ANILOXES & CYLINDERS

PARTS & DISTILLERS

PLATES & SLEEVES

WIDE WEB

CLEANING EQUIPMENT

FLEXO & GRAVURE INDUSTRY

FLEXO WASH

Leading Cleaning Solutions

CONTENT

IMPROVING PRINT QUALITY WORLDWIDE

LEADING CLEANING TECHNOLOGY

Flexo Wash is a leading cleaning technology company based in Denmark. We specialize in cleaning equipment and eco-friendly cleaning liquids for the flexographic and converting industry.

The mission of Flexo Wash is successfully developing innovative and high-quality cleaning equipment to satisfy needs of flexo and gravure printers worldwide, thus contributing to an improved print quality, high productivity and a healthy environment.

EFFECTIVE SUSTAINABLE CLEANING SOLUTIONS

With more than 25 years of developing high-quality cleaning technology, Flexo Wash covers all types of cleaning machines of handcrafted innovative designs for solvent and non-solvent cleaning liquid that can be re-circulated in the Flexo Wash units – all to meet our customers' needs for sustainable cleaning solutions.

DID YOU KNOW ...

... that the first Flexo Wash unit was built from an old dish washer in 1989?

SHOOTING FOR THE STARS

Today Flexo Wash is a global technology 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 does not compromise with quality, flexibility and sustainability to deliver leading cleaning technology.

THE FLEXO WASH QUALITIES

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

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.

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

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.

All this without ever sacrificing the highest quality necessary to improve the efficiency and effectivity of your business.

FOCUS ON THE ENVIRONMENT

LOW IMPACT ON ENVIRONMENT

Sustainability has always been a part of the Flexo Wash way of designing our products. However, in 2019 we made the commitment to ensure that our products would have a low impact on environment as part of our new mission and set of values for the company going forward.

It is important for us to contribute to a greener and healthier printing industry without compromising the cleaning quality.

CONTINUOUS UPGRADE OF PRODUCTS

All our products are continuously optimized to ensure better reuse, better draining and less consumption of both water and cleaning liquid.

Our new .NXT anilox cleaners are developed with special focus on higher degree of reuse of liquid - and with our new LASER units you can achieve a total waste-free solution.

ENVIRONMENTAL SOLUTIONS

In addition to built-in upgrades we have a line of environmental solutions which can be combined with the different Flexo Wash cleaning units to reduce the water and/or liquid consumption.

For re-use of liquid our Filtration unit and Sedimentation tank will prolong the lifetime of the liquid - and for reuse of water the Recirculation unit will reduce water consumption.

ENVIRONMENTAL SOLUTIONS FOR EACH MACHINE

Look for the environmental stamps throughout this brochure. They will appear besides the units which can be combined with one of the Flexo Wash environmental solutions.

F FILTRATION UNIT

S SEDIMENTATION TANK

R RECIRCULATION UNIT

RE-USE OF LIQUID AND WATER

REDUCE LIQUID CONSUMPTION

Both the Filtration & Sedimentation systems are designed to separate ink residues from the cleaning liquid, thus making it possible to reuse the liquid and prolong its lifetime.

The processes of the two systems are very different and the right system depends on the cleaning unit, ink type etc. Depending on your individual needs, we will guide you in choosing the right solution for you.

REDUCE WATER CONSUMPTION

The FW Recirculation System is designed for reuse of the rinse water in a closed loop system. The system is controlled by a number of sensors constantly measuring the pH and liquid levels. The process runs independent of the washing unit.

The process of the Recirculation unit 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 a high-quality cleaning.

FILTRATION UNIT

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

SEDIMENTATION TANK

- Reduce liquid consumption by approx. 50% depending on ink saturation etc.
- Leaves fluid sludge waste
- Continuous closed loop process for filling and emptying

RECIRCULATION UNIT

- Secures high-quality cleaning with reused water
- Reuse rinse water and reduce water consumption significantly
- Fully automatic and environmentally friendly

DAILY DEEP CLEANING OF YOUR ANILOXES

The fully automatic anilox roll cleaners are designed to deep clean/restore anilox rolls or sleeves of all sizes. In other words, it is also a very good tool for the daily washing and maintenance of aniloxes.

QUICK & GENTLE CLEANING PROCESS

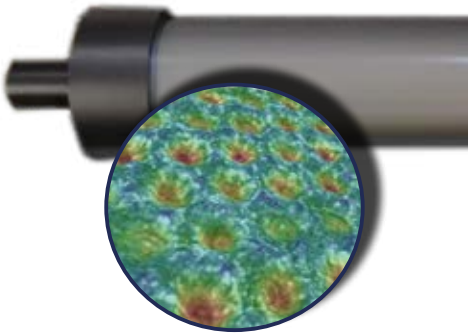
The Flexo Wash system is based on liquid and high-pressure water. Therefore, the system is effective even for high-line aniloxes. The quick and gentle cleaning process leaves the aniloxes totally clean and ready for immediate use after just 10-20 minutes cleaning without causing any wear or tear to the anilox.

ENSURES HIGH & CONSISTENT PRINT QUALITY

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.

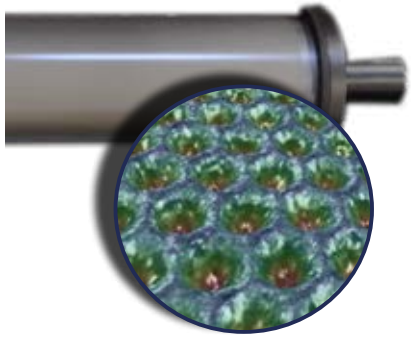
BEFORE WASH

Completely clogged cells



AFTER WASH

Full cell volume recovery



TAKE CARE OF YOUR ANILOXES

- Clean the anilox after each job
- Keep a regular maintenance schedule on the aniloxes
- Clean the anilox immediately after removal from the press and before storage
- Keep new aniloxes clean from day one

HOW DOES IT WORK?

ECO-FRIENDLY CLEANING

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, to a tank for re-use or to one of our water treatment units.

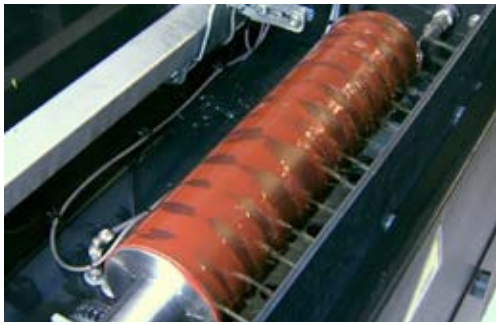
OPTIONS AND ACCESSORIES

- Double tank system for 2nd cleaning liquid.
- Drain tank for re-use of rinse water.
- Automatic liquid filling system.
- Extra traction system for cleaning extra anilox
- Servo driven traction system
- Stationary sleeve holders
- Adaptor for sleeves.
- Gear Covers

WASHING

The anilox rotates while heated liquid is sprayed onto the surface and enables easy removal of the ink from the anilox cells.

Average washing time is 5-20 minutes.



DRAINING

After the washing cycle the liquid is drained back to the wash tank.

Drain time is 2-3 minutes.

RINSING

High pressure adjustable water nozzles complete the cleaning process and removes any remaining ink particles and cleaning liquid.

Rinse cycle is approx. 2-3 minutes.

DRYING

High pressure adjustable water nozzles complete the cleaning process and removes any remaining ink particles and cleaning liquid.

Duration is 1-3 minutes, depending on roll length.

.NXT GENERATION

NEW GENERATION OF ANILOX CLEANERS

Flexo Wash presents a new generation of anilox cleaning machines. All units are produced with the .NXT features which all means easier handling, improved technology & focus on less liquid consumption and sustainable solutions.

FOCUS ON EASY HANDLING & SUSTAINABILITY

The .NXT units takes Flexo Wash innovations into the 2020's, where we increasingly will be focusing on easy handling and sustainability.

FW 992 XL .NXT

- 2 aniloxes per wash
- Microprocessor control system
- Max diameter:
  210 mm *(8.2")*
- Max cleaning length:
  1600 mm *(63")*
- Max weight per anilox:
  25 kg *(55.1lbs)*

FW 2000M .NXT

- 1 anilox per wash
- Microprocessor control system
- Max diameter:
  230 mm *(9")*
- Max cleaning length:
  1700 mm *(67")*
- Max weight per anilox:
  200 kg *(440lbs)*

FW 2500M .NXT

- 1 anilox per wash
- Microprocessor control system
- Max diameter:
  230 mm *(9")*
- Max cleaning length:
  2200 mm *(86.6")*
- Max weight per anilox:
  200 kg *(440lbs)*

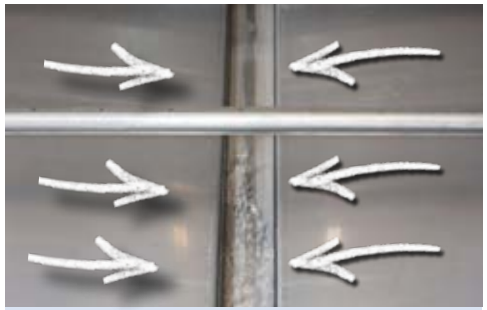
.NXT FEATURES

ENRICHED WITH NEW FEATURES

The machines has inherited all the qualities of the original FW 992 XL, FW 2000M & FW 2500M, but has been enriched with the .NXT features.

