х



# Screen Washing

Cleaning in a Flexo Wash screen washer results in reduced downtime, consistent print quality and a safe and healthy cleaning and working environment. The delicate cylinder screens can be difficult to handle properly in an environment where time is money. Therefore, with a cleaning unit broken screens is very unlikely to happen. With unclean or broken plates you will have quality issues with your print.

Flexo Wash supplies washing units for both rotary screens and flat screens.

- Clean and dry screens fast
- Quick and gentle wash operation
- Timer-controlled washing time can be adjusted from 1-100 minutes
- Limited labor and minimal maintenance.



### **Screen Washing** The Flexo Wash Way

Cleaning in a Flexo Wash screen washer results in reduced downtime, consistent print quality and a safe and healthy cleaning and working environment.

Flexo Wash provides solutions both for cleaning of rotary and flat screens. In both systems you can use our eco-friendly FW86500, which is guaranteed harmless to the screens.

For more details please ask your FW sales representative.

### **Screen Washing** How does it work?

#### Washing of rotary screens

The PK 92 requires only 30L of cleaning solution which is circulated by means of an air powered diaphragm pump. The liquid is filtered and recirculated in a closed-circuit system without any waste to the environment. The washing time is controlled by a timer. Normal washing time is approx. 10 minutes.

#### Washing of flat screens

A moving nozzle arm cleans the screens from below and above. Both screens and nozzles are angled ensuring an optimum washing and liquid draining after ended wash cycle.

### Washing

The screen is sprayed with liquid from both the inside and outside to ensure safe and thorough cleaning.



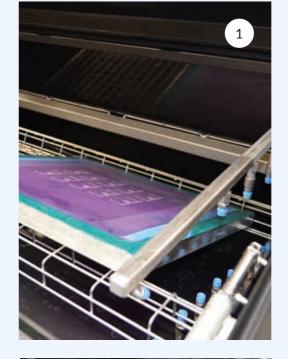
### Drying

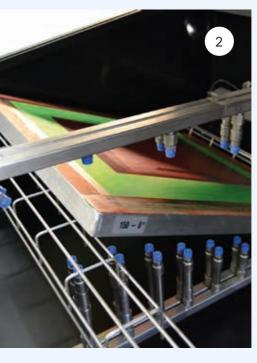
After cleaning the screen can be moved to the integrated chamber for drying (rotary screens only).

### Draining

Continuous draining ensures the reuse of liquid.













- 1. The flat screens are placed in the holders/grids. The unit has the capacity of two screens of 700 X 700 mm (27.5" x 27.5") per wash.
- 2. To start the washing cycle the required time is set (5-15 min) and the start button is activated. The high-pressure nozzles cleans the screen from both sides at once.
- 3. In the PK 92-1 you can clean one rotary screen per cleaning cycle. When placed in the machine high-pressure nozzles wash both the inside and the outside of the screen at once.
- 4. The washing time is easily set with the integrated timer.

### **Screen Washing** Which machine should I choose?

Depending on whether you should clean flat screens or rotary screens we have units for both.

	Screen type	Screens per wash
PK 92-1 XL	Rotary Screens	1
PK Flat Screen Washer.NXT	Flat Screens	2

\* Including end rings



#### PK Rotary Screen Washer

The PK 92 Rotary Screen Washers are used for the cleaning of rotary screens from printing machines using UV-inks.



#### PK Flat Screen Washer

The PK Flat Screen Washer is an easy-to-operate unit, which will leave the screens clean in only 15-20 minutes.

#### **Options and Accessories**

- Extra dip rinse tank for rotary screens
- Fixation for small rotary screens
- External container for dip rinsing of flat screens
- Pump for emptying of Flat Screen Washer



1: Dip tank for rotary screens. The tank can contain 50 L of alcohol. 2: Fixates smaller rotary screens up to 148 mm in inner diameter. 3: For rinsing of flat screens after wash. By dipping the screens in alcohol after the washing, the drying process is optimized.

Max. diameter for rotary screens	Max. length for rotary screens*	Max. screen size for flat screens
270 mm (10.6")	934 mm (36.8")	-

700 x 700 mm (27.5" x 27.5")



### CONTACT

Langs Skoven 38 DK-8541 Skoedstrup Denmark +45 8699 3631 flexowash.com info@flexowash.com

