



PRODUCT CATALOGUE

GRAVURE CYLINDER CLEANING

GCC-series



FLEXO WASH

Leading Cleaning Solutions

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

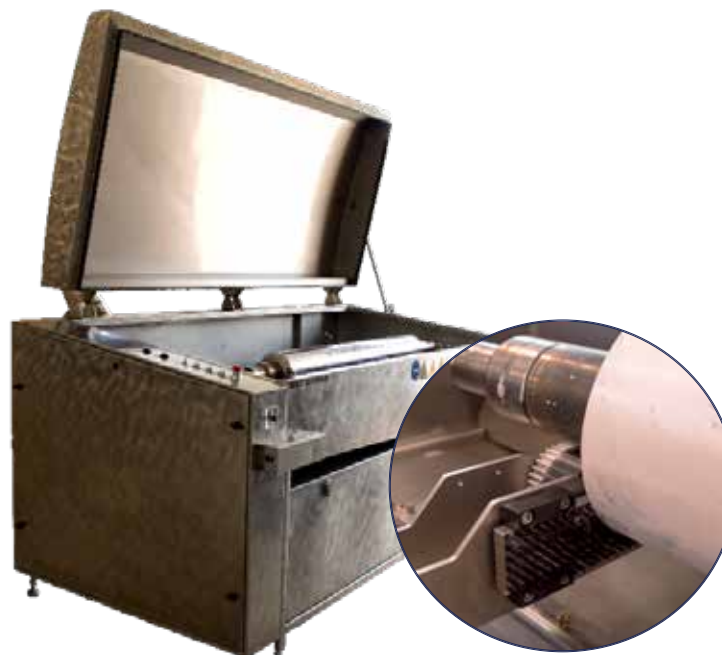
The Gravure Cylinder Cleaner 2300 ATEX can be equipped with end face brushes, which can clean the end face of the cylinder. The brushes are slowly oscillating to remove the ink.

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.



MACHINE DETAILS

PNEUMATIC CONTROL

The unit has a panel with pneumatic timers that can be set as follows:

- Wash time
- Drain time
- Rinse time

Inside the control box the drain timer can be adjusted from 1-10 minutes. Choice of programs settings depends on applications and cylinders.

PUMP

The unit has a diaphragm pump, placed next to the tank under the washing chamber. The pump ensures a constant pressure of 1- 3 bar during washing. It creates a better spraying of the cleaning solvents.

FILTER

The unit has one stainless steel filter of 500-1000 microns. The filter will collect most the larger ink particles, so it will give a long lifetime of cleaning solvent. Furthermore, it protects the nozzles from blocking. The filter is placed at the back of unit and can easily be changed or cleaned.

NOZZLES

All nozzles are made of brass and can be changed easily. The nozzles are spraying from different angles ensuring a fast and efficient cleaning process.

TANK

The unit has one tank of stainless steel. The tank is placed under the washing cabinet.

SOLVENTS

The machine is designed to work with the following solvents:

- Isopropanol alcohol
- Ethyl acetate
- MEK
- Propanol
- Ethanol

For the best quality of cleaning and minimum evaporation, we recommend using a combination of 80% Ethyl Acetate (EA) and a retarder such as 20% Isopropyl Alcohol (IPA) or N-Propanol. For alternative solvent types, please ask Flexo Wash for confirmation of compliance. Some solvent types may require a change of material on some parts in the machine

MACHINE DETAILS

EXHAUST

The unit is prepared for exhaust and equipped with an automatic damper that must be connected to a local ventilation system.

During operation, the damper is closed to reduce evaporation of solvents. When the wash cycle has finished there is a stabilization & draining time of approx. 10 minutes. Hereafter the ventilation starts and runs a short while where all air inside the washing unit is exchanged with fresh air. Finally, the lid can be opened.

Option: If LEL (lower explosion limit) measuring is available, the unit can be connected hereto. The LEL will then give signal to the unit when the vaporized solvent inside the washing machine goes below the LEL level thereby allowing the operator to manually open the lid.