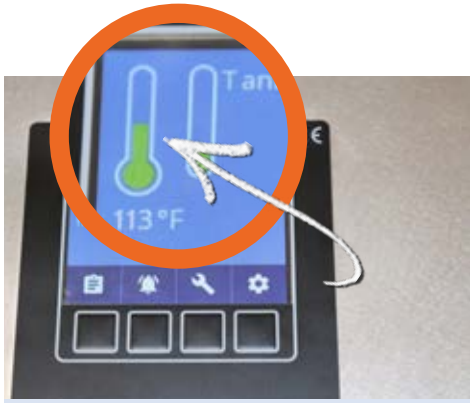
Easy and improved pull-out tank

Improved lid design

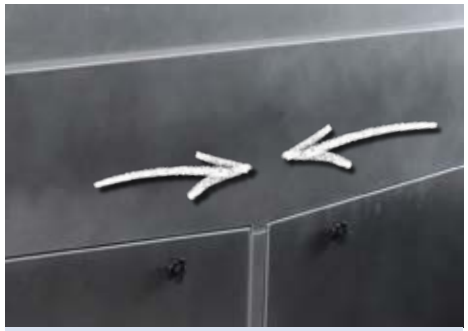


Better and faster draining

Liquid filling & emptying system



Liquid level indicator



Inclination of tub for less liquid carry-over

Automatic lid opening

Easy adjustment

ANILOX CLEANERS FOR ALL NEEDS

WIDE RANGE OF MODELS

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

We have been leading experts in anilox cleaning for 25 years and our large portfolio of units and options reflects the flexibility needed to meet all needs of the flexographic industry.

PLC CONTROLLED MACHINES

All larger FW Anilox Cleaners are equipped with a PLC control, 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 3000-4000

The FW 3000-4500 Anilox Cleaners are designed to clean larger and heavier rolls and sleeves. They can all be adapted to fit your specific needs by for example adding an extra traction system to clean more aniloxes per wash, an adaptor to clean sleeves safely or reinforcing the machine to clean even heavier rolls.

FW 2000-2 & 3000-2

With a deeper width the FW 2000-2 & 3000-2 Anilox Cleaners are designed to clean two larger aniloxes per wash. By adding an extra traction system these units can wash as many as four aniloxes per wash.

FW 3000-4500

- 1 anilox per wash*
- PLC controlled
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  FW 3000: 2400 mm *(94.5")*
  FW 3500: 2900 mm *(114.2")*
  FW 4000: 3400 mm *(133.9")*
  FW 4500: 3900 mm *(153.5")*
- Max weight per anilox:
  600 kg *(1 323 lbs)*/800 kg *(1763.7lbs)****

FW 2000-2 & 3000-2

- 2 aniloxes per wash**
- PLC controlled
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  FW 2000-2: 1400 mm *(55.1")*
  FW 3000-2: 2400 mm *(94.5")*
- Max weight per anilox:
  600 kg *(1 323 lbs)*/800 kg *(1763.7lbs)****

** Clean up to two aniloxes per wash with option.*
*** Clean up to four aniloxes per wash with option.*
****Requires option.*

...AND ALL ANILOX SIZES

NEED MORE? GO XL!

The FW 3000-4500 XL models are designed to hold an even larger diameter than the FW 3000-4000 standard units. Same options for extra traction systems, sleeve adaptors and heavier rolls among various other options.

DESIGNED FOR ANILOXES SLEEVES

The FW 3500 SideLoad Anilox Cleaner is a unit especially designed for easy handling and cleaning of large anilox sleeves.

NO EXTRA HANDLING

The easy loading system from the side of the unit instead of the top like the other FW anilox cleaners make it possible to take the sleeve directly from the press to the washing machine without extra handling/lifting of the sleeve.

MINIMIZING THE RISK OF DAMAGE

The mandrel inside the washing machine is levelled with the sleeve trolley and secure the sleeve to easily be slid into place, thus minimizing handling and the risk of damage.

FW 3000 XL-4500 XL

- 1 anilox per wash
- PLC controlled
- Max diameter:
  450 mm *(17.7")*
- Max cleaning length:
  FW 3000 XL: 2400 mm *(94.5")*
  FW 3500 XL: 2900 mm *(114.2")*
  FW 4000 XL: 3400 mm *(133.9")*
  FW 4500 XL: 3900 mm *(153.5")*
- Max weight per anilox:
  800 kg *(1763.7lbs)*/1500 kg *(3307lbs)**

FW 3500 SIDELOAD

- 1 anilox sleeve per wash
- PLC controlled
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  3040 mm *(119.7")*
- Max weight per anilox:
  180 kg *(397lbs)*

** Requires option. Heavier Roll can be cleaned on request.*

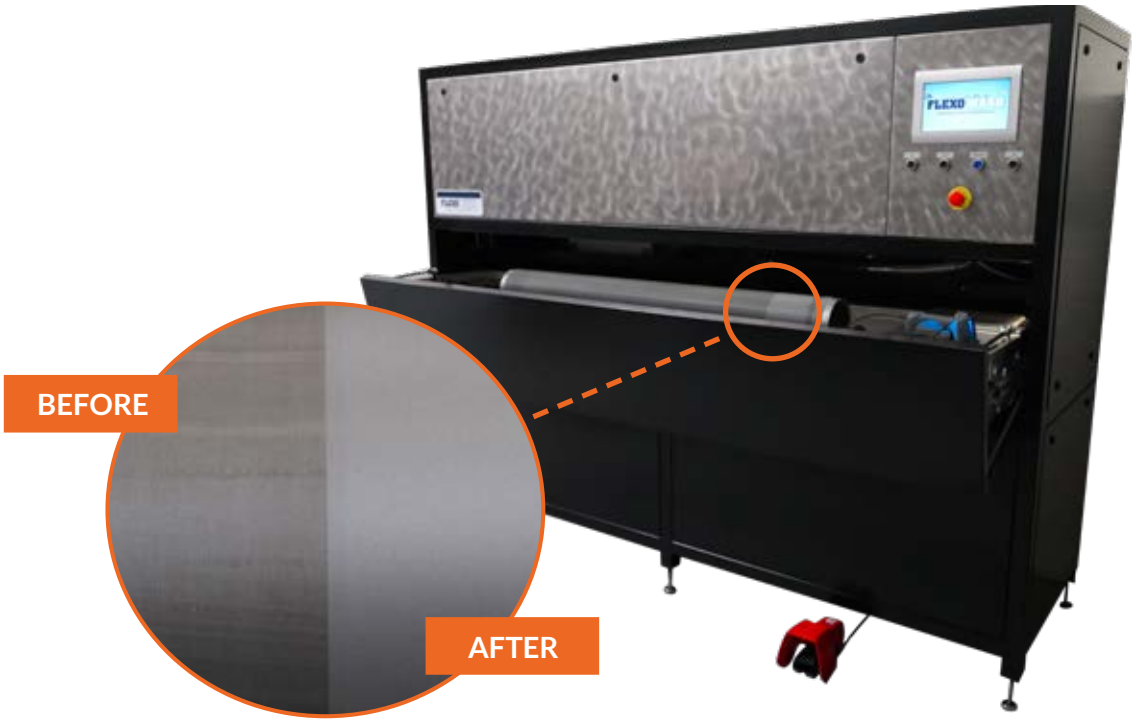
FW LASER ANILOX CLEANERS

NEWEST LASER TECHNOLOGY

The FW Laser Anilox Cleaners are developed with newest laser technology and software systems. The design is both aesthetic and highly functional with a drawer system for easy handling.

FOCUS ON FLEXIBILITY

Focus on flexibility makes it possible to clean several narrow web rolls or a combination of narrow and wide web rolls and sleeves in ONE machine with the FW 2000-3000. Most importantly it is a waste-free and sustainable cleaning method with no liquid handling or consumption.



THE LASER TECHNOLOGY

LASER CLEANING WORKS THROUGH **ABLATION**

THE LASER **EVAPORATES** THE INK

EXTRACTION SYSTEM REMOVES LEFT OVER PARTICLES

FW 2000 LASER

- 1-4 aniloxes per wash*
- Max diameter:
  230 mm *(9")*
- Max cleaning length:
  1730 mm *(68")*
- Max weight per anilox:
  200 kg *(440lbs)*

FW 3000 LASER

- 1-4 aniloxes per wash*
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  2730 mm *(107.5")*
- Max weight per anilox:
  800 kg *(1763.7lbs)*

** Total maximum cleaning length reduces by 50 mm for each anilox*

LIQUID OR LASER?

