

TOWER LINE 1000

Washing of trolleys or ripening grids in the stack

- ▶ Machine provides circulation washing of trolleys or ripening grids in the stack with washing liquid from the tank with the final rinse with clean water.
- ▶ Design of the basic machine – one position with capacity ca 20 cycles / hour according to the degree of pollution and time of rinsing with fresh water.
- ▶ More positions or continuous version of the machine on request according to the capacity requirements
- ▶ Washing is provided thanks to a rotating spraying system.
- ▶ Automatic control of rotor position. Removable washing and rinsing nozzles in stainless steel. Automatic control of door opening.
- ▶ Construction, covering and used aggregates are all in stainless steel DIN 1.4301.
- ▶ Operation of the machine in accordance with the increasing demands for environmental protection.
- ▶ Automatic regeneration of washing solution includes basic double filtration.
- ▶ Easy cleaning and maintenance of the machine thanks to spacious doors.
- ▶ Wide range of the additional equipment according to specific requirements.



The technical parameters of the depicted machine:

	Parameter	Heating of the tank – steam directly	Heating of the tank - electrical
Nominal capacity:	pcs / hour	ca 20 ^{*1)}	ca 20 ^{*1)}
Max. loading dimensions:	L x W x H mm	1000 / 1000 / 2000	1000 / 1000 / 2000
Overall dimensions:	L x W x H mm	2320 / 2300 / 3200	2320 / 2300 / 3200
Number of jets:	washing pcs / rinsing pcs	40 / 15	48 / 6 / 5
Type of jets:	flat jet	flat jet	flat jet
Rotary jet arm:	yes	yes	yes
Rinsing jets on separate rinsing ring:	yes	yes	yes
Volume of washing tank:	l	500	500
Washing pump:	kW / m3 / bar	11 / 60 / 4,5	11 / 60 / 4,5
Conveyor drive:	kW	0,37	0,37
Electrical heating of the tank:	kW	--	46
Installed power:	kW	11,37	57,37
Operating voltage:	V,Hz	3/N/PE 400,50	3/N/PE 400,50
Water consumption:	l / trolley	25 - 40	25 - 40
Steam consumption:	kg / hour	ca 28	--
Connection waste:	DN	50	50
Connection vapour exhaust:	DN	200	200
Connection steam:	coul	3/4	--
Connection water:	coul	3/4	3/4
Weight:	kg	1200	1200

*1) According to the degree of pollution and time of rinsing with fresh water

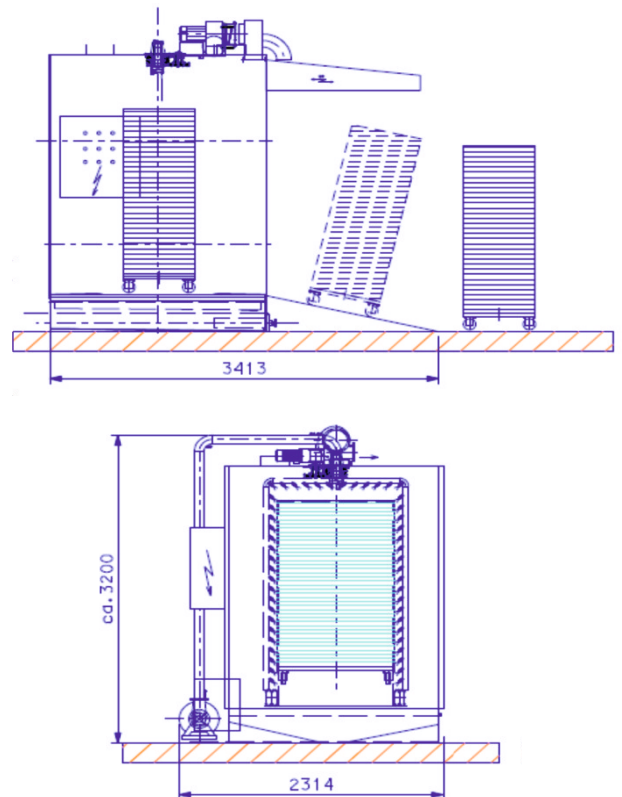
Photos and details of machine:



Technological process of the depicted machine:

- 1 Operator opens the door and takes trolley into the washing position. Then choose required wash program. Closing the door by operator before starting a washing cycle.
- 2 Main circulation wash from the tank is running in closed cycle of washing liquid and it's continuous two stage filtration. Time of main washing and final rinsing is adjustable. Rotor driven by an electric motor with optimally selected jets rotates around the washed trolley. After the set time of the main washing follow rinsing with clean hot water heated to 85 °C with an optimum setting time of rinsing. If there is not heated rinsing water can be used OPTION rinsing boiler or use a larger amount of cold water.
- 3 Filtration of washing liquid is ensured with inserted filtration sieve in the main flow of the washing liquid before to the tank and protective suction sieve of pump. Washing liquid is heated and kept at a required temperature by chosen type heating. Tank level is automatically controlled by level sensors and water is automatically filled from the final rinse with clean water, thanks to this function is ensured automatic regeneration of liquid, or water is filling directly from the infeed pipe.
- 4 After the washing program operator opens the door remove trolley.

Depicted layout of the machine included additional equipment:



Optional additional equipment:

- + Vapors exhaust from the machine.
- + Vapors exhaust from the machine and in front the machine.
- + Oscillating jet frame instead of the rotor.
- + Continuous version of the machine with doors on two sides.
- + Version of the machine under the floor for loading of trolleys from the floor level.
- + Prewash of trolleys and drainage waste water to the waste. Increasing of the washing pressure.
- + Automatical time and conductivity doser of the washing agent.
- + Preparing for doser of the washing agent (Potential-free contacts).
- + Heating of the tank by steam register instead of steam directly.
- + Rinsing boiler with steam register.
- + Rinsing boiler electro in case of connection to the cold water at temperature 15 °C.
- + Rinsing boiler electro in case of connection to the cold water at temperature 50 °C.
- + Thermal isolation of whole module at places technically meaningful.
- + Adapter for washing of EURO crates and other items.
- + Drainage of rinsing water directly to the waste.