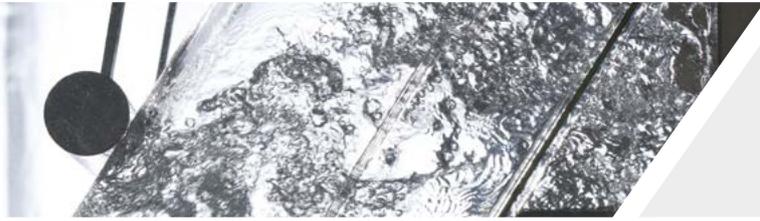




OCEANUS
CABINET WASHER



Heavy duty hydro spray batch-type washer designed for the thorough, efficient cleaning and disinfection of cages, cage components, water bottles and miscellaneous items used in the care of laboratory animals.

STANDARD TECHNICAL FEATURES

► CLEANING EFFICIENCY

Water flow, pressure and coverage are resulting in outstanding cleaning performance, up to 10 cycles and over 300 mice cages per hour. Oceanus is ideal for small to medium scale operation or as complementary unit next to a rack washer. The wash solution and fresh rinse water are pressurized by dedicated pumps and delivered over the load by 3 arms through complete separate circuits. The oscillating movement of the arms, pneumatically driven, is guarantee of perfect load coverage and the rinse water recirculation in the wash tanks allows meaningful savings. Oceanus is fully compliant with AK KAB and AAALAC requirements.

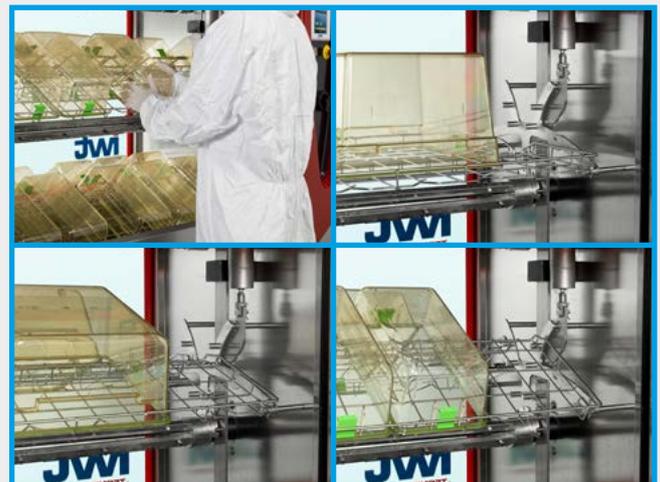


► DOOR DESIGN AND INTERLOCKING SYSTEM

Full length tempered glass (9mm – 0.35" with safety film inside) doors with a sash window design and counterweights for ease of use. Full glass is synonym of complete process visibility, safety and enhanced communicability across barrier. Doors are equipped with locking system to prevent the accidental opening during cycle and to guarantee interlocking to preserve barrier integrity. A static compression gasket is providing water and air-tightness of the chamber.

► EMBEDDED PRESENTATION KIT

Oceanus provides two loading levels engineered for top ergonomics thanks to the reduced overall heights. Easy access to the load is also improved by the door design itself which is avoiding the unpleasant flip over portion and consequent need of pull-out trays. To complete the unique solution, a patent pending presentation kit is directly embedded in the unit and it can quickly adjust to properly position different loads to maximize exposure and dripping.



► QUALITY CONSTRUCTION

Oceanus is entirely made of AISI 304 stainless steel, water manifolds are featuring pharma standard tri-clamp connections and orbital weldings. Non proprietary components are equipped and international brands for local spare parts availability are appointed as partners.



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► **COMPACT TECHNICAL COMPARTMENT**

The technical compartment is located entirely on the front of the unit to allow space savings “wall-to-wall” installations without compromises in term of accessibility for maintenance purposes. Behind the red plastic panel is included a confined space for safe and clean stocking of detergents drums.



► **FILTRATION SYSTEM**

Oceanus is featuring a mesh filter with a flat design removable without the need of any tool and accessible without the need to remove any tray or shelves from the chamber. The mesh size (1mm – 0.04”) is smaller than wash jet-spray nozzles to prevent clogging.