WHAT TO CONSIDER?

LIQUID & WATER

- Cleaning 20 rolls or more per day.
- Limited inventory for each anilox.
- Production schedule concerns.
- Multiple changeovers per day.
- Need for daily deep cleaning.
- Wants to clean multiple aniloxes in 10-20 minutes.
- Lower upfront capital expense.

LASER

- Cleaning less than 20 rolls per day
- Large inventory for each type of anilox
- Leaves anilox in press longer with fewer changeovers
- Concerns with difficult inks, adhesives or coatings
- Location flexibility - no easy access to utility connections and drainage
- Corporate focus on waste free cleaning
- Desires to eliminate ongoing consumables cost

SPECIAL FEATURES

MULTIPLE ANILOX CLEANING
Clean multiple small aniloxes of variable sizes in ONE machine (option).

AUTO FOCUS
The laser is automatically adjusted to the size of the anilox making the process fast, user friendly and safe.

CLASS 1 LASER SYSTEM
Safe under all conditions of normal use - no need for safety goggles or other safety equipment. To enhance the cleaning time of the unit, it can optionally be equipped with a dual laser system.

EVENT LOG
Data regarding cleaning and alarms can be accessed by technicians via LAN connection.

ANILOX DATABASE
Each anilox and its cleaning log is registered ensuring a well-documented cleaning log of every anilox. The anilox can optionally be identified via RFID or Barcode reader.

EASY DRAWER CONCEPT
Electrically driven drawer for easy loading and high degree of protection of the anilox.

HOW DOES IT WORK?

WASTEFREE CLEANING

Get a waste-free, completely safe and automatic anilox cleaner that will give you a more sustainable cleaning solution.

The FW LASER Anilox Cleaner can be installed without requiring water supply, drain or safety equipment.

OPTIONS AND ACCESSORIES

- Extra traction system for cleaning of additional, but shorter aniloxes
- Barcode Reader
- Automatic anilox identification (RFID) possible

LOADING

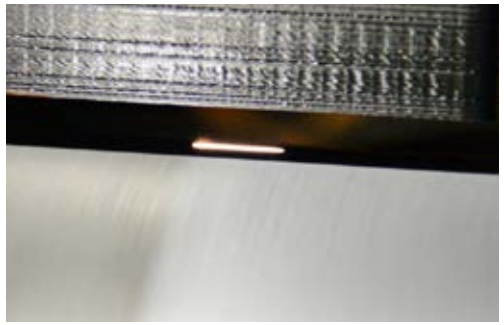
Place the aniloxes on the traction stations.

Anilox properties are defined (diameter, length, lines) choose the anilox from the database.

The colour, volume and cleaning intensity are selected by the operator.

CLEANING

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



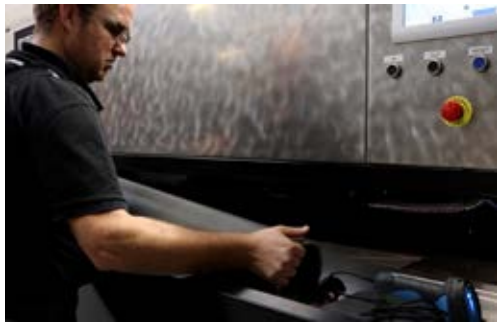
EXTRACTION

The extraction system removes all dust and fumes.

The cleaning programme stop automatically when the cleaning and extraction process are finalized.

UNLOADING

The operator can open from the front panel and easily unload the aniloxes.



EFFECTIVE CLEANING OF CYLINDERS

The Flexo Wash system is based on cleaning liquid and high-pressure water. Therefore, the fully automatic FW Cylinder Cleaners are designed to deep clean rotogravure cylinders of all sizes. The system is effective for all types of rotogravure cylinders.

ROTATING BRUSHES REMOVES EVEN THICK INK LAYERS

The PLC controlled machines can be equipped with rotating brushes thus making it possible to clean gravure cylinders in the machine. The brushes ensure in depth cleaning at the engraved parts of the cylinder thus leaving it clean on all surfaces.

The machines can also be equipped with rotating brushes for cleaning of gravure cylinder shafts, where there is often a heavy build-up of ink, which can be difficult to remove.

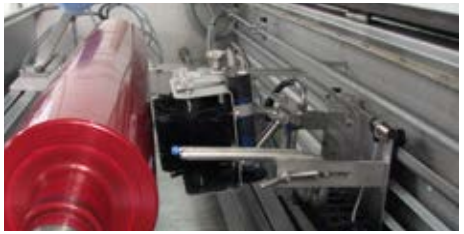
CLEAN ON ALL SURFACES

The hard rotating and oscillating brushes will remove all ink from the shaft and the end of the cylinder making it clean on all surfaces. The cylinder can then be taken to production, storage or re-chroming without any manual treatment.

TAKE CARE OF YOUR CYLINDERS

- Designed to deep clean rotogravure cylinders of all sizes.
- Rotating brushes for cleaning of gravure cylinder ends.
- Quick and gentle cleaning process, wash, rinse and dry cycle.
- Automatic liquid filling & emptying system.

BEFORE WASH



AFTER WASH

HOW DOES IT WORK?

ECO-FRIENDLY CLEANING

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

The water from the high-pressure rinse is automatically led directly either to the drain, to a tank for re-use or to one of our water treatment units.

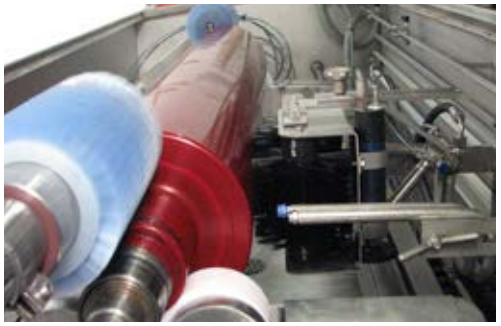
OPTIONS AND ACCESSORIES

- Double tank system for 2nd cleaning liquid.
- Drain tank for re-use of rinse water.
- Automatic liquid filling system.
- Extra traction system for extra cylinder
- Servo driven traction system
- Gear Covers

WASHING

The cleaning liquid facilitates easy removal of the ink from the gravure cylinder.

Average washing time is 5-10 minutes.



DRAINING

After the washing cycle the liquid is drained back to the wash tank for re-use.

Drain time is 2-3 minutes.

RINSING

High pressure adjustable water nozzles complete the cleaning process and removes any remaining ink particles and cleaning liquid.

Rinse cycle is approx. 2-3 minutes.

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 cylinder length.

CYLINDER CLEANERS FOR ALL NEEDS

WIDE RANGE OF MODELS

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

We have been leading experts in cleaning technology for 25 years and our large portfolio of units and options reflects the flexibility needed to meet all the needs of the gravure industry.

PLC CONTROLLED MACHINES

All larger FW Cylinder Cleaners are equipped with a PLC control, 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 3000-4000

The FW 3000-4500 Cylinder Cleaners are designed to clean larger and heavier rolls and sleeves. They can all be adapted to fit your specific needs by for example adding an extra traction system to clean more cylinders per wash or reinforcing the machine to clean even heavier rolls.

FW 2000-2 & 3000-2

With a deeper width the FW 2000-2 & 3000-2 Cylinder Cleaners are designed to clean two cylinders per wash. By adding an extra traction system these units can wash as many as four cylinders per wash.

FW 3000-4500

- 1 cylinder per wash*
- PLC controlled
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  FW 3000: 2400 mm *(94.5")*
  FW 3500: 2900 mm *(114.2")*
  FW 4000: 3400 mm *(133.9")*
  FW 4500: 3900 mm *(153.5")*
- Max weight per cylinder:
  600 kg *(1 323 lbs)*/800 kg *(1763.7lbs)****

FW 2000-2 & 3000-2

- 2 cylinders per wash**
- PLC controlled
- Max diameter:
  300 mm *(11.8")*
- Max cleaning length:
  FW 2000-2: 1400 mm *(55.1")*
  FW 3000-2: 2400 mm *(94.5")*
- Max weight per cylinder:
  600 kg *(1 323 lbs)*/800 kg *(1763.7lbs)****

** Clean up to two cylinders per wash with option.*
*** Clean up to four cylinders per wash with option.*
****Requires option.*

...AND ALL CYLINDERS SIZES

NEED MORE? GO XL!

The FW 3000-4500 XL models are designed to hold an even larger diameter then the FW 3000-4000 standard units. Same options for extra traction systems, sleeve adaptors and heavier rolls among various other options.

NEWEST LASER TECHNOLOGY

The FW laser cleaners are developed with newest laser technology and software systems. The design is both aesthetic and highly functional with a drawer system for easy handling.

FOR ADHESIVES, VARNISH & 2K INKS

If you wish to clean your cylinder clean from adhesives, varnish or difficult 2K inks, the FW LASER is an excellent choice. Most importantly it is a waste-free and sustainable cleaning method with no liquid handling or consumption.

