

## Solvent-based screen cleaning machine (EX)



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# G-105 Solvent-based screen cleaning machine (EX)

## Application

- The G-105 has been exclusively designed for washing print dyes out of screen frames (in the screen printing industry), by means of solvents which have been especially developed for this purpose. This machine can not be used for decoating, degreasing or developing.

## Execution of basic model

### Construction

- The sub-construction of the G-105 screen cleaning machine is made of special steel WST 1.4301 (V2A).
- The machine can be dismantled into its individual parts for transportation.
- On the left-hand side a service door is provided which allows to clean the machine and the nozzles. The service door has been screwed on.

### Loading/unloading

- The screen frames are loaded from the side. During the washing process, the machine is pneumatically locked.
- The position of the screen frames in the machine is slightly inclined towards the back, in order to allow the solvent to drip off the frame.

### Nozzle unit

- Full surface washing from both sides by means of fixed nozzle units. These nozzle units are oscillating during the washing process.
- The well-proven G-101 special steel nozzles from Grünig are used.
- The pressure build-up is achieved by means of a membrane pump which allows to regulate the pressure and therefore the flow rate.

### Tank/barrel

- A 200 liter standard barrel can be placed from the loading side at the site below the machine provided for this purpose.
- For the connection between the barrel and the machine, a special connecting sleeve designed for easy and fast installation.
- The 200 liter standard barrel is used as a solvent tank in which the polluted solvent deposits sediment.
- The suction tube of the connecting sleeve is located at 200 mm above the bottom of the barrel.

### Discharge

- A special plug prevents bigger particles (such as adhesive tape, etc.) from being washed into the barrel. This plug can be cleaned from the loading side.

### Drying process

- On the front side, next to the loading and unloading opening, up to 5 screen frames can be placed into the drying compartment (no door).
- The solvent vapors can be sucked off by means of an external exhaust air ventilation.

### Exhaust air

- An exhaust air connection (D = 100 mm) for the solvent vapors existing after the washing process is provided on the machine.
- The exhaust air ventilator in EX execution (explosion-proof) as well as the exhaust air duct must be provided by customers.
- If option V is used, and for the customer-supplied ventilation system, it is important that the regulations valid in the country of application be observed.

## Accessories

- 1 air connection complete
- 1 set of spare material
- 1 Operating manual with CE declaration

## Control

- Pneumatic control with optimal anti-explosion protection. Absolutely no electric or electric components have been used for the construction of the machine (with the exception of option V).
- The air pressure of the pump is adjustable.
- The washing time can be programmed between 3 and 100 minutes.
- Programs: 1 fixed program, washing time adjustable

## Option V Exhaust air ventilator

Upon request of the customer, an exhaust air ventilator can be connected to the G-105 screen cleaning machine. The ventilator equipped with explosion-protection and has a capacity of 720 m<sup>3</sup>/h. The power supply (3L+N+PE) must be provided by customers, outside of the explosion-hazard zone. This exhaust air ventilator sucks the solvent vapors off the bottom of the drying compartment. Furthermore, the vapors are sucked off as soon as the loading door of the machine is being opened, or every time a program has been completed.

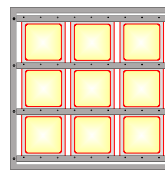
Ventilator capacity	m <sup>3</sup> /h	720
Nominal pressure	Pascal	500 (5,0 mBar)
Exhaust air speed	m/sec.	22,4

## Option T Air nozzle dryer

Air nozzles are mounted on both sides of the loading door. If this option is installed, the remaining solvent drops are blown out of the screen frames when they are removed from the machine. This option allows to reduce the solvent consumption to a minimum. This function is automatically initiated as soon as the door of the machine is opened.

## Option M

Master-Frame for CD-screen frames



## Standards

- The technical execution of the G-105 machine answers the requirements of the explosion protection regulations (EX).



The machine answers the requirements of the EU guidelines for machinery (CE-conformity).

Screen frame format	Standard formats	mm	SH	750 x SL 1000
		mm	SH	750 x SL 1250
		mm	SH	750 x SL 1500
		mm	SH	1000 x SL 1000
		mm	SH	1000 x SL 1250
		mm	SH	1000 x SL 1500
		mm	SH	1250 x SL 1250
Screen frame profile thickness	mm		20 - 50	
Index of options	V	Exhaust air ventilator		
	T	Air nozzle dryer		
	M	Master-Frame		
Outside dimensions	Total width	mm		1005
	Total height	mm	SH	+ 1400
	(with option V) Total height	mm	SH	+ 1590
	Total depth	mm	SL	+ 605
Energy supply	No electric power connection for the standard version			
Compressed air	Connection rating	Bar		8
	Air consumption	m <sup>3</sup> /h		35
	Air consumption (with option T)	m <sup>3</sup> /h		70
Capacity of solvent pump	(quantity adjustable)	lt/min.		50 - 80
Permanent sound pressure level		dB(A)		< 70

Technical data subject to change without notice

