

FLEXO INDUSTRY

Cleaning solutions

ANILOXES
PLATES
PARTS
DISTILLERS
SLEEVES
LIQUIDS

FLEXO WASH

Leading Cleaning Solutions

Table of

CONTENTS

The Flexo Wash Way	4
Sustainable cleaning solutions	6
Anilox Liquid Cleaning	8
Anilox Laser Cleaning	18
Parts Washing	28
Distillation	44
Plate Washing	50
Sleeve Washing	56

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.

The mission of Flexo Wash is to successfully develop innovative and high-quality cleaning solutions, including equipment and liquids to satisfy the needs of flexo and gravure printers worldwide, thus contributing to improved print

quality, high productivity, and a healthy environment.

With more than 30 years of developing high-quality cleaning technology, Flexo Wash covers all types of cleaning machines of innovative designs for solvent and non-solvent cleaning liquid that can be re-circulated in the Flexo Wash systems – all to meet our customers' needs for sustainable cleaning solutions.

Today Flexo Wash is a global

company driven by family values, visions, and not being afraid of shooting for the stars.

Throughout the company history and still today, Flexo Wash is made by people who do not compromise on quality, flexibility, and sustainability to deliver leading cleaning solutions.

The Flexo Wash Way

Our core values

Flexo Wash offers 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 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.



Innovation

We are never done - no product is ever complete. In this fast-moving business, we need to always think new and be ready to reach higher.



Flexibility

We listen to your needs and custom-build machines, washroom layouts, and other solutions to fit the growing complexity of the cleaning needs of your specific printing house.



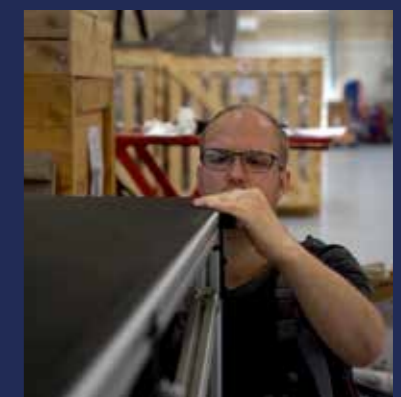
Sustainability

We want to take responsibility by making sure our products contribute to a safe working environment and have a low impact on the environment.

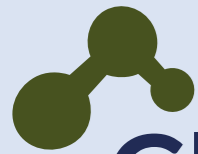


Trust

We strive to be a trusted partner to our customers helping them achieve growth and success. Trust is the foundation of all our collaborations, whether it's with customers, suppliers, agents or employees.



In Flexo Wash we do not just say these four words - these qualities are our backbone from which all development and success starts and ends.



CleanSolutions

Sustainable cleaning solutions for all needs

- 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.

✓ ISEGA-certified
✓ REACH-compliant

✓ ROHS-compliant
✓ Low COD solutions

✓ Low VOC solutions
✓ VOC-free solutions

Developed to ensure high print quality

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 Flexo Wash solutions are of high durability and formulated for easy handling, trouble-free 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 solutions are developed to meet today's demands of high print quality and productivity. This is only possible to obtain if you make sure that your aniloxes, printing plates, and other press parts are kept clean.

Specific inks require specific solutions

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

Our own Flexo Wash consumables brand

CleanSolutions offers many types of liquids.

Additionally, we offer filters, brushes, sponges, and manual cleaning equipment.

Let us guide you towards better cleaning

We are always ready to guide you towards better and more efficient cleaning of your aniloxes, plates, parts, screens etc. based on your specific combination of inks or varnishes.

We can provide liquids that work best with our cleaning systems, but also cleaning liquids for all other cleaning machine brands.

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 a low COD (chemical oxygen demand), which reduces the oxygen demand in the wastewater.



CleanLink

- to your cleaning unit

- Remote service
- Real-time data
- 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 →



Anilox Liquid Cleaning

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 equally essential to your business. The absence of good cleaning practices will always lead to inconsistent print results and increased downtime.

Our Solution

- Fully automatic cleaning
- Clean after 10-20 minutes
- No wear or tear on the aniloxes



Anilox Liquid Cleaning

Quick & gentle washing process

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 legislations), to a tank for re-use or to one of our water recirculation units.



Case Story

One of Columbia's leading manufacturing suppliers of flexible packaging, Flex Pack SAS, has installed Flexo Wash technology at its plant in Bogota to help improve the quality of work being produced on its two flexo printing presses. Founded in 2001 and still owned and managed by Carlos Alberto González and his wife Maribel Jácome, the company is vertically integrated offering a variety of services in-house from extrusion to rolling, printing, and valve inserting. Currently around 90% of all output is printed, and then supplied to markets as diverse as food and beverage, household goods, and medical supplies.

It was with the advent of its second printing press in 2018 that Flex Pack realised the need to improve its overall production efficiency. Following a visit to Labelexpo in Chicago and a meeting with the Flexo Wash team, the decision was made to invest in a PW82WR Plate Washer and two FW992XL Anilox Washers. According to Mr González, the machines have transformed Flex Pack's capability to reduce cleaning times and brought a degree of automation to the production process. "Not only are we saving time, but we are enjoying the benefits of completely clean plates and anilox rolls that have not suffered any of the customary damage that manual cleaning can bring," he explained.

Asked why he had chosen a European manufacturer he responded: "Flexo Wash is the acknowledged market leader, and we had many excellent references from existing users in Columbia. We were impressed with the delivery time offered as we needed a quick installation, and they were very supportive throughout the transaction, which allowed us to buy the best technology available."

Speaking for Flexo Wash Wilson Ramos, Area Sales Manager for South America concluded: "We were delighted to meet Flex Pack at the expo in Chicago and have the opportunity of demonstrating what a difference our technology could make to their business. They were quick to recognise how a relatively small investment in automated cleaning would make a big improvement to the performance of their major investment in a new printing press."

Since installation of the Flexo Wash technology, Flex Pack has seen a noticeable improvement in print quality and production efficiency, and as a bonus has been able to re-deploy the staff who previously were dedicated to cleaning plates and anilox rolls to more productive tasks. "This makes for an improved situation all round – better quality cleaning means better quality print – machine washing gives the plates and aniloxes a longer working life – and the staff enjoy more fulfilling opportunities than performing manual wash-ups."

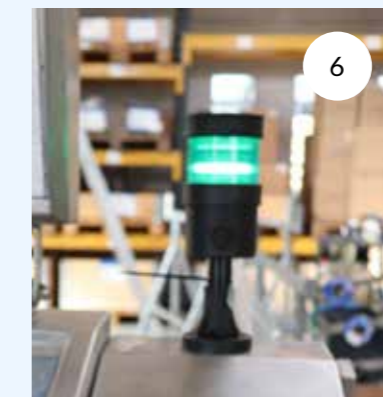
With the variety of products produced in-house, from two- and three-layer laminates to bags with zippers or valves, two- and three-cell flat bags, and flow pack bags with or without degassing valves, Flex Pack's staff of 70 is kept very busy. Recent years has seen the company enjoy a sustained period of growth and profit which it has re-invested in new technology and the generation of employment in the area. This has enabled the company to become self-sufficient and remove the need to outsource work. The result is a better end product for the customer with controlled quality, and a successful enterprise for its owners and all its employees.

"This makes for an improved situation all round – better quality cleaning means better quality print – machine washing gives the (...) aniloxes a longer working life – and the staff enjoy more fulfilling opportunities than performing manual wash-ups"

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 deep cleaned and ready for immediate use after just 10-20 minutes cleaning. The gentle cleaning process not only ensures cleaning without causing any wear or tear to the anilox, but also allows you to clean your aniloxes over and over again. This makes it possible to keep your aniloxes totally clean at all times ensuring a high and consistent print quality and a long lifetime of the aniloxes.



Before

After



1. It is possible to clean even very large and heavy aniloxes in our biggest anilox cleaning units - max cleaning length is up to 3900 mm (153,5")
2. Both liquid tank and filter are easy accessible giving the operator a comfortable workspace for both filter & liquid change, maintenance and trouble shooting.
3. Semi-automatic liquid filling. The filling will automatically stop, when the tank is full.
4. Pull-out liquid tank for easy maintenance.
5. The high-pressure cleaning provides an effective and daily deep cleaning of all cells.
6. The process indicator lamp lights green when the cleaning cycle is in progress.
7. The control system gives you the opportunity to see and manage cleaning time, temperature etc. Furthermore, it is possible to have several cleaning programmes with different settings set up and managed from the control system.

Anilox Liquid Cleaning

Which machine should I choose?

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

All FW Anilox Cleaners are equipped with an innovative control system, which enables easy change of the various program settings e.g., washing time, rotation speed, and temperature. It is also possible to enter an alarm log.



FW Series

The FW series is now available as .NXT units, which ensures easy handling and a sustainable solution. All FW.NXT Anilox Cleaners can be adapted to fit your specific needs by for example adding an extra traction system to clean more aniloxes per wash, or an adaptor to clean sleeves safely.

FW XL Series

The XL models are designed to hold an even larger diameter than the FW standard units. Options for extra traction systems, sleeve adaptors and heavier rolls among various other options are available. The FW XL series is now available as .NXT units, which ensures easy handling and a sustainable solution.

FW SideLoad

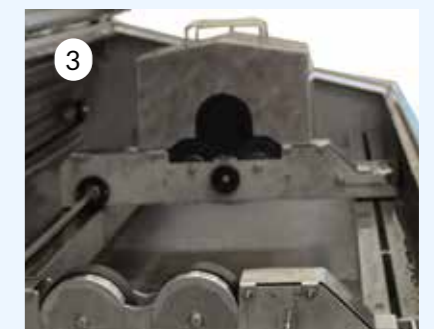
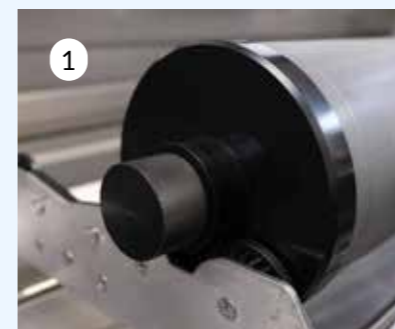
The FW SideLoad Anilox Cleaner is a unit especially designed for easy handling and cleaning of large anilox sleeves. The easy loading system from the side of the unit makes it possible to take the sleeve directly from the press to the washing machine.