FW 3000 XL-4500 XL

- 1 cylinder per wash
- PLC controlled
- Max diameter:
  450 mm *(17.7")*
- Max cleaning length:
  FW 3000 XL: 2400 mm *(94.5")*
  FW 3500 XL: 2900 mm *(114.2")*
  FW 4000 XL: 3400 mm *(133.9")*
  FW 4500 XL: 3900 mm *(153.5")*
- Max weight per cylinder:
  800 kg *(1763.7lbs)*/1500 kg *(3307lbs)**

FW 2000-3000 LASER

- 1-2 cylinders per wash**
- Max diameter:
- FW 2000: 230 mm *(9")*
- FW 3000: 300 mm *(11.8")*
- Max cleaning length:
  FW 2000: 1730 mm *(68")*
  FW 3000: 2730 mm *(107.5")*
- Max weight per cylinder:
  FW 2000: 200 kg *(440lbs)*
  FW 3000: 800 kg *(1763.7lbs)*

** Requires option. Heavier roll can be cleaned on request.*
*** Total maximum cleaning length reduces by 50 mm for each cylinder.*

ATEX CERTIFIED CLEANING OF CYLINDERS

The Gravure Cylinder Cleaner 2300 ATEX is made for cleaning of gravure cylinders with solvents. It is safe to use and gentle on the cylinders, meaning that you can clean the cylinders as often as needed. Consistent and high-quality print is only achieved if the cylinders are completely clean.

READY FOR IMMEDIATE RE-USE

The system is based on solvents sprayed on the cylinder. The system is effective for all types of rotogravure cylinders. The cleaning process leaves the cylinders clean and ready for immediate reuse or storage. The cylinders are cleaned without causing any wear or tear.

COMBINE WITH END FACE BRUSHES

The Gravure Cylinder Cleaner 2300 ATEX can be equipped with end face brushes, which can clean the end face of the cylinder. The brushes are slowly oscillating to remove the ink.

TAKE CARE OF YOUR CYLINDERS

- 100 % fully automatically washing process.
- Time saving and gentle to the cylinders.
- WRO option: Automatic rinse with fresh solvent
- Made for clean one or two gravure.
- The machine is EEX-proof according to the ATEX standard

GCC 2300 & 2300-2

- Pneumatic control system
- ATEX & TÜV Nord certified
- GCC 2300: 1 cylinder per wash
- GCC 2300-2: 2 cylinders per wash
- Max face length:
  1400 mm *(55.1")*
- Max weight per cylinder:
  200 kg *(440lbs)*

BEFORE WASH

AFTER WASH

HOW DOES IT WORK?

WASHING

The lid is closed by an automatic 2-hand control.

The washing process is fully automatic from start to end.

The main pump circulates the washing solvent from the tank, through the filter to the washing area. The nozzles are placed on a fixed nozzle arm.

The washing process takes around 10-30 minutes depending on the quantity of ink residue.

DRAINING

The solvent is drained back to the tank via an automatic drain valve.

The drain time of approx. 5 minutes ensures that as much solvent as possible is drained back to the tank for re-use.

RINSING

(option)

The second pump circulates rinse solvent from a storage tank to the washing area where the cylinder is rinsed for approx. 10 seconds.

The rinse liquid is drained back to the tank for reuse.

The overall rinse process takes approx. 1 minute.

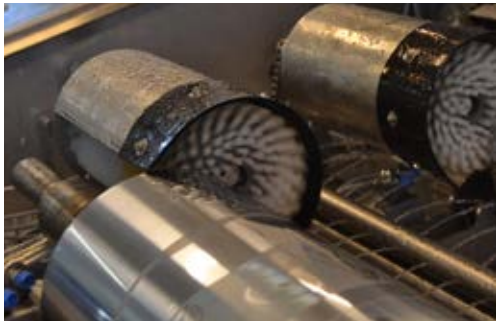
STABILIZATION

This step reduces the amount of solvent transported to the ventilation or RTO.

Stabilisation takes approx. 5 minutes. When the stabilization time has ended, the ventilation starts.

The air from the washing machine will be taken to an RTO or to the open air. Ventilation for approx. 5 minutes.

A shorter stabilization time will mean a longer ventilation time and vice versa.



CLEANING MULTIPLE CYLINDERS AT ONCE

The demand for clean cylinders and automated time saving solutions is a constant battle for the print industry.

With the MCC system it has never been easier. Using a non-solvent system, the Multi Cylinder Cleaner cleans and rinses cylinders, representing a more economical yet sustainable cleaning solution.

ECO-FRIENDLY CLEANING & EASY HANDLING

The MCC unit cleans by using eco-friendly cleaning liquid, afterwards rinsing the cylinders with water at high pressure and finally an air stream removes excess water.

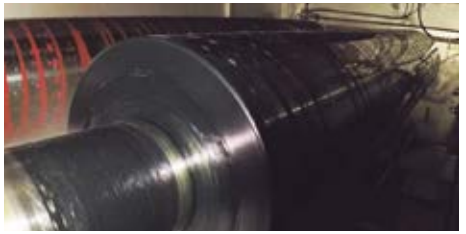
The cylinders can be transported from the printing machine on a special designed trolley with a cylinder carriage. The carriage is loaded from the trolley into the loading station and automatically transported through the cleaning process.

FLEXIBLE MODULAR CONCEPT

The Multi Cylinder Cleaner is designed to clean a larger number of rotogravure cylinders and it is built after a modular concept in separate sections.

This makes it possible to increase the cleaning capacity over time, by simply adding for example an extra washing or rinsing module station.

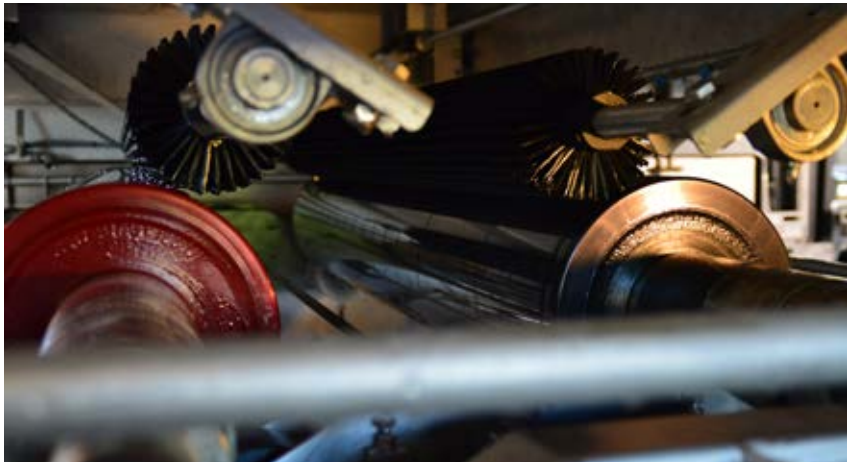
BEFORE WASH



AFTER WASH

TAKE CARE OF YOUR CYLINDERS

- Fully automatic and quick washing process can wash up to 8-22 cylinders per hour.
- Extremely gentle cleaning process for all types of ink.
- Time saving and friendly cleaning liquid.
- Rotating brushes ensure deep cleaning of the cylinder.



HOW DOES IT WORK?

INLET

The cylinders are placed on the trolley at the printing machine and driven to the washing unit.

The trolley is then loaded to the loading station.

When the start button is pressed, the cylinders are automatically loaded into the machine by the automatic conveyer system and the doors close to separate the outside environment from the washing area.

WASHING

Each washing station has capacity for 2 cylinders and consists of pump, filter, brushes and tanks depending on the function and configuration.

While the washing of the first cylinders is taking place, additional cylinders can be loaded onto the machine's loading station.

After a pre-set period, the first washing stage of the first cylinders is finished and they are automatically conveyed to the rinse stage of the cleaning process.

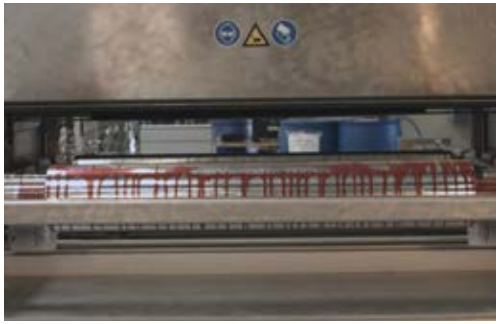
RINSING

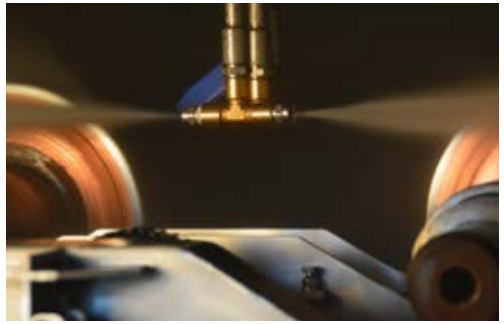
The cylinders are rinsed with water at a high-pressure. The high-pressure rinse nozzles move along the cylinders during the rinse.

