

COMMODITY DESCRIPTION

H.S.No	DESCRIPTION	UNIT	Q'TY
	AUTOMATIC WASHING & DRYING MACHINE	set	2

A. Features :

1. 40 programmes : 20 pre-set factory programmes according to the selected A0 value and 20 programmes that can be memorized on the basis of the user's needs.
2. Each programme offers the possibility of setting up to 10 and washing /rinsing phases + N.1 drying phase.
3. For each washing and rinsing phase it is possible to set:
 - 2 washing temperatures (water temperature range from 5°C to 95°C)
 - The duration of each phase.
 - type of detergent
 - volume of detergent
 - washing chamber temperature at which to introduce the detergent
 - type of water (cold, hot, demineralised)
 - volume of water required
4. For each drying phase it is possible to set:
 - The duration
 - The drying temperature
5. Control System made up of intercommunicating electronic boards.
6. Automatic storage on compact flash internal memory of each event of the machine (program phases, wash cycles, alarms and warnings, etc.). Automatic storage system operating even in the event of a power failure.
7. Real-time control of all operating parameters of the current program, displayed on the touch screen.
8. User interface on both clean and unclean sides with colour graphic touch screen (4.3" with capacitive sensing).
9. Vertical sliding door.
10. Hydraulic system made entirely of stainless steel AISI 304.
11. Doors made with double tempered glass.
12. Doors activated via the touch screen.
13. Heat and sound insulation of the chamber and doors made with compact material.
14. Duct for the introduction of external probes into the wash chamber (according to EN15883).
15. Tap for sampling water from the wash chamber for validation purposes (optional).
16. Detergent cabinet with removable tray for storing up to 4 cans of 5lt and one of 1lt.
17. Electrical control panel on the unclean side, for easy electrical and mechanical maintenance of the machine.
18. Unclean side panels easily removable for easy access to the main components of the machine (pumps, pipes, valves, etc.)
19. Spray arm at the bottom of the chamber, spray arm on the ceiling of the chamber and

- injection system with rapid direct coupling.
20. Washing circuit with recirculation system equipped with one wash pumps, dedicated to the spray arms in the chamber and to the washing trolley in the wash chamber.
 21. Hydraulic circuit, with automatic draining system at the end of the wash cycle, for the complete elimination of any contaminated residues.
 22. Error messages indicated on the display.
 23. The machine, for each phase, fills up to 40 litres of pre-filtered water which is completely drained before the next phase starts through a suitable floor drain connection (or through a drain pump- optional).
 24. The particular shape of the tank minimizes the consumption of water and ensures constant pressure in the washing circuit.
 25. The "intelligent water filling system", fills the amount of water required by the trolley introduced in the wash chamber and thus limiting waste of water.
 26. Door interlock during the washing phases.
 27. System of interlocking doors to prevent the simultaneous opening of the two doors.
 28. Manual door opening in case of power failure.
 29. Checking the maximum water level in the tank, with emergency outlet to prevent any overflow.
 30. Safety thermostats in case of overheating.
 31. Error messages / warnings indicated on the display.
 32. Control of the malfunctioning of the pump.
 33. Self-draining wash pump with complete elimination of residual water.
 34. Over temperature control in the wash chamber by means of two PT1000 probes.
 35. Over temperature control in each boiler by PT1000 sensor (if provided).
 36. Over temperature control of drying by means of a PT1000probe.
 37. Redundant control of the dosing system through flow meters.
 38. System FDS - foam detection system.
 39. System PRC - rinse quality detection system.
 40. Operator safety system: cooling down of the wash chamber at the end of the cycle.
 41. The drying system is made of one hot filtered air generator connected to the water system through a water/air separation valve.
 42. The hot air is forced into the hydraulic circuits by a ventilation system in order to get to the inside of the wash chamber and through the quick couplings situated on the injection trolleys.
 43. Possibility of reducing the drain water temperature to preserve the drain system on the building side.
 44. Triple wash chamber filter.
 45. N° 3 inlet filters on the cold, hot and demineralised water supply.
 46. Internal tank LED light to check washing process.
 47. RS232 connection for technical actions.
 48. Boiler for mains water pre-heating in order to reduce cycle time – electric heating or electric/steam heating.
 49. Boiler for demineralised water pre-heating in order to reduce cycle time - electric heating or electric/steam heating.
 50. Spray arms rotation detector.
 51. Automatic selection system of the washing programs through the trolley identification system.