	Aniloxes per wash	Max diameter	Max cleaning length	Max weight total	Max anilox length****
FW 992 XL.NXT	2	210 mm (8,2")	1600 mm (63")	2 x 25 kg (2 x 55,1lbs)	1860 mm (73,2")
FW 2000M.NXT	1-2*	230 mm (9")	1700 mm (66,9")	200 kg (440lbs)	1800 mm (70,9")
FW 2500M.NXT	1-2*	230 mm (9")	2200 mm (86,6")	200 kg (440lbs)	2300 mm (90,5")
FW 3000-2.NXT	2-4**	300 mm (11,8")	2400 mm (94,5")	600 kg (1323lbs)	2800 mm (110,2")
FW 3000.NXT	1-2*	300 mm (11,8")	2400 mm (94,5")	600 kg (1323lbs)/ 800 kg (1764 lbs)***	2800 mm (110,2")
FW 3500.NXT	1-2*	300 mm (11,8")	2900 mm (114,2")	600 kg (1323lbs)/ 800 kg (1764 lbs)***	3300 mm (129,9")
FW 4000.NXT	1-2*	300 mm (11,8")	3400 mm (133,9")	600 kg (1323lbs)/ 800 kg (1764 lbs)***	3800 mm (149,6")
FW 4500.NXT	1-2*	300 mm (11,8")	3900 mm (153,5")	600 kg (1323lbs)/ 800 kg (1764 lbs)***	4300 mm (169,3)
FW 3000 XL.NXT	1-2*	450 mm (17,7")	2400 mm (94,5")	800 kg (1764 lbs)/ 1500 kg (3307lbs)***	2800 mm (110,2")
FW 3500 XL.NXT	1-2*	450 mm (17,7")	2900 mm (114,2")	800 kg (1764 lbs)/ 1500 kg (3307lbs)***	3300 mm (129,9")
FW 4000 XL.NXT	1-2*	450 mm (17,7")	3400 mm (133,9")	800 kg (1764 lbs)/ 1500 kg (3307lbs)***	3800 mm (149,6")
FW 4500 XL.NXT	1-2*	450 mm (17,7")	3900 mm (153,5")	800 kg (1764 lbs)/ 1500 kg (3307lbs)***	4300 mm (169,3")
FW 3500 SideLoad	1	300 mm (11,8")	3040 mm (119,7")	180 kg (397lbs)	3150 mm (124,05")

* Cleans up to two aniloxes per wash with option (reduces cleaning length).
 ** Cleans up to four aniloxes per wash with option (reduces cleaning length).
 *** Requires option
 **** Including shaft

Options and Accessories

- Adaptor for sleeves
- Gear Covers
- Double tank system for 2nd cleaning liquid
- Systems for reuse of rinse water
- Automatic liquid filling system
- XXL versions for larger size aniloxes available on request



1: For anilox sleeves, an adaptor can be made according to the specific measures of the anilox 2: Recirculation unit for reuse of rinse water, 3: Gear covers for protection of shaft ends.

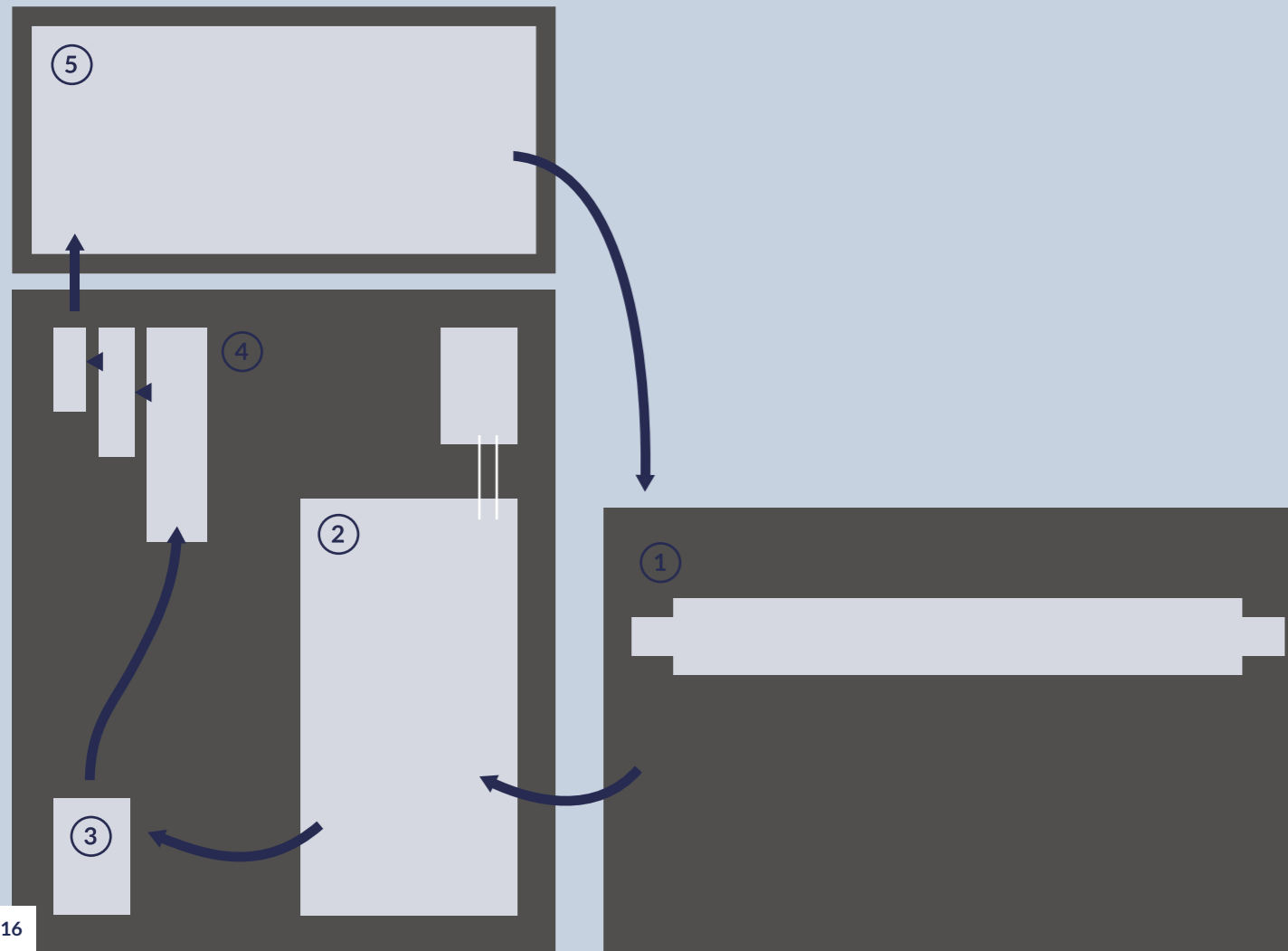
Reuse of rinse water

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. A pump pumps the rinse water from the mixing tank to the filters.
4. The rinse water is passed through high-performance filters, removing solids and dried ink. The 3 filters remove solids and ink particles.
5. The filtered and treated water is pumped to the holding tank from 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 closed-loop system is fully automatic.

Recirculation Unit

- 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.

Our Solution

- 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 newest laser technology and software systems. It is a waste-free and sustainable cleaning method with no liquid handling or consumption.

Loading

Place the aniloxes as is 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 nano particles will enter the room. The cleaning programme stops automatically when the cleaning and extraction process is finalized.



Cleaning

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



Case Story

The Danish manufacturer of paper bags and carriers, Scanbag A/S, has installed a laser anilox cleaner from Flexo Wash for its production plant in Skive. The FW 2000 model, which was introduced in 2018, is the first laser model in the company's anilox cleaning range that dates back 25 years and involves more than 3,000 installations.

With anilox cleaning being such a fundamental part of the flexo printing process, the new laser technology is ideal for 100% cleaning without damage to the

expensive rolls, with the guarantee of consistent print quality and reduced downtime.

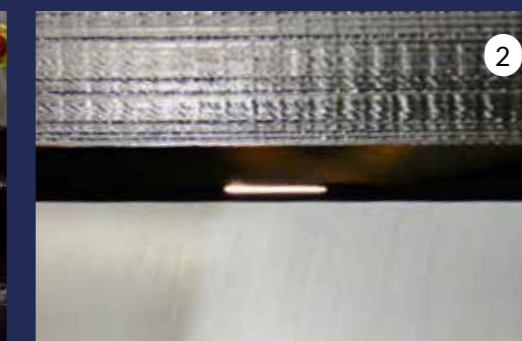
Speaking for Scanbag, printer Søren Bligaard stated: "We are very satisfied with the cleaning results and the easy handling of the aniloxes. We tested another system, but it damaged the rolls. With the Flexo Wash system we have no issues at all."

The new Flexo Wash laser cleaner sits well with the company's ethos of quality, safety and focus on the environment.



"We are very satisfied with the cleaning results and the easy handling of the aniloxes. We tested another system, but it damaged the rolls. With the Flexo Wash we have no issues at all."

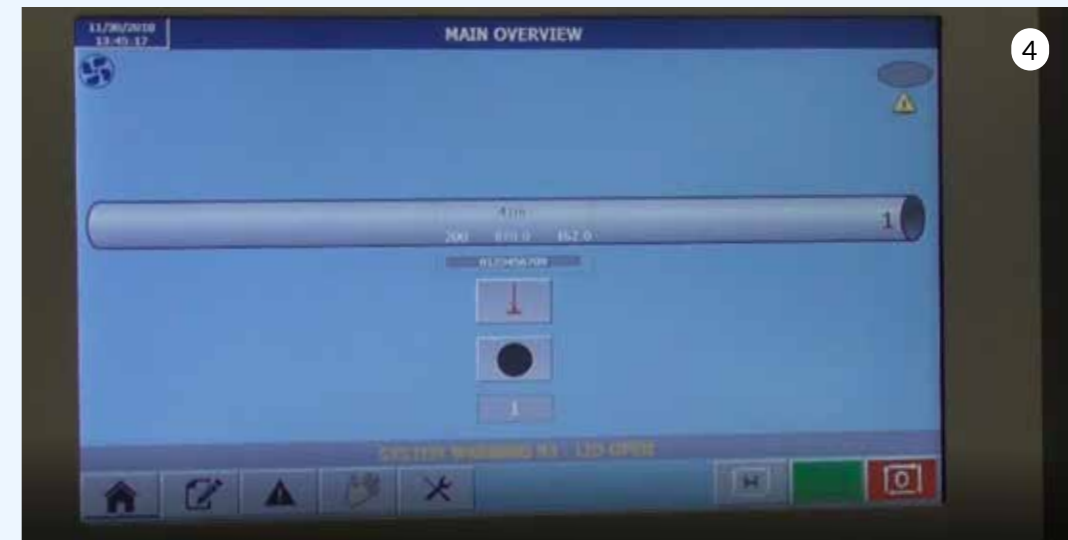
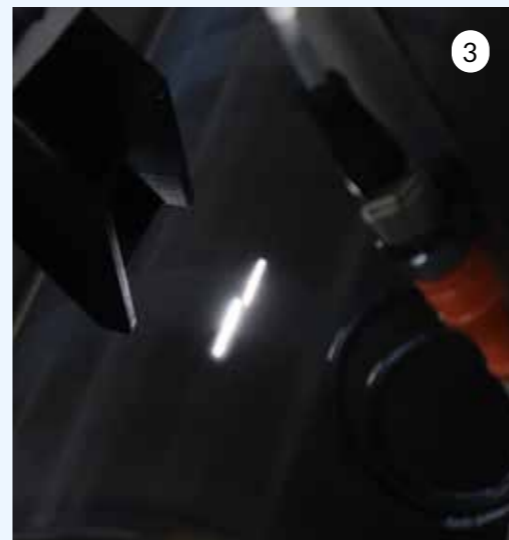
1: Loading, 2: Cleaning, 3: Extraction through a 3-filter configuration.