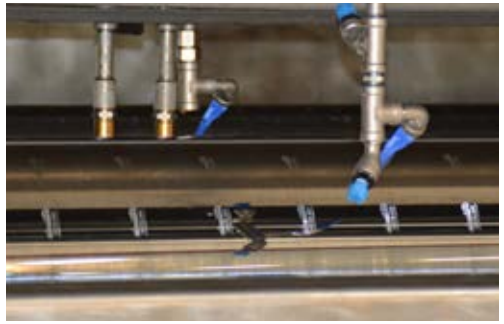
Each cylinder trolley is moved through the washing stages and the process continues until the loading station is empty and all cylinders have been conveyed automatically to the unloading station on the machine.

OUTLET

When the cleaning cycle has ended the cylinders are automatically transported to the unloading station by the conveyer system.







BUILD YOUR OWN MCC

YOUR NEEDS - YOUR OWN CONFIGURATION

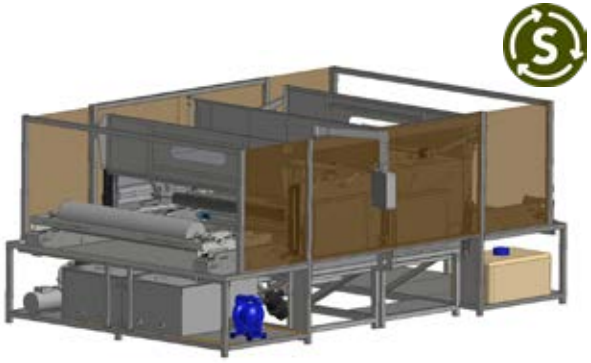
Due to the modular construction of the MCC, the system can be configured according to your needs. This gives you the possibility to create the configuration best fitting your specific needs.

TAKE YOUR HANDLING TO THE NEXT LEVEL

Combining the MCC with a logistic system creates a loop system making it possible to load a full job of 12 or more cylinders, thus ensuring a continous flow of cylinders through the cleaning process.

MCC 2-STAGE WR

- 1 washing station, 1 rinse and drying sections.
- **8-12 CYLINDERS PER HOUR**



MCC 3-STAGE WWR

- 2 washing stations, 1 rinse and drying station
- **6-22 CYLINDERS PER HOUR**

MCC 2-STAGE WR

W/ EXTRA BUFFER SECTIONS

- 1 washing station, 1 rinse and drying sections & 2 extra buffer sections (more buffer space for handling).
- **8-12 CYLINDERS PER HOUR**

LOGISTIC SYSTEM FOR CYLINDER HANDLING

1

LOADING

The dirty cylinders are placed on the frames at the side of the MCC at the storage section of the logistic system.

2

INLET

A frame with two cylinders is moved from the storage section to the front of the inlet section. The frame enters the inlet section.

3

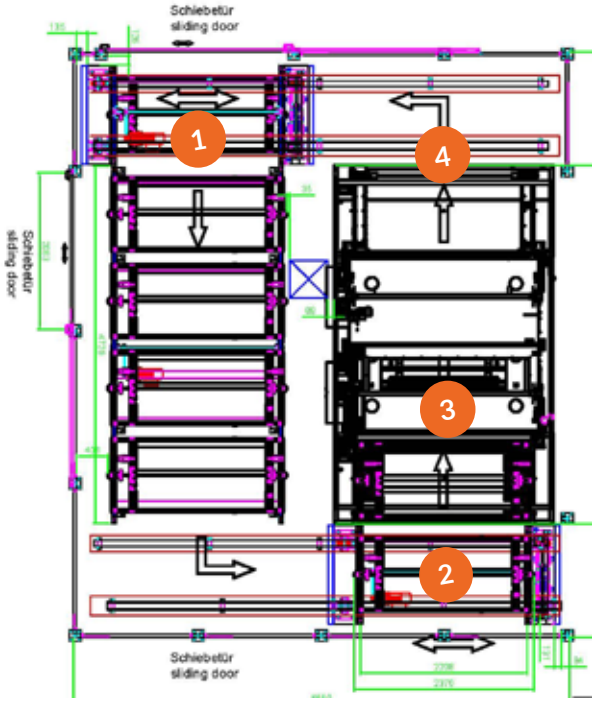
CONVEYOR

At the means of a conveyor system the frames are moved from inlet to wash section (-s) and here after to rinse section and the outlet.

4

OUTLET

At the outlet another transfer car moves the frames with cleaned cylinders from the outlet section to the storage section where they are unloaded.



EFFECTIVE CLEANING OF PRESS PARTS

The PK washing units are user-friendly parts washers, where the press parts are easily slid into the unit from the front.

EASY HANDLING

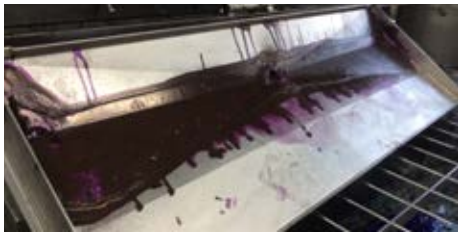
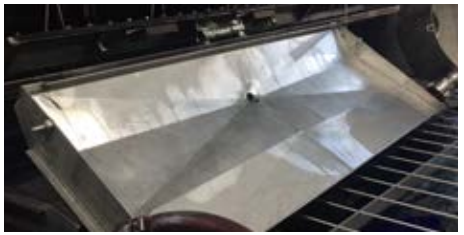
The fully automatic washing units are designed for easy handling of press parts. It is possible to wash doctor blade chambers, ink trays, ink sumps and other removable press parts used with all types of inks, varnishes etc. The units can be equipped with a trolley, which makes the handling even easier.

QUICK & EASY OPERATION

The quick and easy wash operation allows press operators to focus on press make-ready functions and thus reducing the changeover time and the labour involved in washing. This results in reduced down time, constant print quality and a safe and healthy cleaning and working environment.

CUSTOM-BUILD TO FIT YOUR NEEDS

The Parts Washers can be customized according to each customer's specific needs. They are made with a moving nozzle arm, which ensures a more dynamic liquid flow, a higher pressure and thus an improved wash result.

BEFORE WASH	AFTER WASH
	
	

TAKE CARE OF YOUR PARTS

- 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

HOW DOES IT WORK?

TWO-STAGE CLEANING PROCESS

The Parts Washers from Flexo Wash have a Wash & Rinse system with two separate tanks 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 various high-pressure nozzles, spraying cleaning and rinse liquid from below and above.

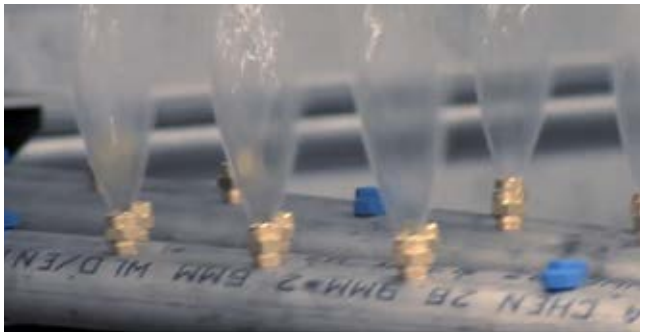
OPTIONS AND ACCESSORIES

- 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.
- Automatic rinse at end of wash cycle - open system or closed circuit.
- 2-story wash area
- Racks for ink trays, cylinders and doctor blades.
- Cleaning of hoses.
- Extra tank, pump and jets for 2. cleaning liquid.
- Distillation systems and integration between parts washer, tanks and distiller.
- Wastewater treatment unit.
- Automatic liquid filling system

WASHING

The parts are placed in the adequate holders/grids in the machine and the lid is closed by a 2-hand control. Activate the washing process by pressing START.

The first pump circulates the washing liquid from the tank, through the filter to the washing area. A moving nozzle arm sprays the liquid ensuring a very efficient washing result.



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 re-used.

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.

4 TYPES OF PARTS WASHERS

DIFFERENT NEEDS - DIFFERENT TECHNIQUES

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

WHICH PK DO YOU PREFER?

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

1

STANDARD PARTS WASHER

- This standard unit is designed to clean with eco-friendly liquids and distillable eco-friendly liquids.
- The machine is recommended when non-flammable liquids are used in the machine.
- These units are made either with a microprocessor control system (EasyLoad-series) or PLC control system (FrontLoad-series)

2

ALKALINE PARTS WASHER

- Cleans both water- and solvent-based inks, varnishes & lacquers in one single machine.
- Alkaline liquids are the most efficient way to remove 2K and other difficult ink residues.
- The units do not need special space for installation, like e.g. an ATEX room. It allows you to solve even difficult cleaning jobs without installing a more space consuming ATEX solution.

