Rhima DVS-UD underbench dryer Washer disinfector for surgical instruments



Rhima Australia www.rhima.com.au Rhima New Zealand www.rhima.co.nz Rhima Singapore www.rhima.sg



Wash, disinfect and dry instruments in a safe and impeccable way

Up to 4 washing levels for baskets



Machine features



Stainless steel design

The wash chamber is made of stainless steel AISI 316L (EN 1.4404) while the chassis and external panels are made of AISI 304 (EN 1.4301). They are shockproof and long-lasting.



Door locking and security system

These machines are equipped with an automatic door locking system which means that the machine does not allow the door to be opened during a wash cycle for the safety of the operators. There is an extra sensor in the event of a machine malfunction where the water pump will be switched off if the door opens.



Touch-pad keyboard with graphic display

The touch control panel consists of 8 backlit keys and a 3.5" LCD colour display. The display shows all cycle parameters, alarm messages, temperatures of the probes in the wash cycle, drying temperatures and A0 value.



Alarm check system

This system allows the operator to understand why an alarm has occurred.



Customisable programs

These machines are supplied with a set of standard programs and the ability to add customisable programs (max 40 programs).



Microcontroller

The machine is equipped with a microcontroller that constantly monitors operation. The machine can store all information regarding cycle parameters, alarms and log history.



Chemical dosing and sensor

The dosing system of detergent passes through a flowmeter to ensure that detergent is used with every cycle required. The detergent sensor will advise the operator via the LCD display if the detergent bottle is empty.



USB port, software and user pin management

The machine is equipped with 2 USB ports:

- PC for programming
- Flash drive to download history, alarms or to update firmware Software is available to connect to the machine and manage the user PIN and downloads. Reports are able to be generated in PDF and CSV format.

The user pin function limits the access of certain functions to authorised personnel only.



Drying with HEPA H14 filter (Optional)

During the drying phase, air is pushed into the wash chamber after passing through an electric heater. The air then comes out of the jets of the impellers to ensure distribution. The HEPA H14 filter blocks fine dust particles with an efficiency of 99.995%. There is a prefilter to block larger particles. The filter cleaning sensor will activate as an alarm message on display.



Steam condensor system (Optional)

These machines are equipped with an effective steam condensor system that acts to reduce the steam during the disinfection and drying phases.



Ergonomic support (Optional)

On request, a stainless steel support can be purchased for the machine to sit on. This provides ergonomic height when the machine is not installed under the counter. The support is useful for storing chemicals.



Printer (Optional)

On request, the machine is equipped with a printer that prints the receipt log of the running program.



Spray arm monitor (Optional)

On request, the machine is equipped with this feature which checks the correct rotation of the spray arm. An alarm message on the display will indicate a problem during the cycle.



Conductivity probe (Optional)

On request, the machine is equipped with a conductivity probe that checks the water purity level at the end of rinsing, before disinfection. The machine repeats the rinse cycle again to remove any residue if the conductivity probe detects a water purity level, expressed in uS/cm, higher than the preset one.



Wash chamber with spray arms



Stainless steel support for chemical tanks



External printer connected by cable



HEPA H14 filter and prefilter



Multi filters in the wash chamber

The main goals that we put first every day are

- 1. the elimination of risks of infection transmission
- 2. the safety for the operators involved in the cleaning and treatment of medical equipment
- 3. user-friendly machines with a disinfection at the highest level



These washers all come with a lower wash rack and an upper wash rack - pictured below.





TECHNICAL FEATURES

| Product code | DVS-UD with dryer | DVS-UD without dryer | |
|--|-------------------------------------|-------------------------------------|--|
| Chamber dimension (WxDxH) | 550x500x600 mm 21.7"x19.7"x23.6" | 550x500x600 mm 21.7"x19.7"x23.6" | |
| Max pump flow rate | 370 l/min 97.8 GPM | 370 l/min 97.8 GPM | |
| Max drying fan flow rate | 150 m³∕h | - | |
| Max absorbed power | 6.2 kW | 6.2 kW | |
| Max number of dosing pumps for chemicals with flowmeters | 4 | 4 | |
| Chemical tank capacity | 5 1 US gal | 5 1 US gal | |

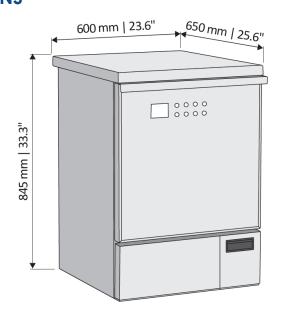
Device configuration options

| USB SLAVE interface for PC | ✓ | ✓ |
|--|----------|----------|
| USB HOST interface for FLASH DRIVE | ✓ | ✓ |
| RS232 Interface for external printer or data connection exchange | ✓ | √ |
| Touch panel with color graphic display | ✓ | ✓ |
| Manual door with interlock | ✓ | ✓ |
| Forced air drying | ✓ | - |
| HEPA H14 filter | ✓ | - |
| Stainless steel wash chamber AISI 316L (EN 1.4404) | ✓ | ✓ |
| Cold and hot water connection | ✓ | √ |
| Deionized water connection | Optional | Optional |
| Conductivity probe | Optional | Optional |
| Water softener system | Optional | Optional |
| Wash chamber LED light | Optional | Optional |
| Spray arm monitor | Optional | Optional |
| External printer | Optional | Optional |

POWER REQUIREMENTS

| Voltage | Frequency | Installed Power | Max absorbed power | Absorbed current (by phase) |
|--------------|-----------|-----------------|--------------------|-----------------------------|
| 380-415V 3N~ | 50 Hz | 10.7kW | 7.9kW | 15.5 A |
| 200-240V 1N~ | 50 Hz | 6.7kW | 3.9kW | 15.5 A |

MACHINE DIMENSIONS



OPTIONAL RACKS AND ACCESSORIES

A large variety of racks and accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.