Anilox Laser Cleaning

How does it work?

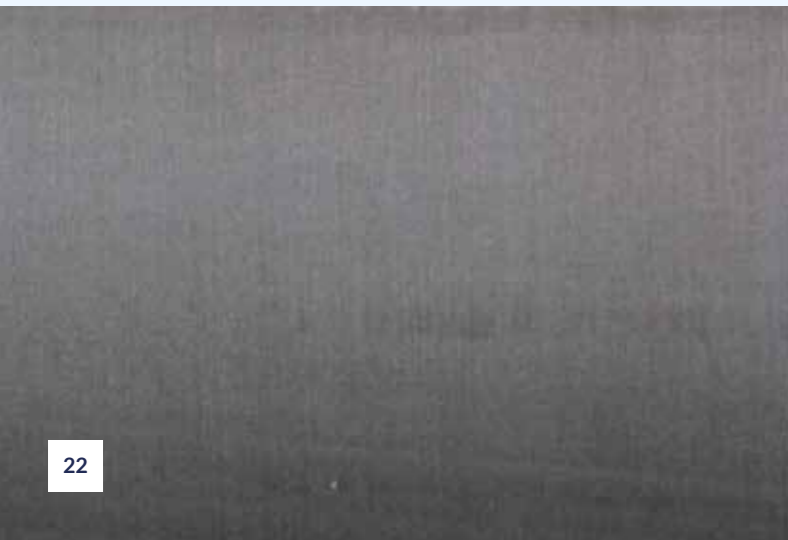
Get a waste-free, completely safe and automatic anilox cleaner that will give you a sustainable cleaning solution. The FW LASER Anilox Cleaner only requires air and power.



1. When loading the anilox simply place it on the traction system - no adaptor is needed.
2. Class 1 laser system which is safe under all conditions of normal use - no need for safety goggles or other safety equipment.
3. By choosing the LaserX or LaserX2 you can get shorter cleaning time with same high degree of safety.
4. 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.
5. The movable traction stations make it possible to clean aniloxes of various length in the same unit.
6. Before and after: The laser cleaning system provides high-quality cleaning results.
7. The easy accessible filter consists of two different combination filters. Both a filter mat, a HEPA and an active carbon filter are integrated ensuring that all particles are collected within the unit by the extraction system.

Before

After





LIQUID OR LASER?

Interview

Liquid or laser cleaning of aniloxes?

Flexo Wash offers two ways to clean your expensive and delicate aniloxes:

- Cleaning with liquid and high-pressure water
- Cleaning with laser technology

Both give perfect cleaning results and will reduce your downtime and expenses from printing with dirty aniloxes. But which is best for you and your needs?

Below you will find an interview conducted by Area Sales Manager, Mette Laursen with our American colleagues Ryan Potter (Vice President, Flexo Wash LLC) and Patrick Potter (President, Flexo Wash LLC) giving an insight into the answer to this question.

Patrick and Ryan, today many printers in the label and flexible packaging industry use the very well known system of cleaning with liquid. But many of these printers maybe have an anilox cleaner that needs replacement. So, Patrick and Ryan, how should they choose this?

Patrick: Sure, Mette, it's a great question and one that we get pretty frequently. It really comes down to how they work in their production process today. By offering both liquid and laser cleaning, it allows them to step back and look at their current process to determine what is the best method of cleaning.

Ryan: And a lot of factors goes into that: How many jobs is the converter running per day? Are they changing over aniloxes pretty frequently, and how many aniloxes are they trying to clean during that particular shift? Do they have a large anilox inventory? Do they have spare aniloxes that they can put in? All of these factors feed into a decision because time is really one of the most important factors when you are deciding between liquid and laser anilox cleaning. And then there is also some other questions around any type of corporate mandates, or concerns around not having access to a drain or water with liquid cleaning. So, we try to step back with each customer, and discuss their particular circumstances to determine the best method of cleaning.

So, Ryan, what are the advantages of laser cleaning? What about all the talks about laser cleaning destroying aniloxes?

One of the main advantages of laser cleaning is that its a simple and easy operation. The operator will just open the door, he can either scan the anilox with an RFID chip or barcode reader, or he can input the anilox ID-number. At that point the machine will know all the specifications necessary for the proper cleaning, and he closes the lid, hits start and the machine will run.

In regards to damage - Flexo Wash spent a lot of time not only developing the best anilox cleaner, but also the safest laser anilox cleaner. There is many safety functions to prevent the anilox from being damaged during the cleaning proces.

What about waste stream when it comes to laser?

Ryan: With the laser anilox cleaner there is no waste stream. The only consumables there are, are filters for the vacuum system. What about liquid cleaning, what are the advantages here? And what about the talks about liquid cleaning only being daily cleaning and not deep cleaning? Actually, liquid cleaning has been around for nearly 25 years, and with over 4000 installations around the world, we know that it is the safest and the most effective means of cleaning your aniloxes.

It is good for daily deep cleaning. when the machine is working probably as it's intended to, you will be able to regain the full cell volume in a quick and efficient cleaning method. Liquid cleaning also offers in addition to time, the flexibility of the number of aniloxes you can clean. So, for a wide web converter or printer they can clean maybe one or two per 15-20 minute wash cycle, whereas a narrow web printer can clean between 1-9 aniloxes per cycle. So, it offers a great deal of flexibility.

For anyone that has a concern about the waste stream, we have so many different ways to work with them on that concern, to treat the effluent to make sure that it works with any of their corporate mandates or environmental questions.

Thank you Patrick and Ryan. So, you say that it very much depends on the customer which system to choose?

Absolutely, Mette. Clean is clean, and it's best to let the customer decide what method to use to achieve that.

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 the pages you will find a brief introduction to the different units and their specifications - for more info ask your FW sales representative.

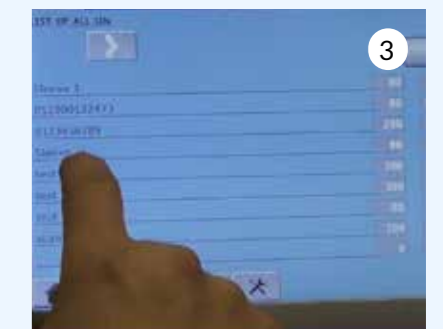


	Aniloxes per wash	Max diameter	Max cleaning length	Max weight total
FW 2000 Laser	1 - 4*	230 mm (9")	1730 mm (68")	200 kg (440lbs)
FW 3000 Laser	1 - 4*	300 mm (11.8")	2730 mm (107,5")	800 kg (1763,7lbs)
FW 4000 Laser	1 - 4*	300 mm (11,8")	3730 mm (146,9")	800 kg (1763,7lbs)
FW 2000 LaserX	1 - 4*	230 mm (9")	1730 mm (68")	200 kg (440lbs)
FW 3000 LaserX	1 - 4*	300 mm (11.8")	2730 mm (107,5")	800 kg (1764 lbs)
FW 4000 LaserX	1 - 4*	300 mm (11,8")	3730 mm (146,9")	800 kg (1764 lbs)
FW 2000 LaserX2	1 - 4*	230 mm (9")	1730 mm (68")	200 kg (440lbs)
FW 3000 LaserX2	1 - 4*	300 mm (11.8")	2730 mm (107,5")	800 kg (1764 lbs)
FW 4000 LaserX2	1 - 4*	300 mm (11,8")	3730 mm (146,9")	800 kg (1764 lbs)

* Depending on configuration. Total maximum cleaning length reduces by 50 mm for each anilox

Options and Accessories

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



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

FW Laser

Our safe & high-quality laser system gives you waste-free anilox cleaner that will ensure you a more sustainable cleaning solution without compromising the cleaning result.

FW LaserX

All the same qualities as the standard laser but with improved technology, making it possible to clean twice as fast, but with the same high quality and degree of safety.

FW LaserX2

The ultimate high-capacity laser cleaning system with all the same qualities as the two others, but with a cleaning speed that reduces the cleaning time to only 25% of what the standard laser cleaner uses.

Parts Washing

Press parts can be tricky to clean. There are three different automatic cleaning methods and what works best for your printing business depends heavily on your workflow and types of ink you use. Here is how you decide between cleaning with solvents, cleaning with non-flammable liquids and cleaning with alkaline liquids.



Our Solution

- Custom-built system enabling focused cleaning of challenging areas
- Fully automatic cleaning closed-loop process
- Ergonomically friendly grids and trolleys
- Clean all press parts in one single machine
- Low operation costs and environmentally friendly cleaning

Parts Washing

The Flexo Wash Way

The Parts Washers from Flexo Wash have a wash and rinse system with two separate tanks (or one tank and one open-rinse). This 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 various high-pressure nozzles, spraying, cleaning, and rinse liquid from below and above.

Washing

The parts are placed in the holders/grids in the machine and the lid is closed by a two-hand control. Activate the washing process by pressing START.

Draining

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.

Rinsing

The parts are rinsed leaving them ready for immediate use.

Case Story

There is only one word to describe Franklin Web's plant, 'enormous!' The Australian company is spread across 100,000 square metres of factory space in Sunshine, Victoria, made up of six buildings, covering a site of some 40 acres. But back in 1935 when Len Taylor opened his print shop in Franklin Street, Sunshine, it wasn't that way.

Taylor started his company in a business climate that was still feeling the pain of the Great Depression. Through hard work and a dedication to quality and service, Franklin Web attracted and retained customers, and one of his sons, Phillip undertook a lithographic printing apprenticeship to become the right-hand-man of the business.

But it was in 1980 that business really kicked off with the installation of a Toshiba 16pp web press, and today, Franklin Web is one of the major suppliers of catalogues to Australian retailers, and a huge percentage of its production makes up the 8 billion catalogues that are distributed every year to Australian letterboxes.

The company has continued to grow and now has some of the most impressive presses in the country. "As a printer, we're constantly looking at ways to optimise performance on our presses," said Taylor. "We aim for 80% utilisation at 80% of top speed, and to achieve that we need to prevent ink build-up on the guards, which really affects uptime."

Another major problem on the presses was the formation of ink droplets, which at running speeds of 15 m/sec can cause the web to break. With four printing units running 24/7 this can involve substantial downtime. On analysis, Franklin Web found that 50 % of its stoppages were due to ink droplets and also took the initiative of investing in a second set of guards that are changed every week.

The whole project began to take shape when Franklin Web's Business Service Manager, Bill Van Den

Dungen, contacted Flexo Wash's Australasian agent Ruvan Weeraratne of Jet Technologies. He explained: "Flexo Wash has been in press cleaning equipment since 1991 and manufactures a variety of models for anilox rolls, cylinders, sleeves, and ink trays."

Knowing that the company's wide-web products could be customised to fit all parts from different press manufacturers, he invited Flexo Wash's Area Sales Manager, Mette Laursen, to visit the customer.