3

ATEX ELECTRIC PARTS WASHER

- The electric ATEX washing machine for parts cleaning is the latest generation of parts washers for intensive use and high demand of removal thick ink-layers.
- The machine will be built to work with solvents and will be made EEX-proof according to the ATEX standard.
- The units are made with a PLC control system and electrical pumps.

4

ATEX PARTS WASHER

- The pneumatic ATEX washing machine for parts cleaning is full working on pneumatics.
- The machine will be built to work with solvents and will be made EEX-proof according to the ATEX standard.
- These units are made with pneumatic control system and have no electrical components.

ATEX CERTIFICATIONS & REQUIREMENTS

NEUTRALIZE THE RISK OF EXPLOSION

When cleaning with solvent, special precautions must be taken in order to completely neutralize the risk of explosion or fire in the immediate area.

Flexo Wash takes these precautions by delivering washing equipment according to the ATEX directive 2014/34/EU intended for use in potentially explosive atmospheres.

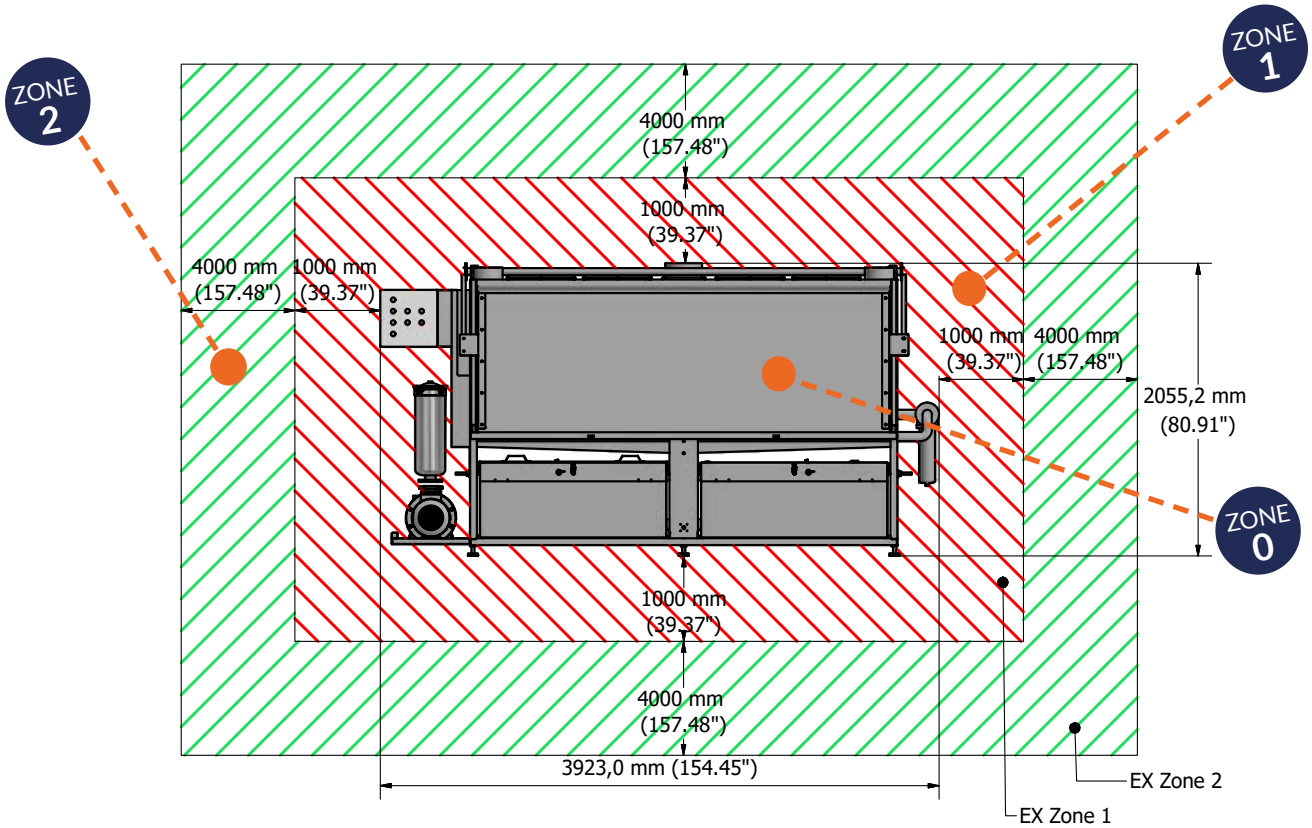
ATEX APPROVAL

Flexo Wash collaborates with notified bodies for approval of the equipment, ensuring that each unit is safe being EEX-proof according to the ATEX standard and certified by ExVeritas.

CATEGORY III

Less than 10 hours of explosive atmosphere per year.

Zone 2 is often referred to as the remotely hazardous area.



CATEGORY II

Between 10 and 100 hours of explosive atmosphere per year.

Around the unit will be ATEX zone 1.

CATEGORY I

Explosive atmosphere is continuously present for long periods.

Inside the washing unit and tanks the unit will have ATEX zone 0

OBS!

ALL electrical fittings & bulbs placed in zone 0-2 must be ATEX certified - ask FW if you are in doubt!

ExVeritas

DANISH TECHNOLOGICAL INSTITUTE

Ex CE

PARTS

PK EASYLOAD & SIDELOAD

COST-EFFICIENT

With the EasyLoad units you will get a very effective and cost-efficient parts washer for various wide web press parts.

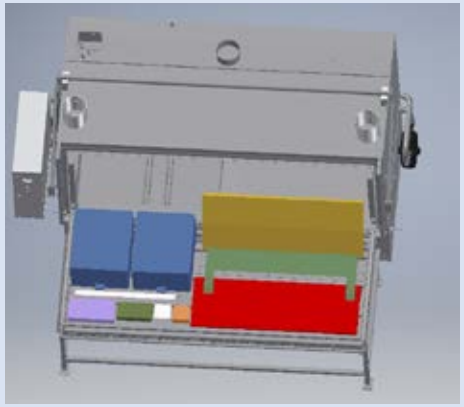
The machines are controlled by a microprocessor, where it is easy to set the different programmes such as wash time.

TROLLEY FOR EASY HANDLING

The standard unit comes with one large trolley which makes it easy to move the parts directly from the printing press to the grid.

The grid is then easily slid into the PK EasyLoad from the trolley, thus eliminating handling to a minimum.

LAYOUT EXAMPLE PK EASYLOAD



PARTS IN LAYOUT:

- 3 trays of various sizes
- 1 ink tray
- 1 holder
- 1 dispenser
- 2 wipers of various sizes
- 2 ink containers

PK EASYLOAD 240

- One trolley included
- Wash area (LxWxH):
  2150 x 1030 x 700 mm
  (84.6" x 40.5" x 27.6")

PK EASYLOAD 280

- One trolley included
- Wash area (LxWxH):
  2550 x 1030 x 700 mm
  (100.4" x 40.5" x 27.6")

PK SIDELOAD 200-300

- ONLY available as ATEX Electric
- One trolley included
- Wash area (LxWxH):
  PK 200: 2000 x 1000 x 700 mm
  (79" x 39" x 27.6")
  PK 300: 3000 x 1000 x 700 mm
  (91" x 39" x 27.6")

PK FRONTLOAD

360° CLEANING

With the FrontLoad units you will get highly intensive 360° cleaning by nozzles from four sides of the parts.

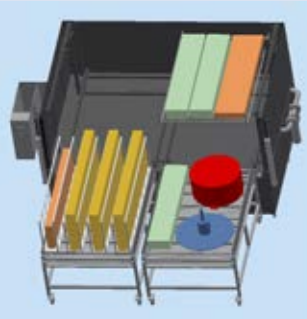
The machines are controlled by a PLC control system for a user-friendly and easy use of the machine.

TROLLEYS FOR EASY HANDLING

The standard unit comes with two trolleys which makes it easy to move the parts directly from the printing press to the grid.

The grid is then easily slid into the PK FrontLoad from the trolley, thus eliminating handling to a minimum.

LAYOUT EXAMPLE



PARTS IN LAYOUT:

- 5 ink pans of various sizes
- 1 ink pot
- 1 lid
- 3 chambers

PK FRONTLOAD 250

- Two trolleys included
- Wash area (LxWxH) per trolley:
  1800 x 950 x 700 mm
  (70.9" x 37.4" x 27.6")
- Available as XL/XXL versions*

PK FRONTLOAD 300

- Two trolleys included
- Wash area (LxWxH) per trolley:
  1800 x 1200 x 700 mm
  (70.9" x 47.2" x 27.6")
- Available as XL/XXL versions*

PK FRONTLOAD 350

- Two trolleys included
- Wash area (LxWxH) per trolley:
  1800 x 1450 x 700 mm
  (70.9" x 57.1" x 27.6")
- Available as XL/XXL versions*

** XL increases the length by 300 mm (11.8") / XXL increases the length by 800 mm (31.5")*

REDUCE WASTE THROUGH DISTILLATION

Distillers makes 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.

