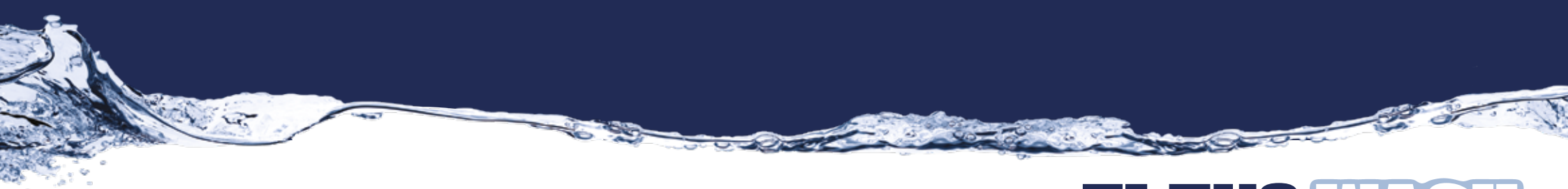


FOR
ALKALINE
LIQUID

PRODUCT CATALOGUE

PARTS WASHING

PK EasyLoad & FrontLoad-series



FLEXO WASH

Leading Cleaning Solutions

CLEAN YOUR PARTS WITH ALKALINE LIQUID

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

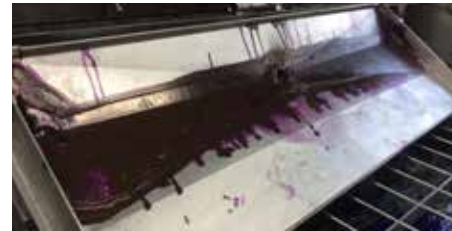
The quick and easy wash operation allows press operators to focus on press make-ready functions and thus reducing the changeover time and the labour involved in washing. This results in reduced down time, constant print quality and a safe and healthy cleaning and working environment.

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



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.

OPERATION DESCRIPTION

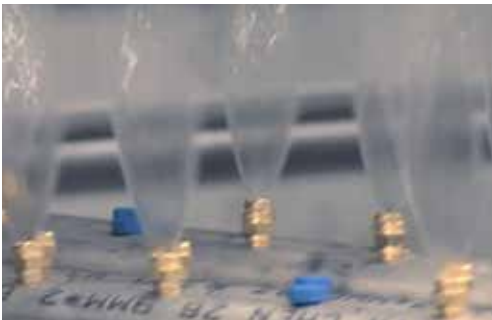
WASHING

The parts are placed in the holders / grids in the machine.

The lid is closed by a 2-hand control. (The washing process cannot begin before the lid is fully closed).

The start button then activates the fully automatic washing process.

The first pump circulates the washing liquid from the tank, through the filter to the washing area. A moving arm with nozzles sprays the solvent and ensures a very efficient washing result.



DRAINING

The drain 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 second pump circulates rinse liquid from the second tank through a filter to the washing area where the parts go through rinsing and then through a drain back to the second tank to be re-used.

The rinse process takes approximately 5 minutes.



VENTILATION

The machine has to be connected to a ventilation resistant to alkaline liquids.

It takes approx. 2-5 minutes to ventilate the machine.

Ventilation ensures good working environment

The lid can now be opened and the clean parts be removed.



PK EASYLOAD

COST-EFFICIENT

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

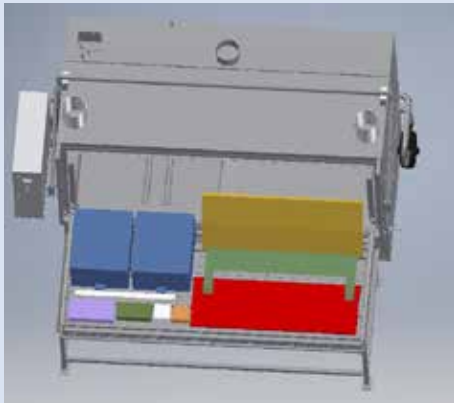
The machines are controlled by a microprocessor, where it is easy to set the different programmes such as wash time.

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 FRONTLOAD

360° CLEANING

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

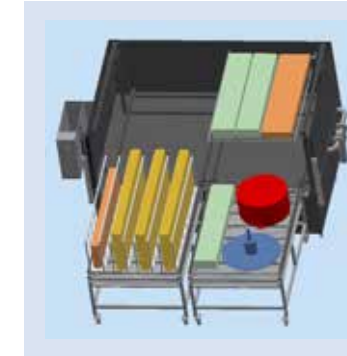
The machines are controlled by a PLC control system for a user-friendly and easy use of the machine.