"While we make a range of different sizes, we felt Franklin required a larger than normal unit to allow it to handle any extra washing of parts that may be required in the future. After measuring the area and the number of guards on presses, we devised the right unit to suit Franklin's needs," she explained. The washing unit from Flexo Wash allows Franklin between 8-10 washes before having to change the exhausted wash fluid. It cleans finger guards and all the other parts that Franklin was previously cleaning by hand, in the preventive maintenance programme.

The Flexo Wash technology now automates the cleaning process and delivers substantial savings.

"Before we installed the Flexo Wash we were manually cleaning the guards and trays fitted on every machine during a routine shutdown. After investigation, we found the operators then had no real-time to spend setting the rollers in the roller train, which is what really was required of them," Business Service Manager Bill Van Den Dungen explains.

Terrific difference with great results

Concluding for Franklin Web, Owner Phillip Taylor commented:

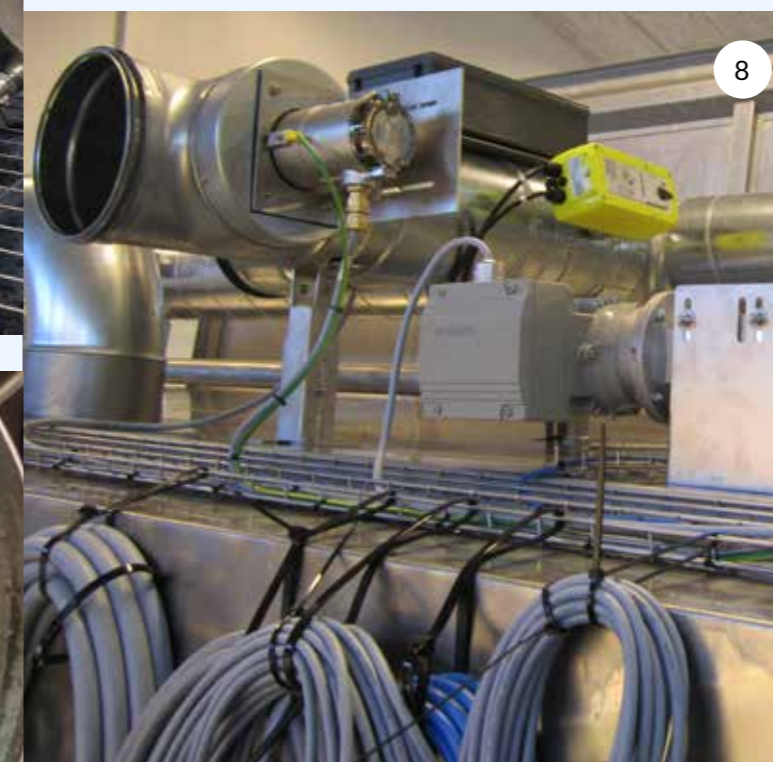
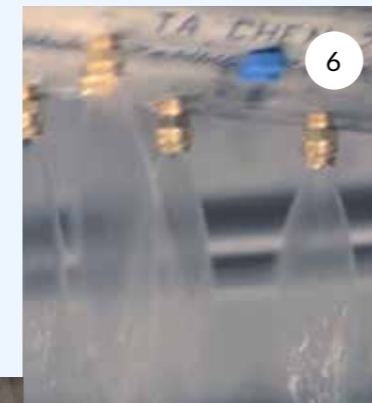
"The unit has made a terrific difference to the cleaning regime and has achieved great results. We work in an exciting and dynamic market, and even after 37 years I still get a buzz out of seeing catalogues streaming off the presses and being despatched all over Australia."

"Before we installed the Flexo Wash we were manually cleaning the guards and trays fitted on every machine during a routine shutdown."

Parts Washing

How does it work?

The fully automatic washing units are designed for easy handling of press parts. It is possible to wash doctor blade chambers, ink trays, buckets and other removable press parts used with all types of inks, varnishes etc. The units can be equipped with a trolley, which makes the handling even easier.



1. The trolleys with slide-in grids make it possible easily to transport the parts from the printing machine to the parts washer. This means less heavy lifting, easier handling, and more efficient processes.
2. High-performance rotating nozzles for bucket cleaning can be placed below the grid (optional). The bucket is placed upside down over the nozzle, which cleans the inside during the wash cycle.
3. The large pump ensures a consistent flow from the wash tank of liquid into the washroom during the cleaning cycle.
4. For washing of standard ink buckets, a rotating holder with brushes can be installed (optional). When placed on the holder the bucket is washed from the inside and outside at once.
5. The hose cleaning valves and quick connections make it possible to clean 2 or 4 hoses during the wash cycle (optional).
6. The wash and rinse nozzles are placed on a moveable spray bar, which moves from one side to the other when rinsing and washing the parts with high-pressure liquid.
7. The large stainless steel filter house is placed on the machine, easily accessible for maintenance and filter change.
8. When the washing machine is connected to exhaust, an air treatment system or an RTO, regulation of fresh air with solvent concentrated air is a necessity. With a LEL sensor and regulator, the solvent concentration in the air is monitored and kept at an acceptable level for the system.

Before

After



Moving Nozzles

Save energy - choose moving nozzles

With fixed nozzles you typically see 4-5 times the number of nozzles in a machine compared to a machine with moving nozzles. More nozzles mean larger requirements on the power of the pump. Typically pumps in a cleaning machine with fixed nozzles would be 50-70% larger, however the larger pump does not compensate sufficiently, and the nozzles pressure is therefore lower than in a machine with moving nozzles. A larger

pump in the cleaning machine with fixed nozzles consequently also consumes more energy when cleaning.

When it comes to moving nozzles the key factor that is going to give you all the advantages are the dynamic. Think of when you are washing your car, when you start spraying water onto it nothing happens until you start moving your spray. The same goes for the moving nozzles. The magic happens

when you introduce movement to the liquid spraying.

As a printer you may have a lot of different parts, some of them with very specific cleaning challenges relating to dimensions and design. A custom built wash layout of the cleaning space in the cleaning machine where the nozzles are angled specifically for all surfaces on your parts ensure optimal cleaning, where the moving nozzles can really work their magic.

	Moving Nozzles	Fixed Nozzles
Nozzle Quantity	Machines with moving nozzles require a lower quantity of nozzles.	A larger number of nozzles are required to compensate for the lack of movement.
Nozzle pressure	Higher nozzle pressure due to better pump efficiency.	Lower nozzle pressure due to lack of pump efficiency.
Energy consumption	Moving nozzles result in better pump efficiency and lower energy consumption.	Larger requirements on the pumps result in higher energy consumption.
Cleaning Effectiveness	Effective cleaning with optimum utilization of solvents.	Risk of do-over jobs due to inconsistent cleaning results.
Operational Costs	Higher cleaning efficiency results in lower operational costs.	Higher energy consumption and do-over jobs mean higher operational costs.
Maintenance	Limited number of nozzles to clean and maintain.	Large number of nozzles to clean and maintain.

The ATEX Room

Certifications and requirements

Zone 0 = Category I

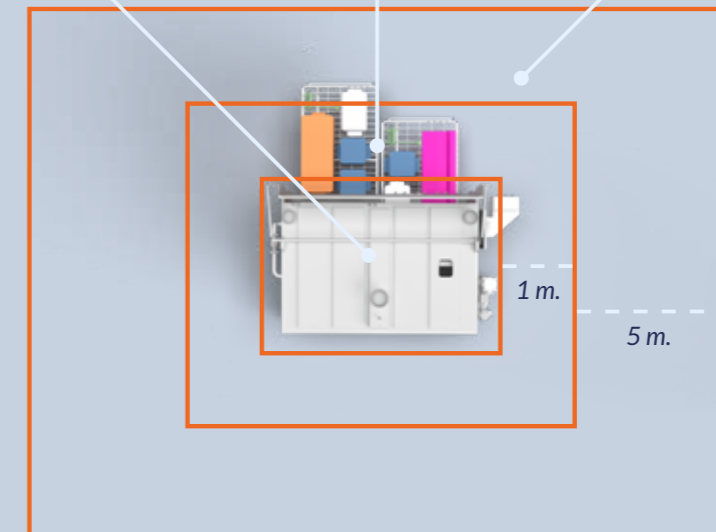
Explosive atmosphere is continuously present for long periods. Inside the washing unit and tanks the unit will have ATEX zone 0

Zone 1 = Category II

Between 10 and 100 hours of explosive atmosphere per year. Around the unit will be ATEX zone 1.

Zone 2 = Category III

Less than 10 hours of explosive atmosphere per year. Zone 2 is often referred to as the remotely hazardous area.



How do I build an ATEX-room?

When deciding to implement an ATEX room, it's important to carefully consider key factors that ensure the room's safety and effectiveness in containing potentially explosive environments. Some of these considerations are:

- 1. Budget:** ATEX rooms require costly specialized materials, ventilation, and safety gear for explosive atmospheres.
- 2. Maintenance:** ATEX rooms need ongoing maintenance to ensure safety measures, including ATEX-rated components.

3. Space limitations: Building an ATEX room can limit available space for other operations or processes due to its size.

Understanding these crucial factors provides comprehensive insights into the implications of implementing an ATEX room, facilitating informed and strategic planning for the establishment and maintenance of a safe and efficient working environment within the facility. If you are looking for ATEX-rated size reduction machines, we can provide you with options that meet the necessary requirements.

You can read more about our parts washer to look for other alternatives that comply with ATEX requirements.

After considering the above, we provide an inclusive 8-step guide to help you comprehend the fundamental requirements for setting up an ATEX room. Establishing an ATEX room involves considering various key factors, such as ATEX ventilation and ATEX-rated size reduction machines, to ensure the safety of both personnel and equipment within the designated area.

Parts Washing

Different needs, different techniques

Different needs require different techniques. Therefore, the Flexo Wash EasyLoad, and FrontLoad parts washers can all be built to clean with solvents, alkaline liquids, or eco-friendly cleaning liquids and distillable eco-friendly liquids.

All methods give excellent cleaning results and will reduce downtime and ease the handling of parts cleaning. But which is the best solution for you and your needs?

Follow the question guide on the next page to see which system might be the right choice for you.

Benefits of cleaning with ...

Non-flammable liquids

- Safer & easier handling
- Non-corrosive & non-evaporating
- Eco-friendly alternative which improves working conditions

Alkaline liquids

- Non-flammable
- Powerful cleaner for 2K inks, adhesives, coatings etc.
- Very effective on combinations of water and solvent based inks

Solvents

- Very effective with solvent based inks
- Easy accessible when solvents are used in production and cleaning already
- Distillable

Test your needs:

Which system is right for me?

START HERE!