COMPLETE CLOSED-LOOP SYSTEM

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

SOLVENT PACKAGES

A complete solvent package from Flexo Wash consists of:

- Water cooled condenser
- Fully automatic distillation process
- High reclaim percentage
- Clean and dirty solvent tanks

DISTILLATION BENEFITS

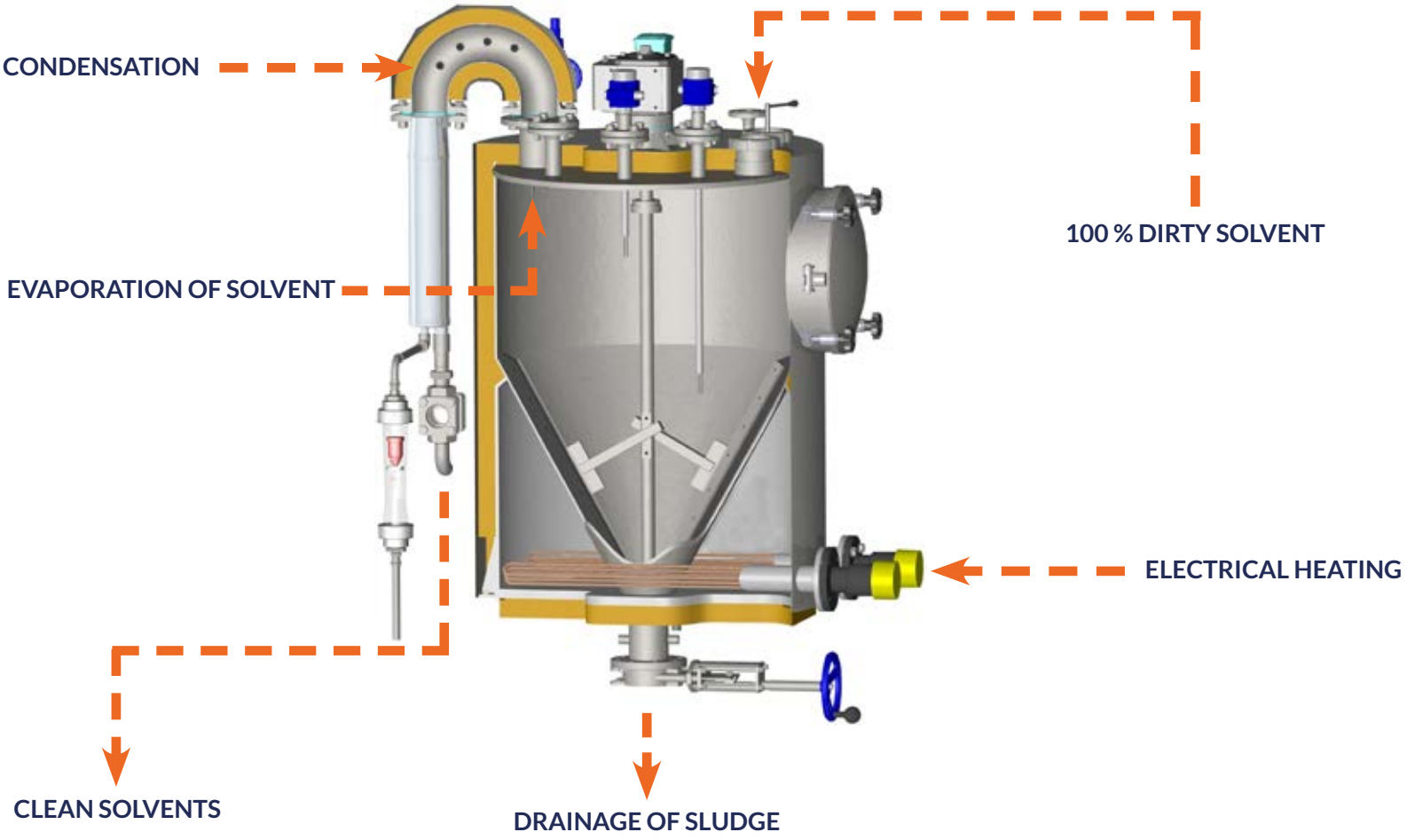
- Reuse your solvents
- Water cooled condenser
- Fully automatic distillation process
- High reclaim percentage
- Tanks for clean and dirty solvent

HOW DOES IT WORK?

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.
- Drainage of the sludge residue through valve to the waste tank - no cleaning necessary, the unit is immediately ready for the next operation.



DI-SERIES FOR SOLVENT RECOVERY

CAPACITY DEPENDENT OF VARIOUS FACTORS

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.

INK TYPE, CONTAMINATION & TEMPERATURE

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.

DI 500

- Total vessel volume:
  70 L *(18 Gal)*
- Approx. Dist. Rate*:
  7-15 L/hour
  (2-4 GPH)

DI 1200

- Total vessel volume:
- 140 L *(37 Gal)*
- Approx. Dist. Rate*:
  20-40 L/hour
  (6-11 GPH)

DI 2400

- Total vessel volume:
  160 L *(42 Gal)*
- Approx. Dist. Rate*:
  40-60 L/hour
  (11-16 GPH)

DI 3300

- Total vessel volume:
  500 L *(132 Gal)*
- Approx. Dist. Rate*:
  50-80 L/hour
  (13-21 GPH)

DI 5500

- Total vessel volume:
  500 L *(132 Gal)*
- Approx. Dist. Rate*:
  100-150 L/hour
  (26-40 GPH)

** Depending on solvent type*

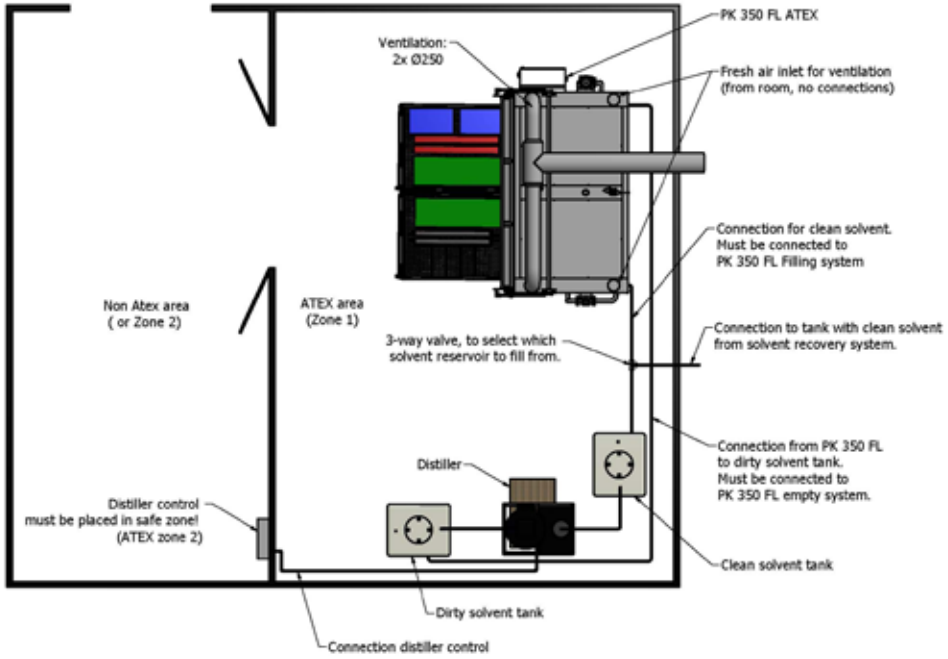
FW TAKES CARE OF ALL CONNECTIONS

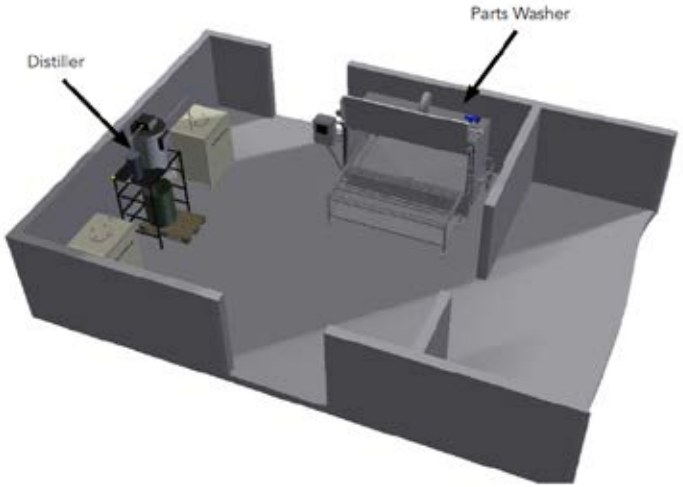
When investing in a Flexo Wash Distiller we will take care of all connections between distiller, tanks and Flexo Wash parts washer.

PROFFESSIONAL COUNSEL

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.