► **POLARIS OPERATOR INTERFACE**

An HMI (Human Machine Interface) where on top of the intuitive graphic and usability is available, as a standard, a comprehensive set of embedded functionalities and features:

- LiteView: smart-phone and tablet app for remote monitoring and setting (cycle parameters and self-start data), inclusive of a “blackboard” to send messages to the screen in the cage wash area;
- TeleService: remote connectivity via internet (on customer’s permission) for troubleshooting and software upgrades directly from the factory without stepping in your facility;
- eMeter: data collection and statistics on the machine consumptions (electricity, water and detergents);
- USB Port: external access port for cycles, alarms and eMeter data download in digital format;
- Self-Start: a weekly programmable functionality to automatically switch on and prepare your unit;
- Self-Clean: a dedicated cycle to rinse chamber, flush lines and tanks when a drain process is requested.



OPTIONS

► **DETERGENT DOSING SYSTEM**

As a standard, the machine is equipped with one detergent pump for the wash tank. As an option, additional dosing pumps can be provided:

- Neutralizer pump: the chemical is injected into the rinse line;
- Rinse aid pump: the chemical is injected in the rinse line;
- Second detergent pump: the chemical is injected in the wash tank and it is used to run alkaline and/or acid cycles;
- Remote chemical management: provide for each of the selected pumps a remote management solution to work with large chemical drums

► **ELECTRICALLY DRIVEN UNIT**

Electrically driven valves and arms movement for installations without the need of compressed air supply.

► **EXHAUST METHOD**

Alternative systems to the building HVAC integration are available:

- EXHAUST FAN - a dedicated fan to extract vapour and condense from chamber during and at the end of cycle;
- EXHAUST CONDITIONING SYSTEM - the system allows to operate the machine without any connection to the building exhaust duct. The heat recovered by vapour condensation is used to pre-warm the incoming water supply.

► **DRAIN MONITORING**

If required by local normative the unit can feature:

- TEMPERATURE WATER TREATMENT - in order to keep the drained water temperature below 60°C – 140°F, the machine can feature an automatic system to mix cold water with process water. Cold water (max 20°C – 68°F) has to be provided separately;
- pH WATER TREATMENT - the pH of the drained water is neutralized by mixing the proper chemical with the process water, as a result, the final pH is between 6 and 9.

► **REALVIEW, REMOTE DATA MANAGEMENT SYSTEM**

A web-based tool, accessible via any browser, for:

- Real time supervision
- Data gathering and exporting
- Statistics about cycles, alarms, productivity and consumptions
- Quick consult of machine documentation
- Alarm notification via email

EQUIPMENT CONFIGURATION

► MACHINE SETUP

- Single door
- Double door

► HEATING METHOD

- Steam
- Electrical

► ACTUATION SYSTEM

- Pneumatic drive
- Electric drive

► POWER REQUIREMENTS

- 400V-50Hz (three-phases + neutral + earth)
- 480V-60Hz (three-phases + earth)
- 380V-60Hz (three-phases + neutral + earth)
- Others