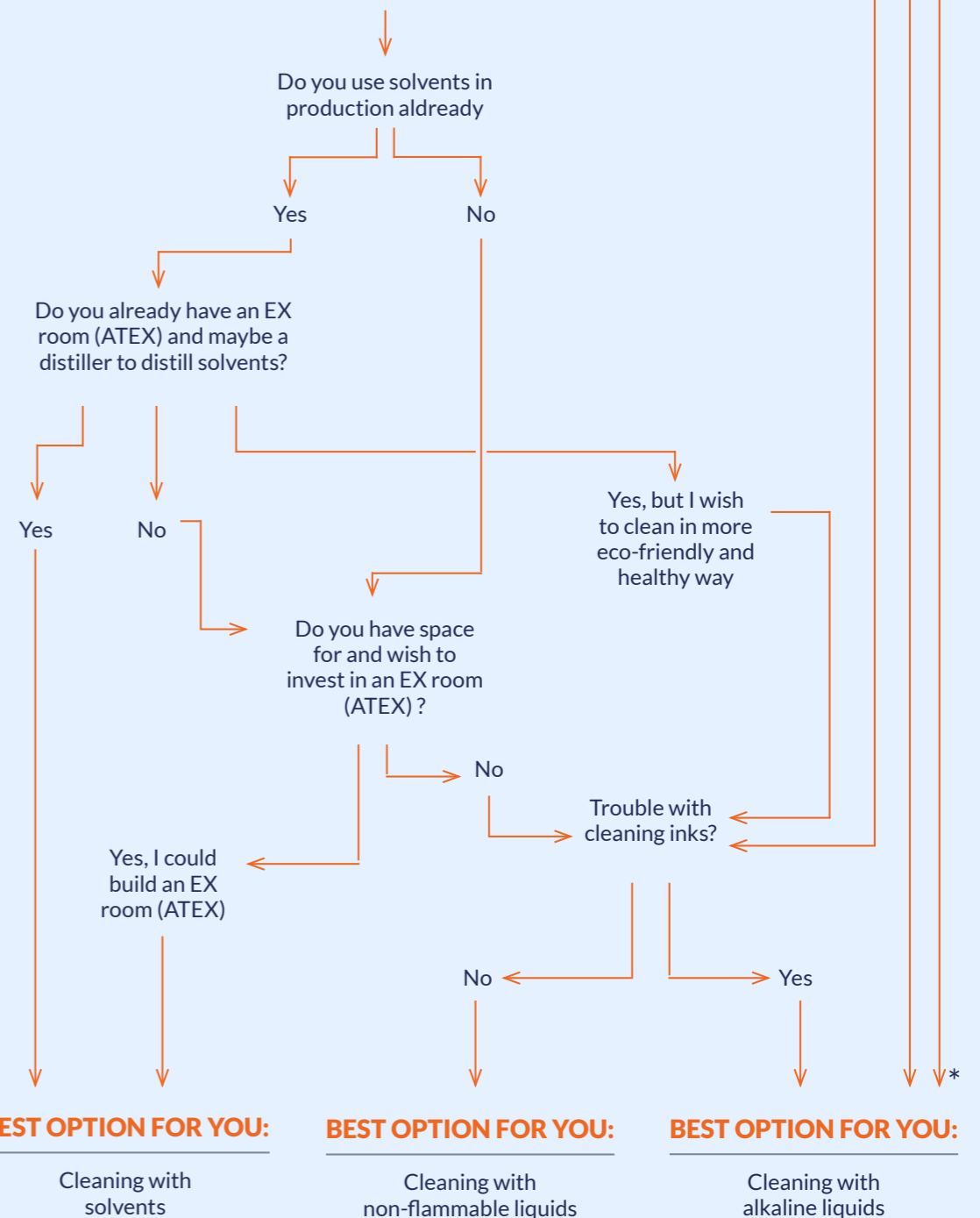
Which kind of ink type(s) do you need cleaned?

→ Mix of solvent and water based inks

→ 2K inks, adhesives, coatings etc.

→ Water based inks

→ Solvent based inks



* Also possible to clean with non-flammable liquids with a double liquid tank solution

Parts Washing

Which machine should I choose?

Factors like ink types, thickness of ink layers, installation space etc. determine which kind of Parts Washer you should choose. Below you will find brief info of each type of cleaning method - for more info ask your FW sales representative.

Standard Parts Washer

Designed to clean with non-flammable and eco-friendly cleaning liquids.

ALKA Parts Washer

Designed to clean with alkaline liquid and made with safety features and components that ensure safe working conditions.

ATEX Parts Washer

Designed to clean with solvents and are made EEX-proof according to the ATEX standard. It is made with a fully electrical system with ATEX-approved electrical control system and pumps.



PK FrontLoad

With the FrontLoad units you will get highly intensive cleaning from several angles. The machines are controlled by a PLC control system. The standard unit comes with two trolleys, which makes it easy to move the parts directly from the printing press to the grid.

Available as standard, ALKA, and ATEX Electric

PK EasyLoad

With the EasyLoad units you will get a very effective and cost-efficient parts washer for various wide web press parts. The machines are controlled by a microprocessor. The standard unit comes with one large trolley, which makes it easy to move the parts directly from the printing press to the grid.

Available as standard, ALKA, and ATEX Electric

PK SideLoad

If you want to place your Parts Washer in an ATEX certified container or have limited space possibilities a SideLoad might be the right choice for you.

Available as ATEX Electric

	Wash area (LxWxH) per trolley:	Trolleys included	Standard	ALKA	ATEX Elec.	XL*	XXL**
PK EasyLoad 240	2150 x 1030 x 700 mm (84,6" x 40,5" x 27,6")	1	X	X	X		
PK EasyLoad 280	2550 x 1030 x 700 mm (100,4" x 40,5" x 27,6")	1	X	X	X		
PK SideLoad 200	2000 x 1000 x 700 mm (79" x 39" x 27,6")	1			X		
PK SideLoad 300	3000 x 1000 x 700 mm (91" x 39" x 27,6")	1			X		
PK FrontLoad 250	1800 x 950 x 700 mm (70,9" x 37,4" x 27,6")	2	X	X	X	X	X
PK FrontLoad 300	1800 x 1200 x 700 mm (70,9" x 47,2" x 27,6")	2	X	X	X	X	X
PK FrontLoad 350	1800 x 1450 x 700 mm (70,9" x 57,1" x 27,6")	2	X	X	X	X	X

* Adds 300 mm (11.8") in length of wash area per trolley.

** Adds 800 mm (31.5") in length of wash area per trolley.

Options and Accessories

- Trolley with slide-in grid for easy handling of parts
- High performance rotating nozzles for ink buckets
- Flexible jets to focus spray on difficult to clean items
- Two-story wash area
- Racks for ink trays, buckets, and doctor blades
- Cleaning of hoses
- Extra tank, pump, and nozzles for 2. cleaning liquid
- Distillation systems and integration between parts washer, tanks, and distiller
- Wastewater treatment unit
- Automatic liquid filling system



1: Cleaning of hoses 2: Racks for ink trays and doctor blades, 3. Distillation systems and integration between parts washer, tanks, and distiller.

Trolley Wash

Easy cleaning of printing trolley station

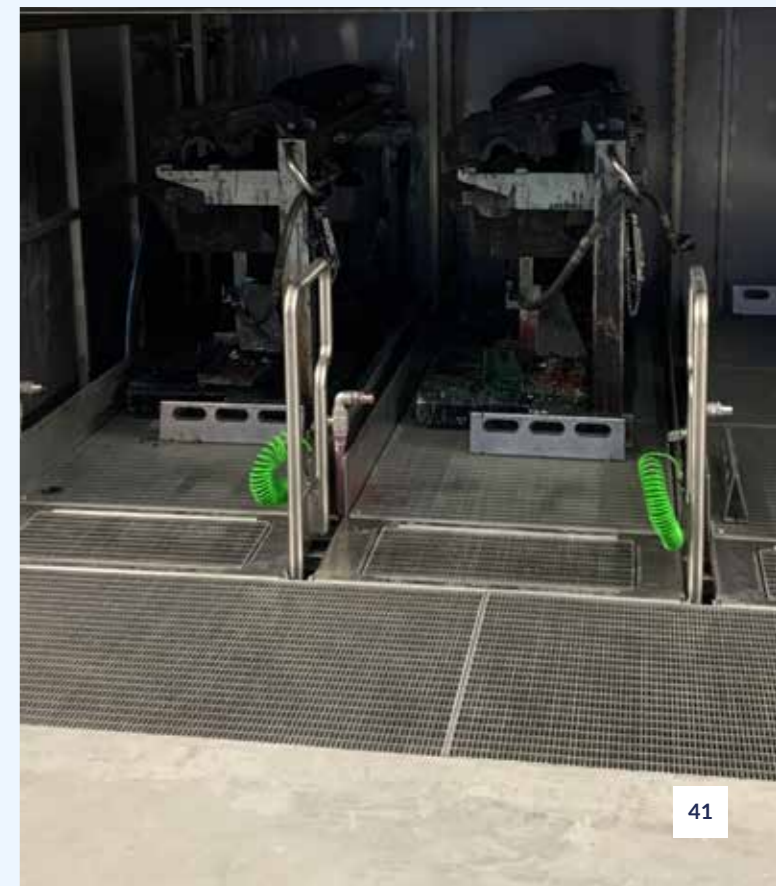
Printing trolley stations get really dirty and are very difficult to clean. With the PK Trolley Wash units you will get a very effective and cost-efficient automatic washing machine for cleaning different types of printing trolley stations.

The printing trolley station is pushed directly into the washing machine. The machines are controlled by a PLC unit, where it is easy to modify the different parameters such as wash-time, drain-time, and stabilization time.

Our Solution

- Custom-built system enabling focused cleaning of challenging areas
- Fully automatic closed-loop cleaning process
- Ergonomically friendly grids and trolleys
- Clean all press parts in one single machine
- Low operation costs and environmentally friendly cleaning

	Wash area (LxWxH) per washroom:	Wash capabilities	Standard	Alkaline	ATEX Electric
PK 350 WR XL	2100 x 850 x 1100 mm (82,7" x 33,5" x 43,3")	3 trolleys			X
PK 350 WR XXL	2400 x 930 x 1300 mm (94,5" x 36,6" x 51,2")	3 trolleys			X



Bucket Wash

Quick & easy operation

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.

Benefits of automated bucket washing

- Reuse your buckets
- Lower expenses on buckets
- Reduce the environmental impact
- Limited labor involved and minimal maintenance
- The Bucket Wash lets you clean 3 buckets in 15-20 minutes.