52. Download archive on USB key (pen-drive) or through the network cable.
53. Security thermostats (manual reset), easily accessible.
54. Input/output Menu for the diagnostic monitoring of inputs and outputs.
55. Automatic cycle counter incorporated with visualization on the display
56. Dosing control through volumetric flow meters.
57. Level sensor for detergent control (Lack of detergent warning on the display)
58. Electrical heating for washing chamber water.
59. 4 password levels: operator, department head, authorised technician, Smeg; to access the personalization and customization of the machine parameters of the washing cycles
60. The new instruments washers are built with an innovative technology which save about 50% of time and up to 25% of water consumption, depending on the SMART program used and without sacrificing the traditional accurate and perfect washing results.
61. New generation of washers are realized with inner surfaces with rounded corners and smooth panels, the stainless steel parts in contact with water like spray arms and filters can be easily removed, cleaned and inspected. This specific attention to hygienic details allows the user to clean the machines quickly, preventing the risk of contamination and bacterial proliferation.
62. The twin washing system is combined with a couple of high power washing pumps: the main one devoted to the racks and hollow instruments and the auxiliary dedicated to the washing chamber or one washing pump.
63. With this type of multiple purposes rack it is possible to wash different type of objects or combinations of them, without changing the rack. This great flexibility means a clear cost reduction and a concrete space saving, as with a single flexible rack it is possible to cover different needs.

B. Specification :

1. Control
: Control System made up of intercommunicating electronic boards.
2. Programs
: Standrad 20 Programs, Customisable 20 programs
3. Electrical connection : 3/N/PE 380V 60HZ 22kW or 18kW MAX.
4. Material :
 - Inner door made in stainless steel AISI 316L, anti-acid in molybdenum nickel - chrome, with rounded angles.
 - Outer panels in polished stainless steel AISI 304 for easy cleaning.
5. Noise level : 50dB or 58dB.
6. Dispenser systems
 - Peristaltic pump of 200 ml/min. for alkaline liquid detergent measuring out.
 - Peristaltic pump of 200 ml/min. for acid neutraliser measuring out.
 - As an optional : Max. 5 dispenser pumps. or 4 dispenser pumps
7. Drying unit
 - 2 motors variable speed
 - Capacity : 440 m3/h or 250 m3/h
 - Prefilter class C 98%, Filter HEPA class 99.999%
 - Display alert for "filters replacement"
 - Temperature : 50°C - 125°C

- Air heating : 2 x 2.5kW or 4 x 1.5kW
- Turbine dryer engine 2 x 1kW or 2 x 1.1kW
- 8. Tank heating 2 x 9kW
- 9. Circulation pump : 600L/min + 600L/min or 750L/min
- 10. Dimensions, weight
 - : External dimensions - 900 x 1000 x 1945 mm (L x D x H) or W1100xD990xH1870
 - : Internal dimensions - 626 x 812 x 685 mm (L x D x H) or W650xD810xH667mm
 - : Net weight : 380 kg or 400 kg
- 11. Water supply :
 - 1 x cold water, supply pressure 1.5 ~ 5 bar or 2 ~ 6 bar, water hardness max. 8°F
 - 1 x hot water, supply pressure 1.5 ~ 5 bar or 2 ~ 6 bar, water hardness max. 8°F
 - 1 x demineralised water, supply pressure 1.5 ~ 5 bar or 2 ~ 6 bar, water conductivity <30 μ S/cm.
 - water consumption : volume adjustable from 40lt to 45lt for each phase, depending on the program chosen.
- 12. Water consumption per step : approx. 32 L or 37 L
- 13. Floor drain outlet diameter DN 70 or DN 50.
- 14. Washable chamber volume : 348 ℓ or 351 ℓ .
- 15. Machine capacity : standard. max. 18 DIN baskets.
- 16. Max. washing level : 2 - 6 levels or 4 - 6 levels. (removable levels washing trolley with spray arms)
- 17. Speed cycle time : 35 min.

C. Consist of:

1. Basic unit (double door type)	2Unit
2. 4 Levels flexible washing rack	2ea
3. Instrument basket with handles	20ea
4. Release trolley	4ea
5. Operating & service manual	each 2ea
6. deconex PROZYME ALKA(세척제)	2ea
7. deconex 64 NEUTRADRY(린스,윤활제)	2ea
8. 연수장치(국내제작)	2system
9. D-Set baskek	15ea
10. SP-Set baskek	10ea
11. DP-Set baskek	5ea
12. Forcep Jar baskek	6ea
13. Basket Cover(Basic)	20ea
14. Instrument basket with handles(Long)	10ea

D. Remarks:

1. The equipment should be installed by supplier.
2. Three years warranty after the performance test, specified the quotation and catalogue.