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*



ALKA

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*



ALKA

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*

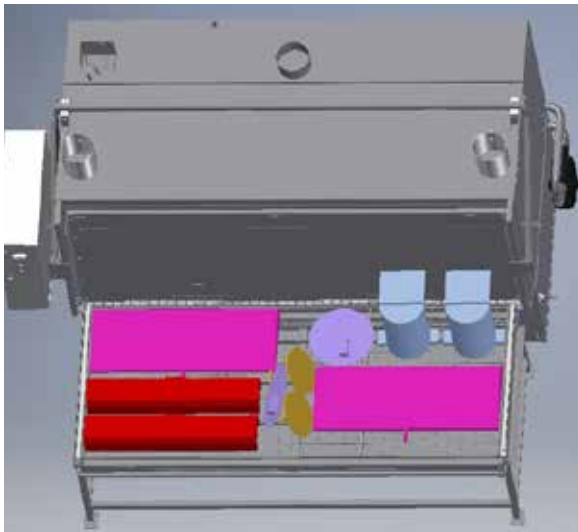


ALKA

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

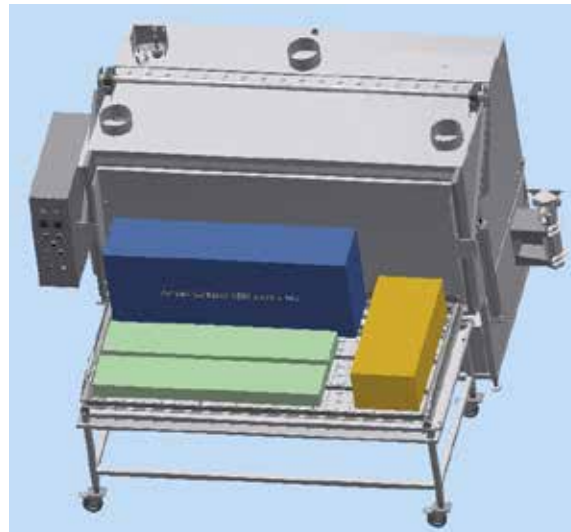
LOADING POSSIBILITIES - EASYLOAD

We recommend to custom build the washing area to your specific needs and applications. Below you will find examples of how the wash area can be designed using different options according to your needs and applications. For illustration purpose only.



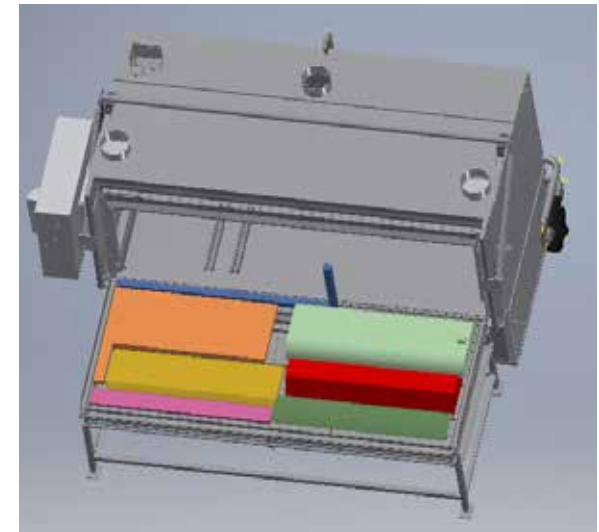
Parts in layout:

- 2 buckets
- 2 bucket lids
- 2 circular tubes
- 2 ink trays
- 2 chambers



Parts in layout:

- 1 ink pan
- 1 ink container
- 2 dr. blade splash guards

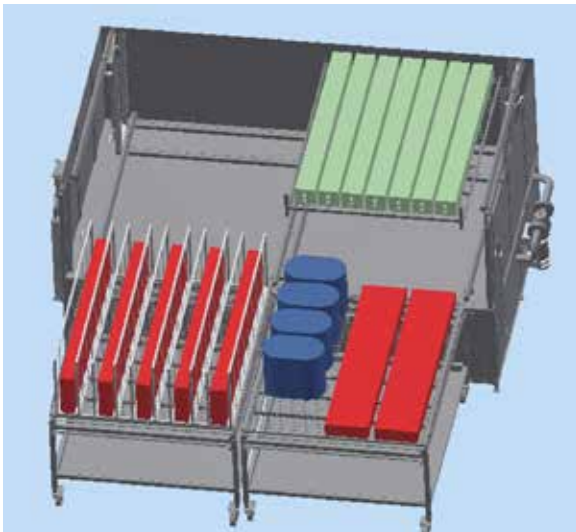


Parts in layout:

- 4 trays of various sizes
- 3 dispensers of various sizes

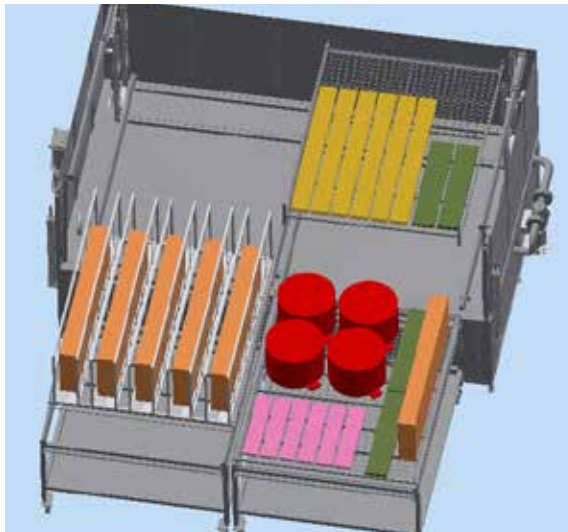
LOADING POSSIBILITIES - FRONTLOAD

We recommend to custom build the washing area to your specific needs and applications. Below you will find examples of how the wash area can be designed using different options according to your needs and applications. For illustration purpose only.



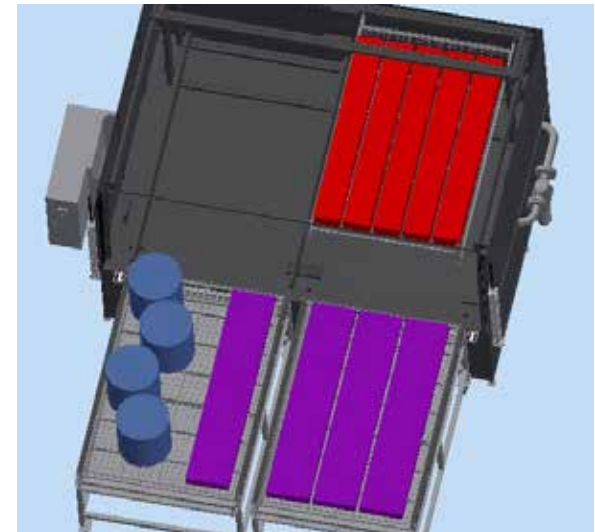
Parts in layout:

- 4 ink buckets
- 7 drip trays
- 7 dr. blade chambers



Parts in layout:

- 10 ink pans of various sizes
- 12 dr. blade chambers of various sizes
- 4 ink buckets



Parts in layout:

- 4 ink pans
- 5 dr. blade chambers
- 4 ink buckets

MACHINE DETAILS

GENERAL

As standard all Flexo Wash PK ALKA are equipped with:

- 2 trolleys included with PK FrontLoad and 1 trolley included with PK EasyLoad for easy handling of press parts
- Process indicator lamp, so you always know if the machine is in operation or not.
- Extra isolation to be able to keep a high temperature
- Semi-automatic filling of liquid which makes the handling of high alkaline liquid easier and friendly to the workers

PLC CONTROL

The unit is controlled by a user friendly PLC panel, which makes a large variety of washing programmes available.

It is possible to adjust e.g.:

- Wash time
- Drain time
- Rinse time
- Liquid temperature

It is possible to check the following:

- Number of washes and working hours the unit has run
- Check all functions individually

Choice of programs and settings depend on applications and parts.

PUMPS

The unit has 2 electrical centrifugal pumps especially configured for alkaline liquids. An extra-large pump for the washing tank circulates 5-600L/minute at 6-8 bar and the pump for the rinse tank circulates 300L/minute at approx. 1-3 bar.

- Pump size PK 250-350 FrontLoad: 15kW
- Pump size PK 240-280 EasyLoad: 5,5kW.

STAINLESS STEEL NOZZLES

The nozzles are spraying from different angles ensuring a fast operation and efficient washing. All nozzles are made of stainless steel and positioned so they are easy to change.