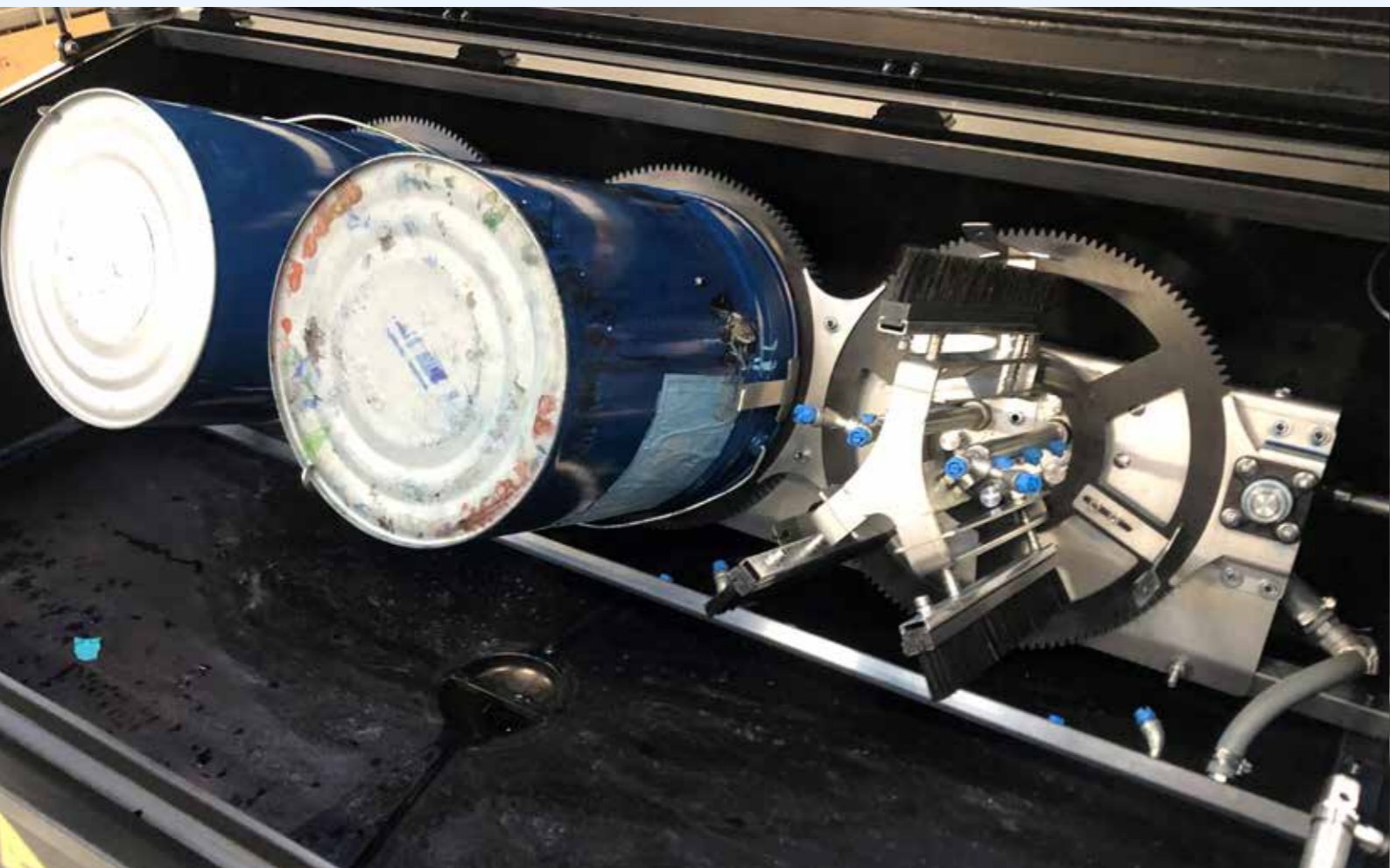
TWO-STAGE CLEANING PROCESS

The Bucket Washers from Flexo Wash have a Wash and 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 washing and the second stage is for rinsing. The buckets are cleaned by a rotating brush, spraying, cleaning, and rinse liquid from below, above, and inside the bucket.

	Wash capabilities	Min. diameter	Max. diameter	Min. height	Max. height
Bucket Wash	3 buckets	280 mm (11")*/ 310 mm (12,2")*	330 mm(12,9")*/ 360 mm (14.1")*	280 mm (11")**/ 370 mm (14.5")**	340 mm(13,4")**/ 430 mm (16.9")**

* Max range from min. diameter to max. diameter: 50 mm.

** Max range from min. height to max. height: 60 mm.



Pump Wash

Easy operation

The system consists of a stainless steel cabinet with a reservoir for solvents and 6 stations for pump cleaning. At each station the pump is connected to a hose and motor which ensures a steady and constant flow of cleaning solvents through the pump.

From the operating panel, each of the 6 stations can be individually controlled and operated. An optional set of adaptors enables the washing unit to accommodate different pump sizes. To reduce solvent evaporation empty pump slots are covered during the wash cycle.

Benefits of pump washing

- Prevent downtime - no need to use printing press to clean pumps.
- Easy handling and mounting of pumps
- Effective cleaning with solvent in ATEX approved unit.

	Wash capabilities	Machine dimensions (LxW)	Service space required
PK-6 Pump Wash	6 pumps	3279 x 1100 mm (129,1" x 43,7")	500 mm (20") around the machine



Manual Cleaning Station

Easy operation

The system consists of a cabinet with a reservoir for solvent or other cleaning liquids, like UV/Solvent cleaner 1A. To reduce evaporation of liquid from the reservoir, the lid that can be closed when the system is in stand-by. The interior of the 200 mm deep tub has a sliding grid that can be pushed aside making it possible to dip or soak parts to soften the ink before washing them in an automatic washing unit. The system has a brush that can be used to clean the parts manually.

Ease your manual cleaning

- Soak parts with difficult ink residues before washing them in an automatic washing unit for a better result
- Reuse liquids/solvents to reduce consumption
- Both as ATEX or non-ATEX models.

	Area for washing (LxW)	Drip tray area (LxW)	Machine dimensions (LxW)	Service space required
PK Manual Cleaning Station	950 mm x 1900 mm (37" x 74")	950 mm x 1700 mm (37" x 66")	3800 x 1100 mm (150" x 44")	500 mm (20") around the machine



Distillation

Distillers make it possible to reduce the solvent waste to an absolute minimum and is a very economical instrument to reduce costs in the printing and coating industry.

Flexo Wash offers a complete system where the parts washer, the inline wash system in the printing press(es), and the distillation system is connected and work as a closed loop. Our distillers are fully automatic and perform a high output during operation.

Our Solution

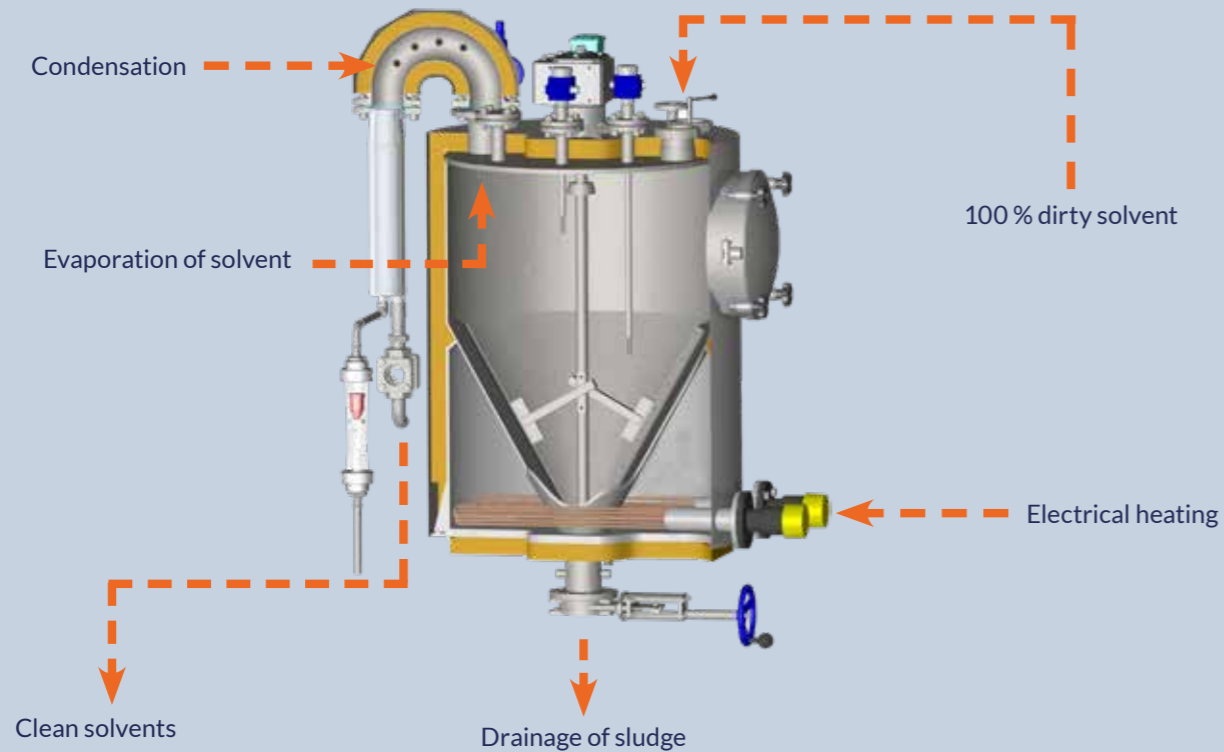
- Reuse your solvents
- Tanks for clean and dirty solvent
- Water cooled condenser
- Fully automatic distillation process
- High reclaim percentage



Distillation

How does it work?

When investing in a Flexo Wash Distiller we will take care of all connections between distiller, tanks, and Flexo Wash parts washer. We will guide you through all the requirements of the installation and prepare an installation layout to give you concrete measurements before deciding which DI unit best fits your needs and space requirements.



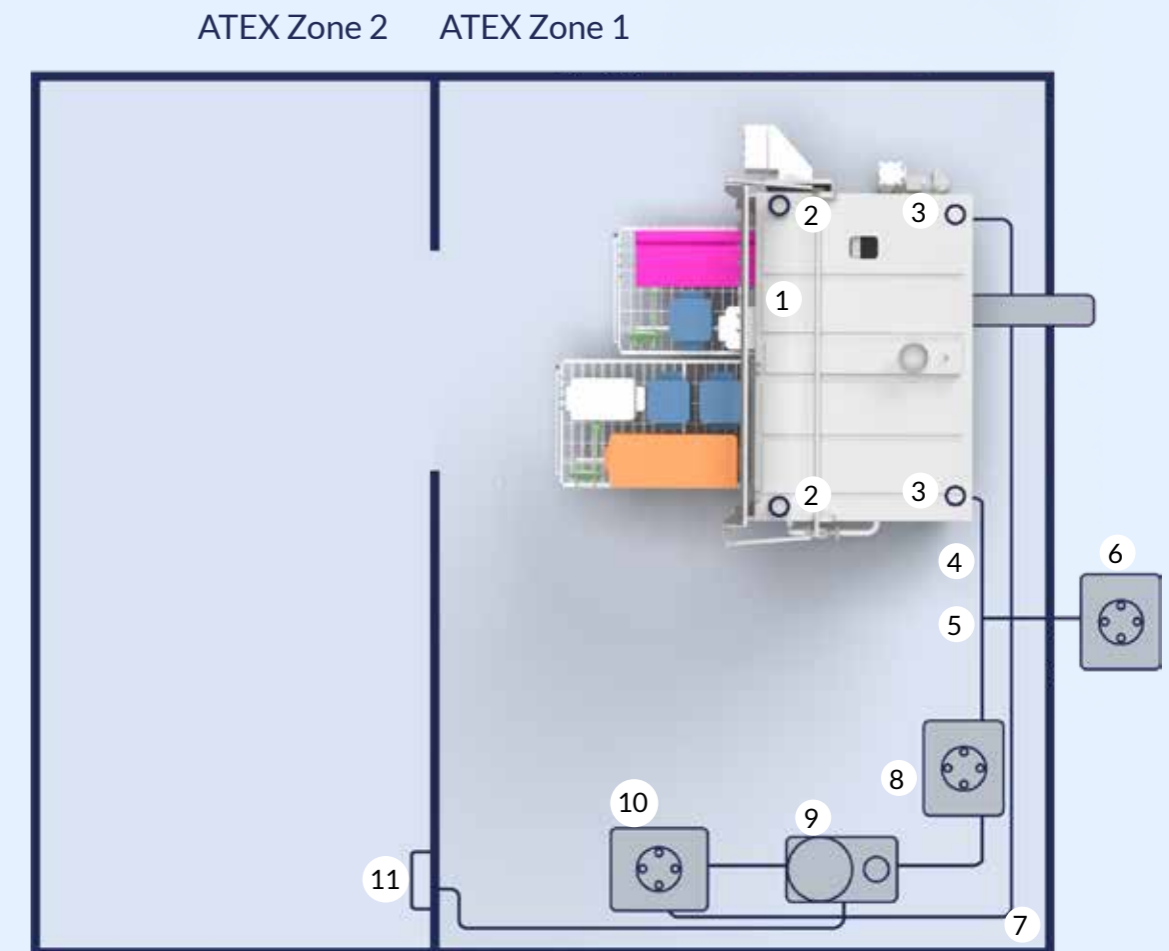
3-STEP PROCESS

All distillers run by a fully automatic 3-step process: The solvent is automatically filled into the distiller from the dirty solvent tank. The process works continuously until all solvent has been distilled. During the continuous distillation process the distilled solvents automatically run into the clean solvent tank.