Standard basket

Washing basket with tub cap, basic version. Designed for various inserts and accessories.



4-level trolley

Washing trolley with spray arms and 4 levels. Suitable for washing large quantities of standard surgical instruments.



Shoes trolley

Washing trolley with support for shoes. Suitable for washing rubber shoes. Capacity: n°32 rubber shoes (16 pairs).



Anesthesia trolley

Washing trolley for washing anesthesia instruments.



Mini invasive trolley

Universal mini invasive surgery washing trolley with spray arm, 3 levels and n° 36 position (n° 9 luer locks + n° 9 silicon pipes + n° 18 guard connections for tubular hollow instruments Ø 3-7 mm).



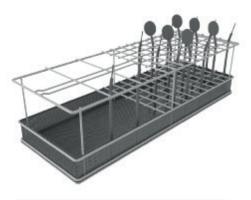
Containers trolley

Washing trolley for containers and trays.



Transfering trolley

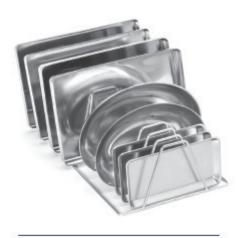
Loading trolley with block system to load washing trolley into the machines.



Insert for vertical instruments



Stainless steel basket with two silicone supports



Insert for 9 trays



Basket for washing teats and rings for biberon



Basket for washing biberon



Ophtalmic basket with lid



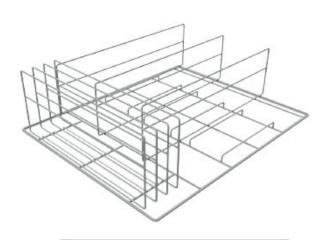
Basket for washing speculus



Standard basket with handle for washing medium-sized instruments



Insert for washing flexible pipe and anaesthetic baloons



Insert for washing containers



OTHER ACCESSORIES

A large variety of other accessories completes the setup room where these machines are installed.

- Stand alone cabinetry and cupboards
- Stainless steel or customised work tops
- Stainless steel covering and panelling
- Micro-controlled soap dispenser/mixer
- Manual or automatic photocell water taps

Rhima can also provide water softener and detergent liquids in 5 litre bottles, tested and approved in compliance with EN ISO 15883-1/3 to ensure better cleaning and longer equipment life.



Australia: MEDIWASH 5 Litre

A non caustic, non chlorine washing liquid that gives superior results in our range of glasswashers. Only to be used in combination with automatic dispensers.

This detergent is TGA approved. Available in 2 x 5L carton.

New Zealand: MEDIWASH 2.0 - 5 Litre

Singapore: RHIMAWASH - 5 Litre



RHIMA CARE

SERVICE AND MAINTENANCE FOR YOUR WASHER

Does my washer/disinfector need regular service and maintenance?

Whether your Rhima washer/disinfector is in or out of warranty, it needs regular professional maintenance to ensure it is operating at optimum performance. Regular maintenance can also reduce running costs and greatly extend your washer's useful life. As importantly, a well serviced machine helps to safeguard against unexpected, inconvenient, expensive breakdowns.

Does my washer/disinfector comply with ISO 15883 and AS1487 standards?

Rhima provides thermal validation services that comply with Australasian and international standards. Our specialist validation technicians are trained in the use of highly sophisticated, calibrated test equipment and will ensure that your washer/disinfectors meet these strict standards for disinfection. The validation services that Rhima provide should not be confused with a simple 'temperature check' offered by other providers which do not comply to either standard. While performing the validation service on each machine, Rhima technicians also perform a full preventative maintenance on the machine, ensuring that your washer/disinfectors are performing to manufacturer's specifications.



My washer needs to be fixed and it's 11AM on a Sunday morning. Who do I call?

Rhima provides professional washing equipment to professionals just like you. We understand that businesses do not all operate 9 to 5 and neither do we. Call us at any time and a service representative will respond to your call. Our first priority is to try to get you operational over the phone, however if this is not possible, you will be given the option of waiting until the next business day to log a service call or if you can't wait, then in most cases a service technician will be arranged to attend your premises as soon as possible, usually same day.

BENEFITS OF RHIMA PREVENTATIVE MAINTENANCE

- Confidence that your washer/ disinfectors meet international and Australasian standards
- Improved washer efficiency and reliability
- Priority service in the event of repairs being required
- Reduction in unexpected breakdowns and costly stoppages
- Savings on total maintenance costs
- Optimisation of detergent and rinse additive usage
- Prolonged service life
- 24/7 service response
- First 2 hours of labour on breakdowns*

*Callout fee applies. Not valid for faults not directly related to washer i.e., interruption to services (power, water & drainage) or operator

We can tailor a Rhima Care Validation and Preventative Maintenance Agreement to suit your needs.

