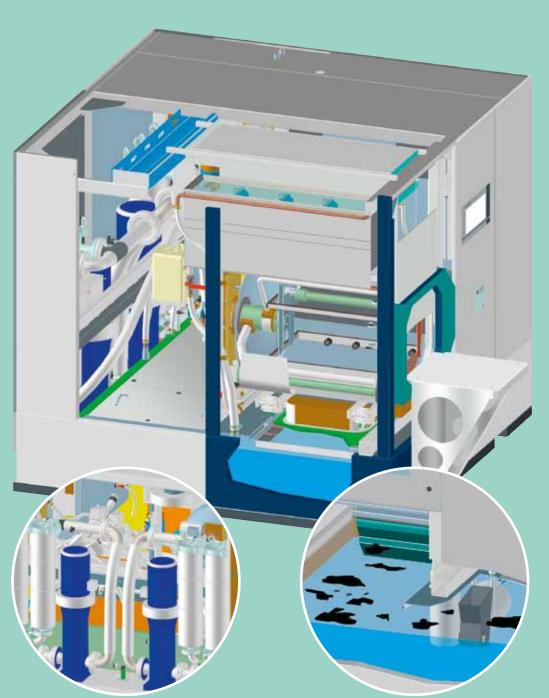


MAFAC PALMA Technical specifications



Benefits for the user:

- Patented rotating multi-side spray system with counter-rotating basket pickup system (can be switched off). With specifically arranged nozzles for reliable cleaning results.
- Two or three large-capacity tanks for long life of the process water.
- Cascade design of tanks for extended life of media.
- Reduced energy consumption thanks to insulated tanks.
- Separate heating of tanks.
- Removable swarf filter trays for collecting coarse dirt particles in the return flow from the cleaning/ rinsing process.
- Coalescing oil separation system with integrated surface suction device in tank 1 and high-level monitoring of the oil collection tank.
- Floodable cleaning chamber (100 % of batch height).
- Steam extraction with mist collector, return of condensation and condensate.
- Vertical sliding door and loading table with drain valve for residual water as a versatile conveyor and load/unload platform. After the end of the cleaning process, automatic opening of the sliding door is possible.
- Easy-to-use MAFAC MAVIATIC touch panel.
- Ultrasonic cleaning system incl. parabolic reflector for optimum efficiency of the ultrasonic waves.
- Ultra-fine filtration on pressure side of the pump for removing small dirt particles before cleaning/rinsing.

Standard features:

- Innovative machine design for quick maintenance and easy servicing
- Front loading with automatically unlocking sliding door
- EURO standard baskets can be used (600 x 400 x 288)
- Swarf filtration in return flow
- Bath heating system with analogue temperature control and cut-off
- Thermal insulation of tanks
- Steam extraction with condensation and mist separator
 Coalescing oil separator with high-level monitoring of
- the oil collection tank
- Media fill level control
- Water-contact components made of stainless steel / plastic
- Two large tanks (720 and 600 litres)
- Spray-flood cleaning with batch 100 % floodable

Options:

- Additional spray process with tank 3
- Working chamber size adjustable to max. 660L x 480W x 338H (mm)
- Modem for remote maintenance of the control system
- Rotating hot air pulse blowing system
- Stationary hot air drying system
- Combined rotating hot air pulse blowing and hot air drying system
- Vacuum drying*
- Ultra-fine filtration on pressure side of pump
- Ultrasonic cleaning unit
- Viewing window with internal light
- Speed control for basket rotation including oscillation
- Program package for time control and media treatment
- Enhanced pump system for tank 1
- Bund tray acc. to German Water Resources Act
- Draining pump
- Dosing of chemicals
- DI unit
- Loading trolley
- Stationary roller conveyor, all castors with ball bearings
- Automatic transfer system
- User-friendly MAFAC MAVIATIC touch panel, 12 inch, with graphic visualization of the process
- Speed control with nozzle rotation
- Frequency-controlled pump pressure
- Rinse water treatment module



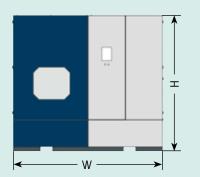
Ernst Schwarz GmbH & Co. KG Maschinenfabrik Max-Eyth-Straße 2, D-72275 Alpirsbach Phone + 49 (0) 74 44 / 95 09-0, Fax 95 09 - 99 Email: info@mafac.de, www.mafac.de

