Robotwash machine

MILANA



Washing station placed in robotic cell.

Robotwash machine

Description:

The Machine series is a top-loaded dip washer, automatically fed by an external robot. As standard the series is designed to be manoeuvred by external control system, same system at the rest of the robotic cell. This external system is meant to control both pump, pneumatic lid, heating, level regulation and other options. The machine can of course also be equipped with its own control system. The machine is CE marked as a component accordingly to machinery directive 2006/42/EC AnnexII.

Function:

The machine washes with the help of a robot which dips the goods in either a one-tank model (-11) or a two-tanks model (-22), i.e. wash/rinse. We offer three different washing methods; solely dipping, jacuzzi-flush and furthermore ultrasonic cleaning.

Solely dipping: Dip-tank 350-E, Dip-tank 500-E

Dip-tank including insulated stainless steel cabin with immersion heater. Washing is performed with an external robot moving the detail around in a water-based, alkaline, washing liquid. The E-machines can also be used as a separate rinsing stage to other washing machines. The E-machines do not include any swarf filters nor other particle filtration apart from sedimentation of heavy particles.

Dip-Wash with Jacuzzi-flushing: Dip-Wash 350-11, Dip-Wash 500-11 and Dip-Wash 500-22.

The machine effectively washes the goods with a Jacuzzi-flush beneath the liquid surface. The Jacuzzi-flush creates an effective washing which gives access to cavities and hidden contours. The rinse step in Dip-wash 500-22 is solely dip-wash without Jacuzzi-flush. The machine comes in one-tank or two-tanks versions.

Dip-Wash with Jacuzzi-flush and ultrasonic wash: Dip-wash 500-22U

When higher cleanliness are required, an even more effective ultrasonic-wash is recommended in extension to the Jacuzzi-flush. Depending on how the machine is controlled you can alter between wash systems or have different programs for different types of goods. The Jacuzzi-pump then have the possibility to work as a filtration pump instead of only washing. Machines with ultrasonic function are equipped with both wash and rinse steps (-22U). The rinse step in Dip-wash 500-22U is with solely dip-wash without Jacuzzi-flush and ultrasonic.

Standard equipment:

Stainless steel insulated tank.

Loading cover (1) where goods are lowered by the robot.

Cylinder (2) and valve for loading cover, with position sensors on the cylinder. Heating element (3) with thermal protection and thermostat directly on the cartridge.

Pump (4) and Jacuzzi-flush beneath the liquid surface.

Automatic water filling from water net to rinse tank to wash tank.

Overfill protection. Manual (5) service cover for access to the tank.

Adjustable machine feet.

Stainless coarse filter (6) (swarf collection filter). Do not apply for E-models.

At 2-tanks machines the second tank is indirectly heated by the wash tank.

Options:

Oil separator (7) integrated in the tank for removal of floating oils.

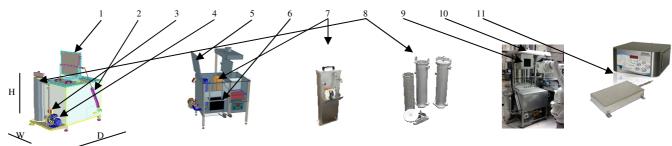
Bag filters in stainless steel (8).

Blowing Cabin (9) for dry-blowing to be connected to external compressed air. Ventilation hood (10) for connection to extraction.

Stainless steel ventilation fan.

Heating element for montage above liquid surface.

(tanks do not need to be emptied for replacing heating elements). Automatic dip-function for loading above the liquid surface. Ultrasonic function -22U(11) with reflector for efficient washing. Partial emptying of liquid to external sewage treatment.



	Dip-tank 350-E (Dip)	Dip-wash 350-11 (Jacuzzi)			
Denomination	Dip-tank 500-E (Dip)	Dip-wash 500-11 (Jacuzzi)	Dip-wash 500-22(Jacuzzi/Dip)Díp-wash 500-22U (ultrasonic/dip)		
External dimensions 350 (WxDxH/H open hatch) 750x1100x875/1475mm	750x1400x875/1475mm	-	-	
External dimensions 500 (WxDxH/H open hatch) 850x1400x950/1700mm	850x1700x950/1700mm	1050x1550x980/1700mm	1200x1250x980/1700	
Height with ventilation hood/ brass cabin	2150mm	2150mm	2150mm	2150mm	
Wash dimensions incl. robotic tool 350 (WxDxH) 410x350x500mm	410x350x500mm	-	-	
Wash dimensions incl. robotic tool 500 (WxDxH) 450x450x500mm	450x450x250mm	280x350x250mm	280x350x150mm	
Liquid volume in liters(350/500)	350 litres / 500 litres	350 litres/ 500 litres	470+150 litres	375x70 litres	
Heater cartridge	9kW (incl. thermostat)	9kW (incl. thermostat)	9kW (incl thermostat)	9kW (incl thermostat)	
Jacuzzi pump/Filtration pump	-	801/min, 2,5bar, 0,75kW	801/min, 2,5bar, 0,75kW	* 801/min, 2,5bar, 0,75kW	
Coarse filter/ basket filter	500µm	500µm	500µm	500µm	
Compression air in bar	4-8 bar	4-8 bar	4-8 bar	4-8 bar	
Ultrasonic effect	-	-	-	Generator 1200W/38kHz. Mounted in	
				control cabinet IP55.	
Consumption of compressed air (litres/min)	Less than 10 litres / min	Less than 10 litres / min	Less than 10 litres / min	Less than 10 litres / min	

* For the ultrasonic model the spray function is used to filtrate the liquid from particles.

	Dip-tank 350-E (Dip)	Dip-Wash 350-11 (Jacuzzi)			
Options	Dip-tank 500-E (Dip)	Dip-Wash 500-11 ((Jacuzzi)	Dip-Wash500-22	2(Jacuzzi/Dip)Dip-Wash 500-22U	(ultrasonic/dip)
Oil separator (7) integrated in the tank.	Option***/ Option	Option***/Option	Option	Option	
Bag filters (8) at the pump flow.	Not available	Option	Option	Option	
Blowing stage(9) with compressed air.	Option	Option	Option	Option	
Ventilation hood (10) for connection to extraction Option		Option	Option	Option	
Stainless steel ventilation fan.	Option	Option	Option	Option	
Cost to exchange 9kW into 12kW above liquid.	Not available / Option	Not available / Option	Option	Option	
Jig for loading above surface.	Not available / Option	Not available / Option	Option	Option	
Partial emptying of liquid via external timer.	Option	Option	Option	Option	
Machine cabinet with plc.	Option	Option	Option	Option	

** The function does not include its own thermostat but has to be added in external control system. Is only suitable for Dip-Wash500 models. The function implies that it is not needed to empty the tank of liquid to replace heating element.

*** External mounted oil separator.



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