

CLEANING EQUIPMENT LABEL INDUSTRY





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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.



FILTRATION UNIT



SEDIMENTATION TANK



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

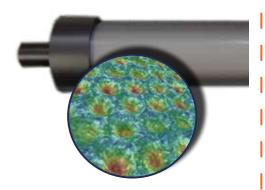
This makes it possible to keep your aniloxes totally clean at all times ensuring a high and consistent print quality and a long lifetime of the aniloxes.

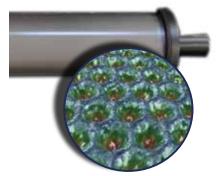
BEFORE WASH

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









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. The water consumption is only 10 litres for each roll meter.

OPTIONS AND ACCESSORIES

- Adaptor for sleeves.
- Gear Covers
- Double tank system for 2nd cleaning liquid.
- Drainage tank for re-use of rinse water.
- Wastewater treatment unit.
- Automatic liquid filling system.

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 air drying completes the cleaning process leaving the anilox ready for immediate use or storage.

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









FW HANDY FAMILY

LOW COST & FULLY AUTOMATIC

The FW Handy-product line of Anilox Cleaners from Flexo Wash are fully automatic units designed to deep clean/restore anilox rolls and print sleeves of all sizes and providing you with a very good and cost-efficient tool for the daily washing and maintenance of aniloxes etc.

FW HANDY MIDI 2X2

Our most economical model

FW HANDY MINI 2

- 2 aniloxes per wash
- Max diameter: 150 mm (5.9")
- Max cleaning length:

640 mm (25.2")

Max weight of aniloxes:

2 x 15kg (2 x 33 lbs)

- Our most popular anilox cleaner
- 2 or 4 aniloxes per wash
- Max diameter:

150 mm (5.9")

- Max cleaning length:
- 2 aniloxes: 1120 mm (44.1")
- 4 aniloxes: 480 mm (18.9")
- Max weight of aniloxes:

 $2 \times 20 \text{kg} / 4 \times 15 \text{kg} (2x44/4x33 \text{ lbs})$

WHICH HANDY DO YOU PREFER?

The three different Handy models have been developed to serve a broad part of the label industry. Depending on your specific aniloxes you will find a FW Handy Anilox Cleaner that will fit your needs.

FW HANDY MAXI

- For heavier and larger aniloxes
- 1 or 2 anilox per wash
- Max diameter:

230 mm (9.1")

• Max cleaning length:

1 anilox: 1120 mm (44.1")

2 aniloxes: 450 mm (17.7")

• Max weight of aniloxes:

1 x 50 kg (1 x 110 lbs)







GENERATION







Automatic liquid filling



Automatic lid opening



Easy adjustment



Better and faster draining



Liquid level indicator



Easy access pull-out tank



Improved lid design

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 sustainable solutions.

ENRICHED WITH NEW FEATURES

The machines has inherited all the qualities of the original FW 993 XL/ XXL. but has been enriched with the .NXT features.

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 993 XL NXT



- 3, 6 or 9 aniloxes per wash
- Max diameter:
 - 150 mm (5.9")
- Max cleaning length:

3 aniloxes: 1600 mm (63")

6 aniloxes: 715 mm (28.1")

9 aniloxes: 420 mm (16.5")

- Max weight per anilox:
- 15 kg (33lbs)

FW 993 XXL NXT



- 3, 6 or 9 aniloxes per wash
- Max diameter:
 - 150 mm (5.9")
- Max cleaning length:

3 aniloxes: 2000 mm (78.7")

6 aniloxes: 915 mm (36")

9 aniloxes: 553 mm (27.7")

• Max weight per anilox:

15 kg (33lbs)

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 two narrow web rolls in the FW 850-2 Laser Anilox Cleaner. Most importantly it is a waste-free and sustainable cleaning method with no liquid handling or consumption.

FW 850 LASER

- 1-2 aniloxes per wash*
- <u>Max diameter:</u> 180 mm (7")
- Max cleaning length: 700 mm (27.6")
- Max weight per anilox: 50 kg (110lbs)

* FW 850 Laser: 1 anilox per wash FW 850-2 Laser: 2 aniloxes per wash

SPECIAL FEATURES



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

- 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.

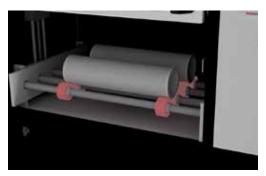
EXTRACTION

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 PRESS PARTS

The fully automatic washing units are designed to wash ink trays, doctor blades, aniloxes and other removable press parts used with water-based ink, solvent-based ink or UV ink.