MACHINE DETAILS

STAINLESS STEEL FILTER

These filters collect the vast majority of ink particles when the Flexo Wash Liquid flows from the washing area and back to the two tanks for reuse thereby extending the lifetime of the cleaning and the rinse liquid.

The stainless-steel filters are easy to clean and change

The filter capacity of the cleaning cycle is larger than that of the after rinse cycle, as most of the residual ink sludge is collected in the cleaning process.

ALARMS

To ensure optimal performance the cleaning machine is equipped with alarms programmed to send messages to the front screen telling the operator what to do when the machine needs service.

Liquid level alarm:

The liquid level alarm consists of a level float switch which is placed in the tanks. The switch registers the liquid level and a message will appear on the screen telling the operator when the liquid level is too low. At the same time the machine stops running to protect the pumps, which means that liquid has to be filled into the tank before the machine can wash again.

Service alarm:

The PLC control is programmed to remind the operator to make a service check on the machine after a number of washes. This is done to ensure regular maintenance.

Temperature alarm:

If the pre-set temperature at the display is not reached in the tank the alarm will show at the display and the machine cannot run until the required temperature has been reached.

Slide alarm:

To ensure the best possible washing result a nozzle arm inside the machine is moving from side to side while spraying liquid onto the parts from different angles. If the nozzle arm moves into a press part the slide alarm stops the machine and a message is sent to the screen telling the operator that the parts need to be rearranged.

TANKS

The wash tank with cleaning liquid and the rinse tank with rinse liquid are made of stainless steel and both are located under the washing area. The heating elements in the tanks make sure that the washing liquid can be heated to 75°C.

By using the semi-automatic liquid filling for both tanks, the operator can start the filling process with a press on a button and a sensor will then stop the pump filling the liquid once the tank is full.

An empty pump is connected to the tank, for easy handling of the liquid.

EXHAUST

The unit is prepared for exhaust with 2 × Ø250mm dampers. When the unit is connected to your ventilation system, the exhaust is connected to the PLC and thus open and close automatically. For an improved drying process, we recommend connection to ventilation (500-1000 m3/h).

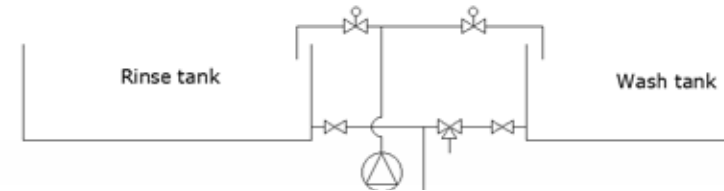
MACHINE DETAILS

CLEANING LIQUID

Flexo Wash supplies all types of environmentally friendly cleaning liquids and the specific type depends on the type of ink.

For both solvent & water based inks, Flexo Wash recommends the following eco-friendly cleaning liquid:

- Wash tank: FW ALKA Cleaner mixed 1:1 with water
- Rinse tank: Water



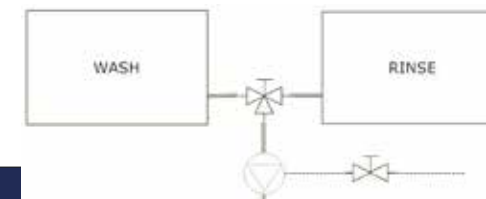
SEMI-AUTOMATIC FILLING & TRANSFER SYSTEM

Each tank is filled individually.

The filling starts manually on the control box on the washing unit. Valves and pumps are controlled automatically by the control box.

The filling stops when the tank is full.

A 3-way ball valve determines if filling is from After rinse tank or external clean liquid tank.

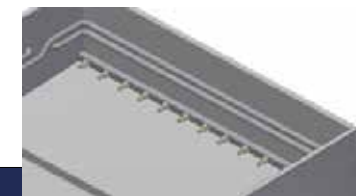


MANUAL EMPTYING SYSTEM

The tank which is emptied is selected by the manual operated 3-way valve.

The pump is controlled manually with a throttle.

Cast iron pump.



TANK FLUSH FOR WASH TANK

Submerged pipe system with jets installed in the wash tank.

The system is connected to main pump with manually operated valves.

Before change of liquid the sludge/ink waste from the bottom of the tank is agitated with the jets where after the tank can be emptied.

AUTOMATIC VENTILATION DAMPERS

Ventilation dampers are closed during wash and rinse cycle and opens automatically after saturation. This decreases consumption of washing liquid.