Complete installation

Example layout

1. ATEX Parts Washer
2. Fresh air inlet for ventilation (from room, no connections)
3. Outlet ventilation system from machine
4. Connection for clean solvent. Must be connected to PK 350 FL Filling system.
5. 3-way valve to select which solvent reservoir to fill from.
6. Connection to earth tank with fresh clean solvent.
7. Connection from PK 350 FL to dirty solvent tank. Must be connected to PK 350 FL empty system.
8. Tank with clean solvent from solvent recovery system.
9. Distiller
10. Dirty solvent tank
11. Connection electrical control box



Distillation

Which distiller should I choose?

When choosing the right model of distiller, various factors come into play. Concerning the capacity of the distiller, it is essential to know which solvents are being distilled. Furthermore, many aspects will influence the capacity, such as: Ink type in the solvent, level of contamination, the temperature limit of the specific solvent to distillate.

	Total vessel volume	Approx. distillation rate
DI 1200	140 L (37 gal)	20-40 L/hour (5-10 GPH)
DI 2400	160 L (42 gal)	40-60 L/hour (10-16 GPH)
DI 3300	300 L (80 gal)	60-80 L/hour (16-21 GPH)
DI 5500	500 L (132 Gal)	90-140 L/hour (24-37 GPH)



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.

Our Solution

- 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 is easy to change settings.

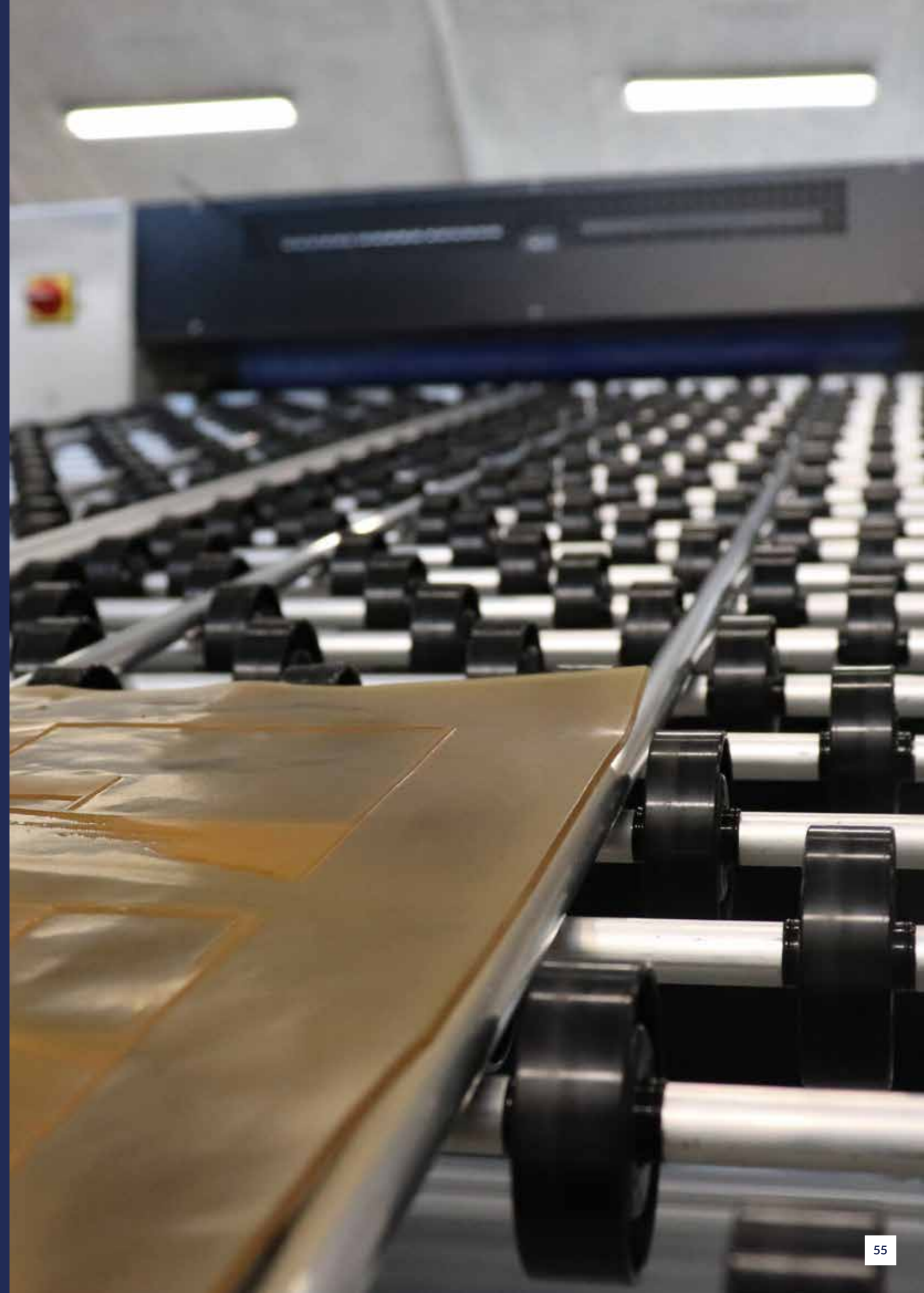


Plate Washing

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.

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 eco-friendly 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.

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:

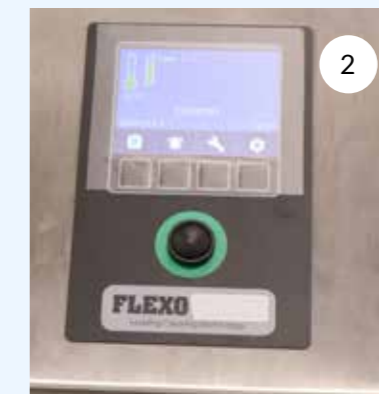
- Sponge roll
- Warm air knife



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 rinse tank



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.



1: Washing. 2: Draining. 3: Rinsing. 4: Drying.



Plate Washing

Which machine should I choose?

We supply plate washing equipment in all sizes for all segments of the label and flexo industries. The Flexo Wash plate washers come in many different models which each can be modified by combining the standard unit with one or more of the various options.

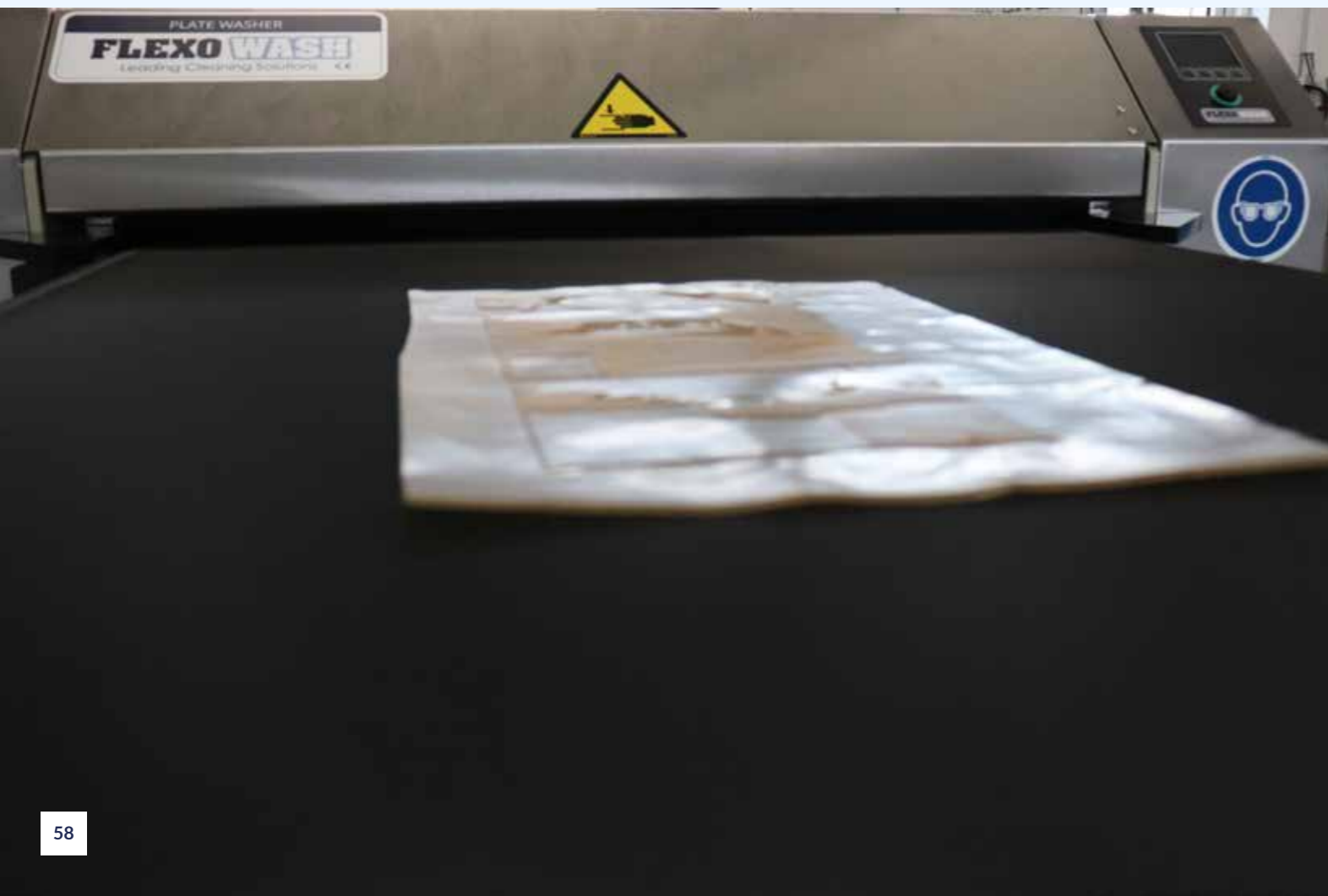
Our range of models cover plate widths from 45 cm up to 130 cm.