QUICK & EASY OPERATION

The quick and easy wash operation allows press operators to focus on press makeready functions, thus reducing the changeover time and the labor involved with manual washing.

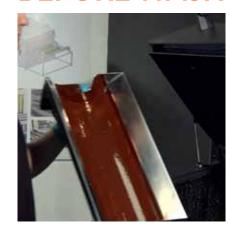
This results in reduced downtime, consistent print quality and a safe and healthy cleaning and working environment.

CUSTOM-BUILD TO FIT YOUR NEEDS

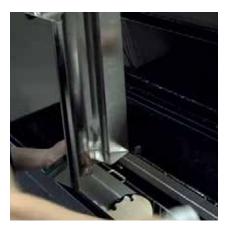
The Parts Washers can all be customized according to your specific needs. In the standard machines the various press parts are placed on a grid and cleaned by means of nozzles spraying from underneath and above.

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

BEFORE WASH



AFTER WASH





TAKE CARE OF YOUR PARTS

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

TWO-STAGE CLEANING PROCESS

The Parts Washers from Flexo Wash have a Wash & Rinse system with two seperate 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 a moving nozzle arm, spraying cleaning and rinse liquid from below and above.

OPTIONS AND ACCESSORIES

- Flexible jets to focus spray on difficult to clean items.
- Racks for ink trays, rolls and doctor blades.
- Automatic lid operation.
- Wastewater treatment unit.

WASHING

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

DRAINING

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

In WR-units the liquid is re-circulated through a filter.

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.

DRYING

Upon completion of the washing cycle the machine automatically stops.

The lid is opened leaving the parts to dry.

In the PK ECO-units the lid should be opened manually.









PK ECO-SERIES

LOW COST & FULLY AUTOMATIC

The units in the PK ECO-series are fully automatic and cleans all kinds of parts.

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

WHICH ECO DO YOU PREFER?

Depending on your specific parts you will find a PK ECO Parts Washer that will fit your needs.

All models can be tailormade with holders for chambers securing the best washing result for your specific chambers.



LAYOUT EXAMPLES



MARK ANDY SCOUT

6 ink trays

MPS 410 EF

4 doctor blade chambers





GALLUS EM 410 6 chambers

NILPETER FA 6 4 chambers



PK ECO MIDI

• Wash area (LxWxH): 1400 x 415 x 275 mm (55.1" x 16.3" x 10.8")

LAYOUT EXAMPLES





MARK ANDY SCOUT 9 ink trays & 9 blades

3 ink trays & 4 doctor blade chambers





GALLUS EM 410 6 ink trays & 6 chambers

NILPETER FA 6 8 chambers



PK ECO MAXI

• Wash area (LxWxH): 1400 x 765 x 275 mm 55.1" x 30.1" x 10.8")

PK TOPLOAD & TROLLEYLOAD

STAINLESS-STEEL UNITS

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

LARGER WASH ROOM AREA

In the PK TopLoads the handling of the parts is made more accessible with slide-in grid, which means that the back grid can be slid to the front of the machine for easier mounting of parts.

EASIER HANDLING

The PK TrolleyLoad provides with its trolleys an even easier handling of your press parts. Simply place the press parts on the trolley at the press. Drive the trolley to the washing machine and push the grid into the machine. It is possible to wash doctor blade chambers, ink trays and other removable press parts.

PK 200 TROLLEYLOAD

1 LARGE TROLLEY

Wash area (LxWxH):
 1750 x 900 x 250 mm
 69" x 35.4" x 9.8"

2 MEDIUM TROLLEYS

• Wash area (LxWxH) per trolley: 800 x 900 x 250 mm 31.5" x 35.4" x 9.8"

3 SMALL TROLLEYS

• Wash area (LxWxH) per trolley: 500 x 900 x 250 mm 19.7" x 35.4" x 9.8"

PK 160/200 TOPLOAD

PK 160 TOPLOAD:

 Wash area (LxWxH): 1450 x 900 x 250 mm 57" x 35.4" x 9.8"

PK 200 TOPLOAD:

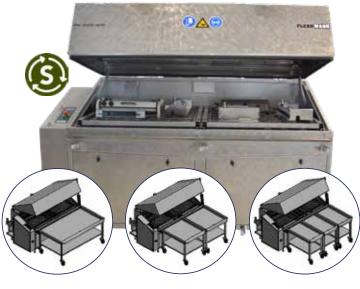
- Wash area (LxWxH):
 1850 x 900 x 250 mm
 73" x 35.4" x 9.8"
- Both models come with either a slide-in grid for easier handling or one flat fixed grid for even more wash area space.













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.

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.