COMPLIANCE TO DIRECTIVE AND STANDARDS

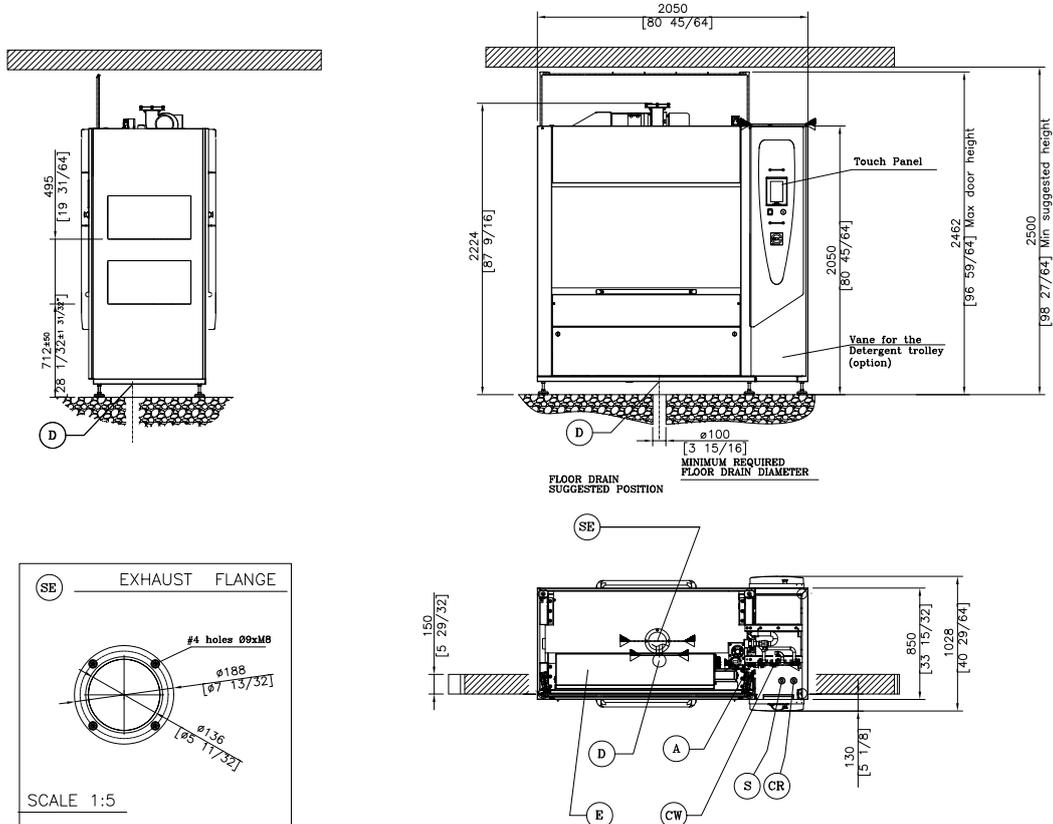
2006/42/EC	Directive 2006/42/EC of the European Parliament and of the Council on machinery.
2004/108/EC	Directive 2004/108/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to electromagnetic compatibility.
2006/95/EC	Directive 2006/95/EC of the European Parliament and of the Council on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.
UNI EN ISO 12100:2010	Safety of machinery General principles for design Risk assessment and risk reduction.
UNI EN ISO 13732-1	Ergonomics of the thermal environment – Methods for the assessment of human responses to contact with surfaces – Part 1: Hot surfaces.
EN 60204-1	Safety of machinery - Electrical equipment of machines - Part 1: General requirements.
EN 13857	Safety of machinery – Safety distances to prevent hazard zones contact with upper and lower limbs.
ISO 11201	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a workstation and at other specified positions - Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995).

DOCUMENTATION

The OCEANUS cabinet washer comes with the following standard documentation:

- User and Maintenance Manual
- P&ID
- Wiring diagram
- Pneumatic diagram
- Spare part list
- EC conformity declaration

TECHNICAL DATA AND SERVICE REQUIREMENTS



	SERVICE	CONNECTION	SERVICE REQUIREMENTS		
				METRIC UNIT	US IMPERIAL UNIT
E	Electrical supply	Electrical cabinet	Voltage and frequency: Type: Power required: Circuit Breaker: Line fuse:	400V 50Hz 3phases+neutral+earth 3.3 kW NA 16 A	480V 60Hz 3phases+earth 3.8 kW 10A 12 A
CW	Cold Softened Water	½" G [½" NPT]	Dynamic pressure: Supply temperature: Supply flow rate: Initial fill:	2-3 bar 15°C<T<60°C 2400 l/h 100 l	29-44 psi 59°F<T<140°F 635 gal/h 26 gal
D	Floor Drain		Max flow rate	4 l/s	1 gal/s
A	Compressed air	½" G [½" NPT]	Dynamic pressure: Quality: Min flow rate:	6 bar filtered, dry and oil free 50 l/min @ 6bar	87 psi filtered, dry and oil free 13 gal/min @ 87 psi
SE	Exhaust	See drawing	Min flow:	300m³/h	177 CFM
S	Steam	½" G [½" NPT]	Dynamic pressure: Quality: Min flow rate:	3-5 bar filtered and dry 72 kg/h	44-72 psi filtered and dry 158 lbs/h
CR	Condense return	½" G [½" NPT]	Same data of S field		
DA	Data management	RJ45 Ethernet socket			
WEIGHT					
Empty			935 kg	2060 lbs	
Operating			1035 kg	2275 lbs	
NOISE LEVEL					
At 1 meter – 3ft			< 70 dbA		
APPROXIMATE HEAT LOSS					
			2.68 kWh – 2300 kcal – 9145 BTU		
PACKAGING					
#1 Crates			2320 x 1140 x 2170 mm	91.3 x 44.9 x 85.4 "	
#1 Pallet			1000 x 3000 x 2250 mm	39.4 x 118.1 x 88.6 "	

* Machine configuration: double door, steam heated, pneumatic drive, exhaust fan option