All units are available as both:

- WRO-version: Fresh water
- WR-version: Water from the closed-loop wash tank

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.

	Max. plate width:	WR	WRO	DLE
PW 82	820 mm (32,3")	X	X	
PW 92	920 mm (36,2")	X	X	X
PW 115	1150 mm (45,3")	X	X	X
PW 130	1300 mm (51")	X	X	X



Options and Accessories

- Table for unloading of plates
- Sponge roll holder
- Extended inlet conveyor belt
- Extra large tank capacity
- DLE version (PW 92 - PW 130 only)



1: Instead 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.

Sleeve Washing

Flexo Wash offers a variety of equipment for cleaning of sleeves of all dimensions and types. The sleeve washers will clean all types of rubber sleeves, laser-engraved print sleeves, plates mounted on sleeves etc.

Flexo Wash supplies two types of washing units for sleeves:

- Single sleeve washing
- Multiple sleeve washing

Our Solution

- Fully automatic and extremely gentle cleaning process for all types of ink
- Minimal maintenance is required
- The unit has a long life time
- Environmentally friendly cleaning



Sleeve Washing

The Flexo Wash Way

All Sleeve Washers are designed to clean all types of print sleeves and all types of inks. The eco-friendly cleaning liquids from Flexo Wash are specially developed to efficiently remove the different types of inks from the sleeves in only a few minutes.

Washing

This unique combination of the FW cleaning liquid and soft rotating brushes ensures an effective cleaning without any risk of damaging the plate or sleeve. The sleeve is rotating during the entire process thus ensuring an even and thorough cleaning.

Draining

After the washing cycle the liquid is drained back to the wash tank. Drain time is 2-3 minutes.

Re-use

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

Drying

Finally, the water is removed from the sleeve by compressed air. The sleeve rotates during the entire process, which only takes about 10 minutes. Afterwards the sleeve is clean and dry and can be stored or put into production immediately.

Rinsing

Thereafter, the sleeves are after rinsed with high-pressure water.

Case Story

In order to keep up with the amount of sleeves that needed washing every day, Danish printer company Amcor invested in a multi-sleeve unit from Flexo Wash.

"Compared to having a wash unit for only one sleeve, we are today, with the Sleeve Washer, saving around 10 man hours per day", Print Supervisor Mogens Gloggengiehser explains, "And the operator can now focus on other press-makeready functions instead of washing."

When asked about comparing the Sleeve Washer with manual washing of the sleeves, Gloggengiehser replies: "We have always used automatic equipment to wash our sleeves and I can only imagine how many man

hours could be saved by going from manual washing to the Sleeve washer from Flexo Wash."

Always 100% clean sleeves

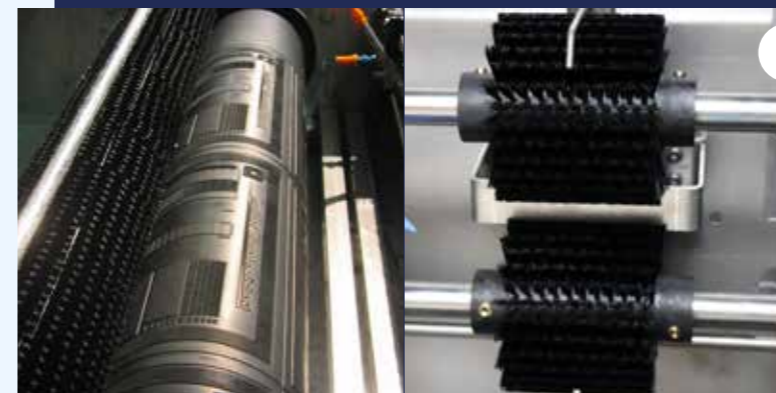
The Amcor Sleeves are taken to the wash room directly after printing, where they are cleaned within 2-3 hours before being left for storage.

"In this way we always have 100% clean sleeves and we never have to worry about problems occurring from dirty sleeves", says Gloggengiehser and continues:

"The 10 minute wash cycle fits our working routine very well and the flow of sleeves from printing to washing to storage works very well for us."

"... I can only imagine how many man hours could be saved by going from manual washing to the Sleeve washer from Flexo Wash"

1: Washing, 2: Draining, 3: Rinsing, 4: Drying

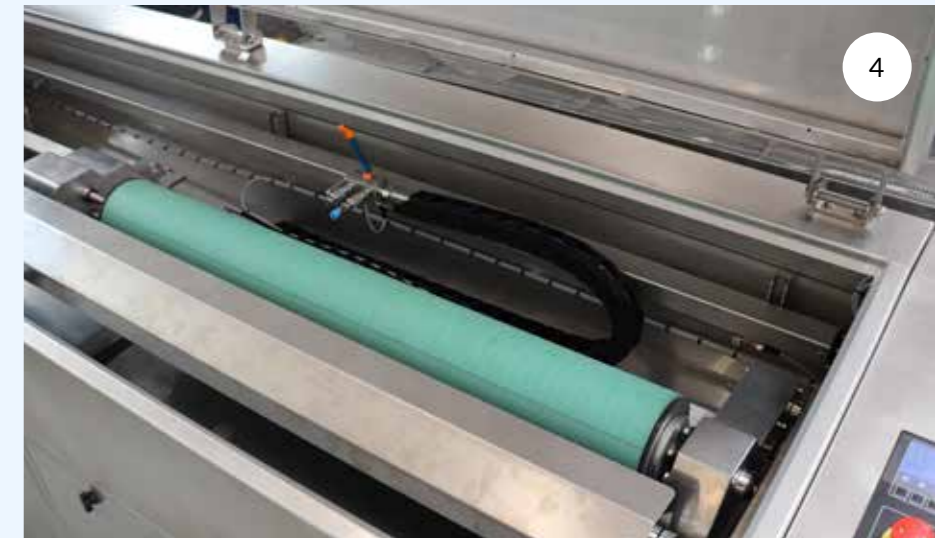
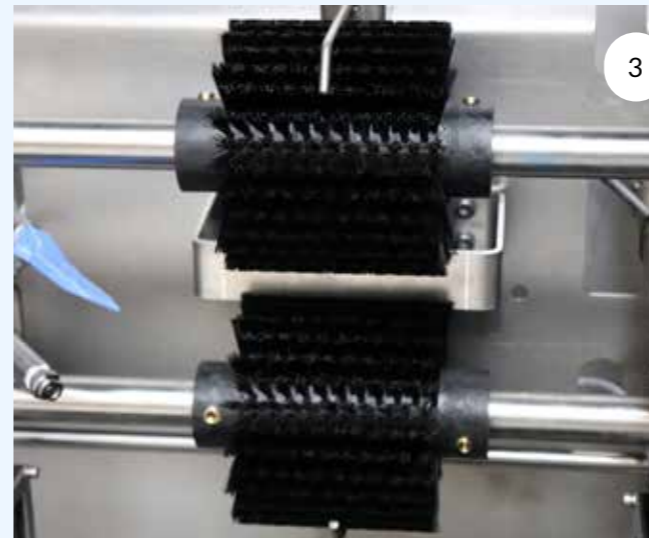


Sleeve Washing

Gentle & efficient cleaning

The unique technology combines the use of cleaning liquid, brushes, high-pressure water, and compressed air, which ensures a gentle and efficient cleaning of the sleeve.

In all sleeve washers it is possible to wash sleeves of various lengths and diameters. Rubber cones or adaptors in the machine ensure that liquid does not enter the inside of the sleeves.



Before

After



1. When cleaning multiple sleeves, the high-pressure water nozzles gently rinse the sleeves before the air stream dries the surface.
2. Both the nozzles and brushes are placed on a movable bar which moves up and down during the wash cycle (multiple sleeve cleaning).
3. The multi-sleeve cleaning unit is equipped with special-made soft brushes that ensure efficient yet gentle cleaning of the sleeve.
4. In the single-sleeve cleaning unit the nozzle and air stream are also placed on a movable bar moving from one side to the other during the wash cycle.
5. The process indicator lamp lights green when the cleaning cycle is in progress.
6. The full-length special-made soft brush ensures a high-quality cleaning result in the single-sleeve cleaning unit.
7. In the multi-sleeve cleaning machine, the top bar is adjustable making it possible to wash sleeves of various lengths in the same machine.

Sleeve Washing

Which machine should I choose?

Flexo Wash offers a variety of solutions for cleaning of sleeves of all dimensions and types. The Sleeve Washers will clean all types of rubber and laser-engraved sleeves. Plates mounted on sleeves can be cleaned as well.

	Max sleeves per wash	Max diameter	Max cleaning length
SL 2000.NXT	1	340 mm (13,4")	1380 mm (54,3")
SL 2500.NXT	1	340 mm (13,4")	1880 mm (74")
SL3000 DLE.NXT	1	450 mm (17,7")	2500 mm (98,4")
SL 6V	6	300 mm (11,8")	1700 mm (69,9")
SL 6V XL	6	350 mm (13,8")	1700 mm (69,9")
SL 6V XXL	6	350 mm (13,8")	2200 mm (86,6")
SL 8V	8	280 mm (11")	1700 mm (67")

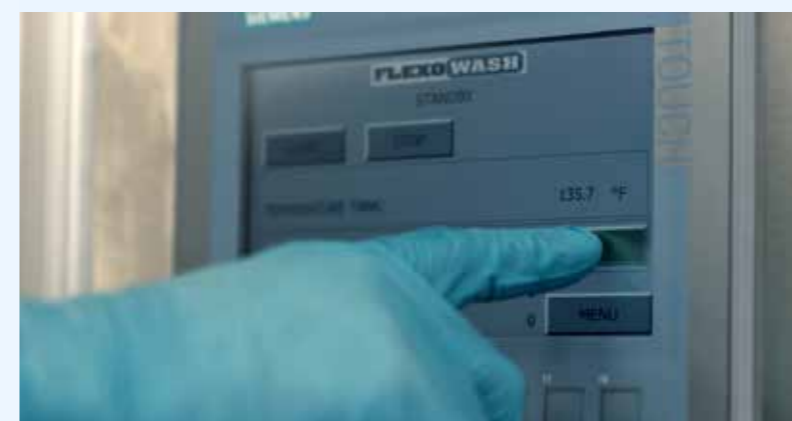


Single sleeve washing

With the SL 2000-2500.NXT-series Flexo Wash presents a new generation of cleaning machines. All units are produced with the .NXT features which means easier handling, improved technology, focus on less liquid consumption and sustainable solutions.

Multiple sleeve washing

With the SL 6/8V, you can clean up to 8 sleeves simultaneously in one single unit. The machine is designed to clean all types of inks with eco-friendly cleaning liquids. The sleeves are easily loaded into the machine vertically.



CONTACT

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