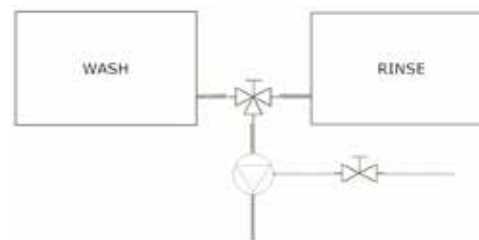
A local engineer or contractor must connect ducting to ventilation, atmosphere or to an oxidizer as required.

The unit can provide a pneumatic signal to control a fan to draw solvent vapor out of the washing machine at the end of the cycle before the door opens. Fan, ducting and connection to exhaust are not included.

MANUAL EMPTYING SYSTEM

The unit is equipped with a manual operated emptying system for easier emptying of the tanks.

The tank to be emptied is selected by the manual operated 3-way valve. The system is connected to a pump controlled manually with a throttle.



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.

ZONE 2

CATEGORY II

Between 10 and 100 hours of explosive atmosphere per year.

Around the unit will be ATEX zone 1.

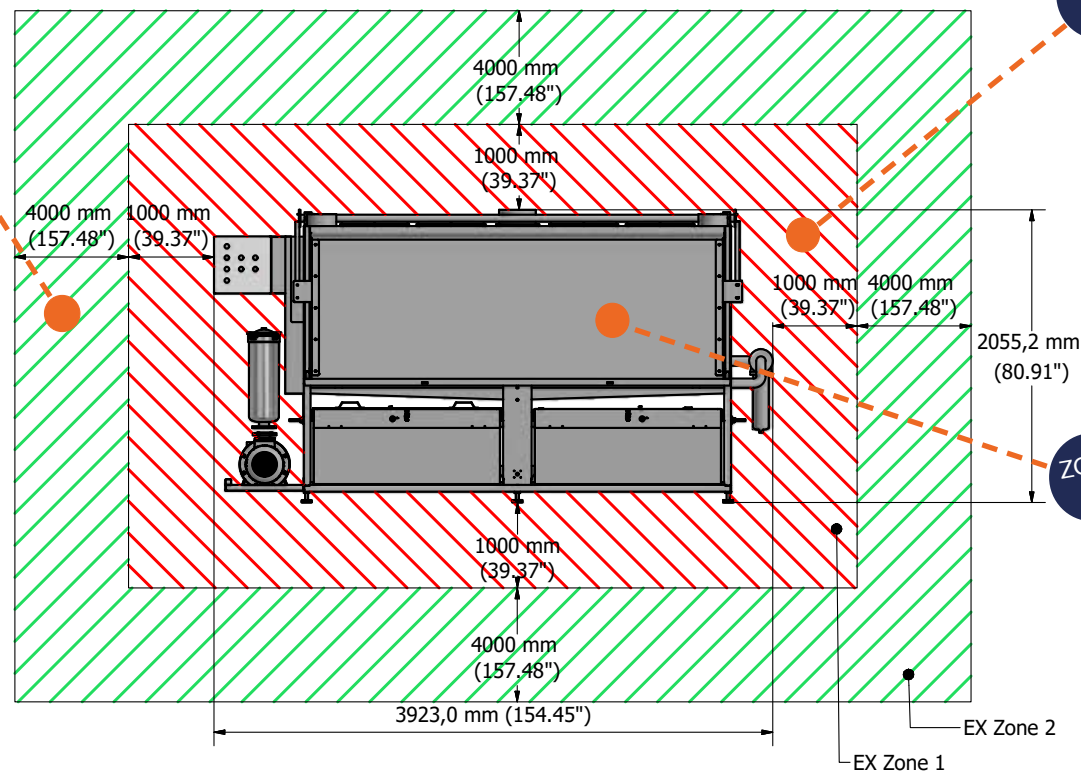
ZONE 1

CATEGORY I

Explosive atmosphere is continuously present for long periods.

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

ZONE 0



OBS!

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

