

AUTOMATIC RINSER -STERILISER

NEPTUNE



NEPTUNE 2000
NEPTUNE 3000
NEPTUNE 4000



The « NEPTUNE » Rinser is an autonomous machine ensuring the rinsing or sterilization of bottles.

OPERATION

After being synchronized by an Archimedean screw, the bottles are placed (in groups of 3 or 4 depending on the model) on the conveyor via a ramp fitted with grippers, in step with the motion and speed of the conveyor.

Then, they are turned over and loaded into the centering cones of the bottles ramps, which are moved sequentially in a closed circuit.

STEPS

- Treatment cycle starting immediately after positioning in the drawers by a temporised injection of filtered water.
- The bottle ramps are moving in a domino type, first backward and then (after a sideways movement) forwards that insure a very long cycle time: rinsing & draining.
- The bottles are turned over and then placed on the conveyor, in step with its motion and speed.

TECHNICAL CHARACTERISTICS

- Rinsler/Steriliser completely built in **stainless steel**.
- "Multi Formats" Bottle gripping device taking the bottles Diam. 65 to 95mm in their movement on the conveyor (option: for bottles D:55 to 64mm and D:96 to 110mm)
- Bottle height 150 to 380mm (Option: up to H:480mm)
- Adjustable total cycle time
- Bottle presence check during the loading phase: no bottle = no injection.
- Programming of the pick-up parameters for different bottle formats

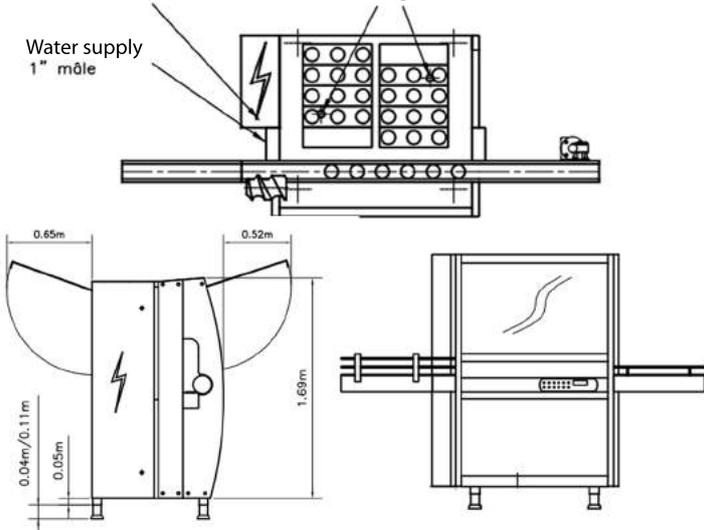
Control board by supple keyboard with digital display indicating :

- the bottle type to be treated
- the rinsing program and its parameters,
- the production incidents.

Power electricity cable
3 x 380 V + N + T - 1,5 kW

Water supply
1" môle

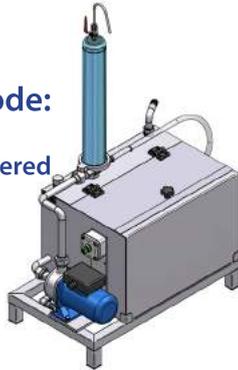
Rinsing water evacuation



TWO OTHER VERSIONS

By wine or alcohol rinsing mode:

- same operation as the standard rinsler, but the injected media is **recycled, filtered and re-injected in a closed circuit through an auxiliary system, a centrifugal pump** : The « KS 6000 ».



By sterilization mode :

- Media Injection : a 0,5 % peracetic solution, which is recirculated and filtered continuously with a long reaction time.
- The collecting trays under the ramps are separate between:
 - "médium" side
 - "clean water" side
- second injection with sterile water evacuates the peracetic residues and then the bottle is drained for about 10 or 15 seconds.

INERT GAZ SPARGING

Installation of an injection ramp (before overturning the bottles) for inert gas sparging (fix injector) or complete inert gas sparging with nozzles introduced in the bottles by 170mm.



Advantages :

- A very high number of stations in a compact space, guaranteeing a useful cycle time: overturned bottle = excellent rinsing & draining.
- Easy, tool-free removal of all the magazines ensures full access to drip pans, for optimised cleaning and inspection of the injectors.
- Modular construction: a second or even third injection function and wine or alcohol rinsing or sterilising systems can be added on later.
- Speed electrovariator : up to 4000 bph
- Standard feature: water filtration with a 10", 1-micron-porosity cartridge in a plastic housing (optional: 3-stage filtration: 1 micron + 0.45 micron + activated carbon for dechlorination)



Modell	NEPTUNE 2000	NEPTUNE 3000	NEPTUNE 4000
Rate (in b/h)	3000	3000	4000
Number of positions	24	36	48
Magazines / Ramps	eight magazines of three bottles	twelve magazines of three bottles	twelve magazines of four bottles
Total useful cycle time	For 2000 F/s = 32 sec. For 3000 F/s = 22 sec.	For 2000 F/s = 54 sec. For 3000 F/s = 36 sec.	For 2000 F/s = 48 sec. For 3000 F/s = 36 sec.
Weight (in kg)	485	500	540
Breadth (in mm) Without conveyor	1315	1315	1595
Depth (in mm)	1005	1230	1230
Height (in mm) Without feet	1850	1850	1850