TAKE CARE OF YOUR PLATES

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

PW 45-92

PW 45

• Max plate width: 450 mm (17.7")

PW 62

• Max plate width: 620 mm (24.4")

PW 82

• Max plate width: 820 mm (32.3")

PW 92

• Max plate width:

920 mm (36.2")



EFFICIANT 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.

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







EFFECTIVE CLEANING OF ROTARY SCREENS

The Flexo Wash PK 92 Rotary Screen Wash is used for the cleaning of rotary screen cylinders from printing machines using UV-drying screen inks.

ENSURES THOROUGH CLEANING

The screens are placed on rotating holders and the specially designed jets on both sides of the screen ensure a thorough cleaning.

The holder on the PK 92-1 is equipped with an adjustable plate, making it possible to adjust to different screen sizes.

TAKE CARE OF YOUR SCREENS

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

BEFORE WASH | AFTER WASH







PK 92-1

- For cleaning of one screen
- Max diameter: 270 mm (10.6")
- Max length: 755 mm (29.7")



PK 92-2

- For cleaning of two screens
- Max diameter:
 - 270 mm (10.6")
- Max length: 600 mm (23.6")

ECO-FRIENDLY & HARMLESS CLEANING

The PK 92-series requires only 30L of cleaning solution which is circulated by means of an air powered diaphragm pump. The liquid is filtered and recirculated in a closed-circuit system without any waste to the environment. The cleaning liquid used is our eco-friendly FW86500, which is guaranteed harmless to the screens.

The washing time is controlled by a timer, adjustable from 1 to 100 minutes. Normal washing time is approx. 10 minutes.

OPTIONS AND ACCESSORIES

- Extra dip rinse tank
- Fixation for small screens

TIMER

The washing time is easily set with the integrated timer.

WASHING

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

DRYING

After cleaning the screen can be moved to the integrated chamber for drying.

If the screen has to be rinsed with alcohol an external dip tank can be purchased.







SAFE CLEANING OF FLAT SCREENS

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

EASY & EFFECTIVE CLEANING

First the screens are washed in the unit and can afterwards be rinsed in a separate stainless steel tank containing alcohol (option). The machine is controlled by a micro-processor, where it is easy to set the different wash times.

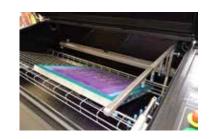
REDUCE YOUR DOWNTIME

Cleaning in a Flexo Wash Flat Screen Washer results in reduced downtime, consistent print quality and a safe and healthy cleaning and working environment.

PK FLAT SCREEN WASHER

Max screen size:
 700 x 700 mm (27.5" x 27.5")

 2 screens per wash











TAKE CARE OF YOUR SCREENS

- Clean and dry screens in a short time
- Quick and gentle wash operation
- Limited labor involved and minimal maintenance.

ECO-FRIENDLY & HARMLESS CLEANING

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

The cleaning liquid used is our eco-friendly FW86500, which is guaranteed harmless to the screens.

OPTIONS AND ACCESSORIES

- External container for dip rinsing
- Pump for emptying

LOADING

The screens are placed in the holders/grids.

The unit has the capacity of two screens of 700 x 700 mm or one screen/scrapper per wash.

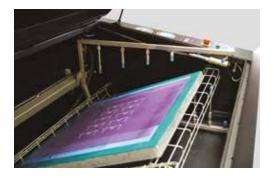
WASHING

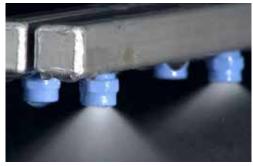
The required time is set (5-15 min) and the start button is activated. The fully automatic washing process begins.

DRAINING

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

Upon completion of washing cycle the machine automatically stops.







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.

.EANING
FW Anilox Cleaning Machines
FW Anilox Cleaning Machines
Ultra Sonic Cleaners
Manual Cleaning
Manual Cleaning
F



UV & SOLVENT -BASED CYLINDE	R CLEANING
FW UV/Solvent Cleaners	FW Cylinder Cleaners
FW MCC Solvent Cleaner	FW Multi Cylinder Cleaners

ES & SLEEVES
Parts & Plate Washing Machines
Parts & Plate Washing Machines
Parts Washing Machines & FW Coating Unit Cleaners

UV & WATER -BASED PARTS, PLAT	ES & SLEEVES
FW Hot Cleaner	Parts Washing Machines
FW UV/Aqua Cleaners	Parts & Plate Washing Machines

UV & SOLVENT -BASED PARTS, PLAT	ES & 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*

UV -BASED	SCREEN WASHING
FW 86500	FW Screen Washing Units

ALL INK TYPES	
TYPES	ON-PRESS CLEANING
FW W275	On-press 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!

NOTES

NOTES

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Leading Cleaning Solutions