Spraying pressure pump standard version			Return filtration		Option: Pre-run filtration		
Flow volume	Pressure	Output	Grade	Surface area	Grade		Surface area
Cleaning process tank 1:							
335 l/min.	4.5 bar	4.0 kW	150 µm	0.56 m ²	100 µm		1x 0.48 m ²
Rinsing process							
300 l/min. 3.5 bar 3.0 kW		150 µm	0.56 m ²	50 µm		1x 0.48 m ²	
Option final rinsing process tank 3:							
300 l/min. 2.5 bar 1.85 kW				25 µm		1x 0.24 m ²	
Option: Spraying pressure pump non-performance version			Return filtratio	n	Option: Pre-run filtration		
Flow volume	Pressure	Output	Grade	Surface area	Grade		Surface area
Cleaning proces	ss tank 1:						
370 l/min.	7.5 bar	7.5 kW	150 µm	0.56 m ²	100 µm		$1 \mathrm{x} \ 0.48 \ \mathrm{m}^2$
Cleaning process tank 1 (alternative):							
550 l/min.	7.5 bar	11.0 kW	150 µm	0.56 m ²	100 µm 2		2x 0.48 m ²
Option: Quick-f	lood numn		Return filtratio	n	Ontion	Option: Pre-run filtration	
Flow volume	Pressure	Output	Grade	Surface area	Grade		Surface area
Cleaning proces	ss tank 1/2 via	•					
850 l/min.	4.0 bar	11.0 kW	150 µm	0.56 m ²	100 µm		2x 0.48 m ²
Cleaning process tank 1/2 via spray tube:							
400 l/min.	6.5 bar	11.0 kW	150 µm	0.56 m ²	100 µm		2x 0.48 m ²
			ā. 1. 1	T			
Tank 1. alaganing			Contents	Heating time	Temperature		Heating capacity
Tank 1, cleaning:			720 litres	approx. 2.5 h	[75 °C]		15.0 kW
Tank 2, rinsing:			600 litres 500 litres	approx. 2.5 h approx. 2.0 h	[75 °C] [75 °C]		15.0 kW 10.0 kW
Option: tank 3, final rinsing:			300 miles	approx. 2.0 ii	[/3 0]		10.0 KW
Connections:			Electrical system	V PH: Hz ; kVA	400;3		; 50 ; 65
			Compressed air	inch; bar	Rp ¾ ; 5		5 – 8
			Fresh water	inch; bar	Rp 3⁄4 ;		0.5 - 10
			Waste water	inch		Rp 1½	
			Exhaust air	mm	DN 12		
Extraction/condensation:			Mean volumetric	flow rate	v rate 600 ^{m3} /		1
Ultrasonic cleaning unit			Frequency	25 kHz	Output		2 x 1,500
				25 kHz			2 x 2,000 W
				40 kHz			2 x 1,000 W
Durving systems				Flow volume	Pressure		Temperature
Drying systems: Pulse blowing system				approx. 3,100 l/min.			45 °C
Hot-blowing system				250 ^{m3} /h	0.015 bar		max 90 °C
Combined pulse/hot blowing			system	180 ^{m3} /h	0.015 bar		max. 100 °C
Vacuum drying system			-,	300 ^{m3} /h	20 mbar		
Dimensions: Usable space max. External dimensions				Depth (mm)	Width (mm) 480		Height (mm)
				660			338
				2300	2250		2050
Loading height							860
Weight:	Bat	ich		max. 100 kg	Option max.25		max.250 kg
	Ma	chine	without liquid	2030 kg			
			with liquid	3350 kg			
Machine colour				Light grey	Sapphir	o hluo	Charcoal grey
machine colour	•			RAL 7035	RAL 500		RAL 7016
				мш (0 <i>)</i>)	иц)0(.,	1010 / 010

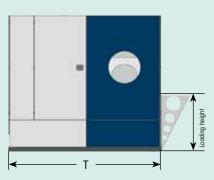
Poture filtration

Ontion, Dec. min filteration

Dimensions:



processing nump standard varian



* The height of the cleaning machine increases by 600 mm.