EXAMPLE OF COMPLETE INSTALLATION LAYOUT





GENTLE CLEANING OF PLATES

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 or storage handling.

ECO-FRIENDLY CLEANING LIQUIDS

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 the different types of inks from the plates in only a few minutes.

LONG LIFETIME & LOW MAINTENANCE

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.

DLE UNITS FOR LASER ENGRAVED PLATES

For cleaning of laser engraved plates after engraving Flexo Wash supplies two special DLE Plate Washers: PW 92 DLE & PW 130 DLE. These units gently remove the dust from the engraving without damaging the plate. A special filtration system is made to handle large quantities of engraving dust.

PW 82-180

PW 82
- Max plate width:
  820 mm *(32.3")*

PW 92 *(also as DLE unit)*
- Max plate width:
  920 mm *(36.2")*

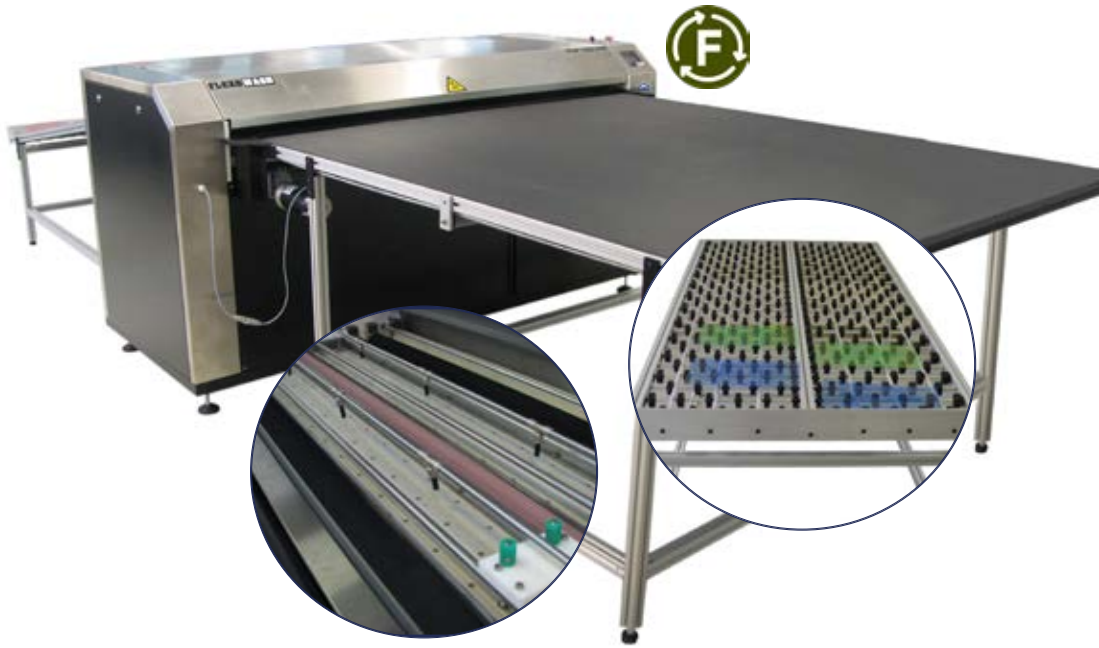
PW 115
- Max plate width:
  1150 mm *(45.3")*

PW 130 *(also as DLE unit)*
- Max plate width:
  1300 mm *(51")*

PW 180
- Max plate width:
  1800 mm *(70.8")*

TAKE CARE OF YOUR PLATES

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



HOW DOES IT WORK?

EFFICIENT WASHING PROCESS

The Plate Washers from Flexo Wash have a Wash & Rinse two-stage cleaning process, where the first stage is for cleaning and the second stage is for rinsing.

The units are designed for horizontal cleaning of plates and can clean approx. 20 meters of plates per hour.

OPTIONS AND ACCESSORIES

- Table for unloading of plates.
- Extended inlet conveyor belt
- Extra tank capacity

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.

Cleaning liquids are re-circulated and drained back to the tank for re-use.

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.

DRYING

After the rinsing process, the plates are dried in two steps:

- Sponge roll
- Warm air knife

CLEAN ALL TYPES OF SLEEVES IN ONE UNIT

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.

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.

FULLY ADJUSTABLE

All Flexo Wash Sleeve Washers are adjustable, which makes it possible to wash sleeves of various lengths. Rubber coated cones make it possible to wash various sleeve diameters in the same unit. The rubber cones ensure that liquid does not enter the inside of the sleeves.

TAKE CARE OF YOUR SLEEVES

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

SL 2000-2500 .NXT

- For cleaning of one sleeve
- Max diameter:
  340 mm *(13.4")*
- Max length:
  SL2000.NXT: 1300 mm *(51.2")*
  SL2500.NXT: 1800mm *(70.9")*

BEFORE WASH

AFTER WASH

DLE
Also available as
DLE sleeve cleaner:
SL 3000 DLE

SL 6V

- For cleaning of up to 6 sleeves
- Max diameter:
  300 mm *(11.8")*
- Max length:
  1700 mm *(69.9")*

HOW DOES IT WORK?

EFFICIENT WASHING PROCESS

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.

OPTIONS AND ACCESSORIES

- Automatic liquid filling.
- Waste water treatment.
- XL version with larger outer diameter for the sleeves
- XL version with extended height and outer diameter for the sleeve

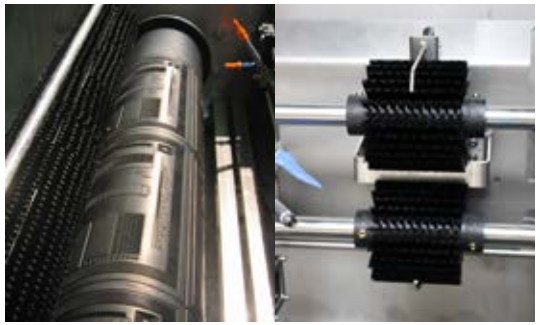
WASHING

The rotating brushes are activated and are washing the sleeve with the cleaning liquid.

This unique combination of the FW cleaning liquid and soft 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.

After wash, the liquid is drained back to the tank through a filter for reuse.



RINSING

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

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.

SUSTAINABLE CLEANING SOLUTIONS

WHY FLEXO WASH SOLUTIONS?

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

HIGH DURABILITY & SAFER CLEANING ENVIRONMENT

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.

Choosing the right cleaning solutions is the key to a more sustainable business.

ENSURES THE BEST POSSIBLE CLEANING RESULT

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.

LIQUIDS FOR ALL NEEDS

FOCUS ON WORKING ENVIRONMENT

The Flexo Wash solutions are of high quality and durability. The working environment as well as the environment around us have always been an important parameter to Flexo Wash. We strive to ensure high quality and long lifetime for your aniloxes, print plates and other press parts when using our machines and/or solution.

ENSURES YOU THE BEST MATCH

Flexo Wash offers a wide range of cleaning liquids for different ink types and applications - below you will find an overview for our products. If in doubt which solution is the best for your need, inks and/or machines, Flexo Wash can help you with guidance to ensure you the best match.

ALL INK TYPES

ANILOX CLEANING

FW Anilox + Cleaners	FW Anilox Cleaning Machines
FW Anilox Deep Cleaners	FW Anilox Cleaning Machines
FW Hot Cleaner	Ultra Sonic Cleaners
FW Quick Treat	Manual Cleaning
FW Buster	Manual Cleaning

ALL INK TYPES

CYLINDER CLEANING

FW Cylinder Cleaning	FW Cylinder Cleaners

UV & SOLVENT BASED

CYLINDER CLEANING

FW UV/Solvent Cleaners	FW Cylinder Cleaners
FW MCC Solvent Cleaner	FW Multi Cylinder Cleaners

WATER BASED

PARTS, PLATES & SLEEVES

FW Aqua Cleaners	Parts & Plate Washing Machines
FW Aqua Cleaner Extra	Parts & Plate Washing Machines
FW W275	Parts Washing Machines & FW Coating Unit Cleaners

UV & WATER BASED

PARTS, PLATES & SLEEVES

FW Hot Cleaner	Parts Washing Machines
FW UV/Aqua Cleaners	Parts & Plate Washing Machines

UV & SOLVENT BASED

PARTS, PLATES & SLEEVES

FW Alka Cleaner	Alkaline Parts Washing Machines
FW UV Offset Cleaner	Parts Washing Machines
FW UV/Solvent Cleaners	Parts & Plate Washing Machines and Manual Cleaning*

**Please be aware of our different types of FW UV/Solvent Cleaners and that some of them are not suitable for Plate Washing Machines or manual cleaning - please seek advice from your Flexo Wash sales representative before use!*

UV BASED

SCREEN WASHING

FW 86500	FW Screen Washing Units

UV BASED

ON-PRESS CLEANING

FW W275	On-press cleaning

CONTACT

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FLEXO WASH
Leading Cleaning Solutions