

MecWash



HIGH PERFORMANCE AQUEOUS **COMPONENT CLEANING** MWX300 – MWX400 – MWX600

EXPERTS IN COMPONENT CLEANING PROCESS, CHEMISTRY & TECHNOLOGY

PRECISION CLEANING

OF ENGINEERING COMPONENTS

The **MWX** range provides the ultimate aqueous component cleaning and degreasing systems. Ultrasonics can be combined with high flow washing, rinsing, dedicated jetting and vacuum drying to provide the highest quality of component cleaning and drying available.

The MWX systems are designed to process complex and intricate components that require very high standards of cleanliness, surface finish and dryness. This includes the removal of all types of contamination, from soluble and mineral oils to greases, polishing compounds, lapping pastes and dye penetrants.

The MWX range's industry leading functionality includes:

- Wash and rinse – flood and spray
- Six face spray capability, traditional top manifold supplemented by manifolds at the front and rear of the chamber
- High and low pressure flood/spray manifolds allowing flexible wash strategies
- Direct jetting system – jets rotating with the component, flushing key apertures (**MWX400** and **MWX600** only)
- Doubled ultrasonic power providing 20 watts/litre in the **MWX400/MWX600** and 30 watts/litre in the **MWX300** gross power at 25kHz
- High volume wash and rinse tanks enabling full chamber wash and rinse ultrasonics
- Encoder controlled rotation enables wash to be focussed on critical features
- Hot air and vacuum drying
- Aqua-Save evaporator to optimise solution quality and minimise maintenance.



The **MWX600** is the latest addition to the MWX series. Building on the successes of its predecessors, the **MWX600** is designed to accommodate larger components such as gearbox housings, engine blocks and large additive components. The system incorporates enhanced wash functionality and maintenance with remote monitoring. The **MWX600** offers unmatched capacity for heavy-duty cleaning, ensuring maximum uptime and efficiency.

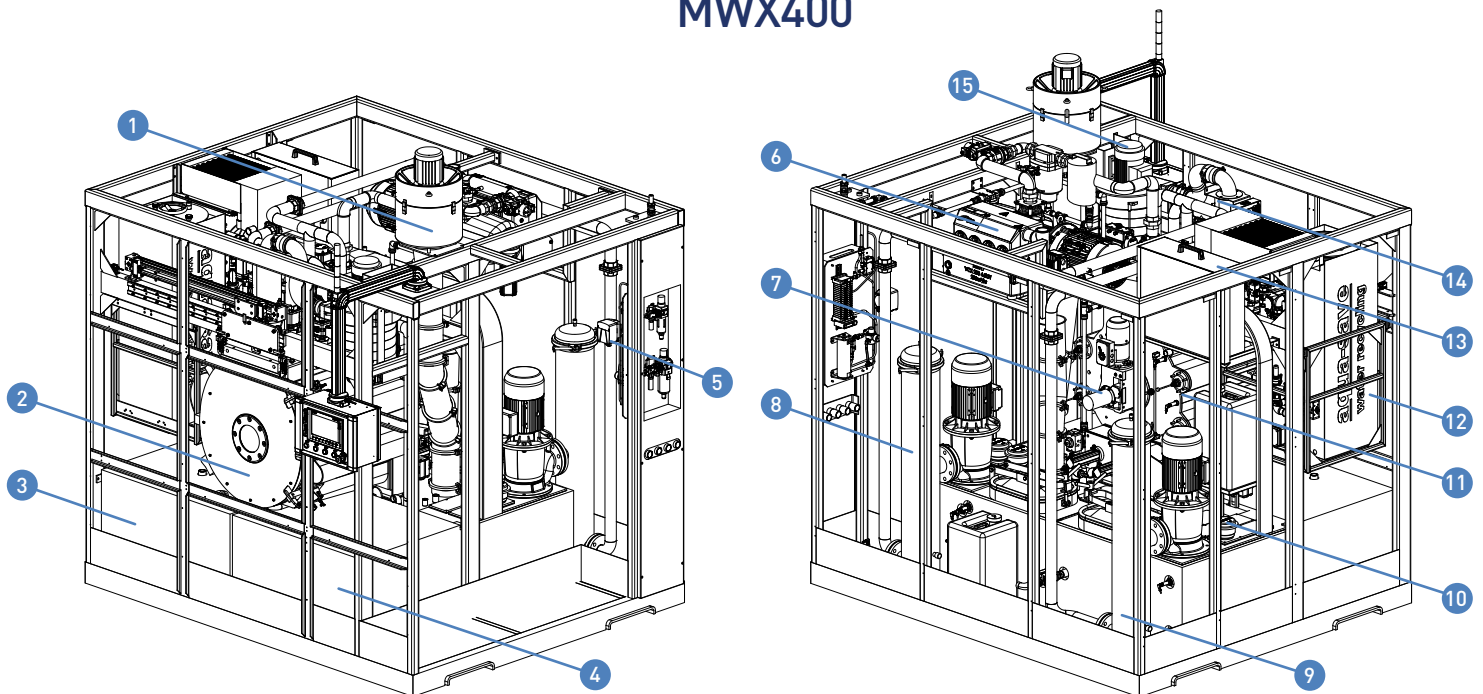
The **MWX400** is a versatile workhorse for precision engineering cleaning challenges – the system's direct jetting is ideal for automotive, fluid power and aerospace components. The robust design makes the **MWX400** equally able to cope with heavy machined castings and intricate machined/additive parts, delivering consistently high cleanliness standards.

The **MWX300** has been developed with higher power ultrasonics (up to 30 watts/litre), perfect for small, intricate precision components. This, added to its smaller footprint, makes the **MWX300** the perfect aqueous cleaning system for the medical and high-precision sectors where very stringent standards are required for cleaning, surface finish and drying.

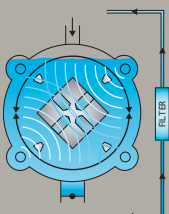




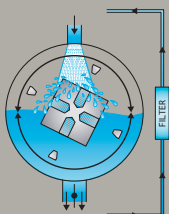
MWX400



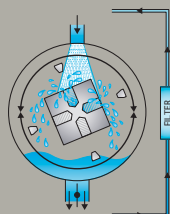
1. Vapour Condensor	6. Vacuum Pump	11. Ultrasonic Pods
2. Process Chamber	7. Drive Motor	12. Aqua-Save
3. Rinse Tank	8. Wash Filter	13. Oil Separator
4. Wash Tank	9. Rinse Filter	14. Air Heater
5. Detergent Dosing Pump	10. Immersion Heater	15. Air Blower



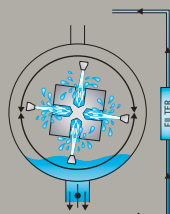
Ultrasonics



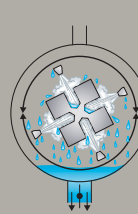
Flood



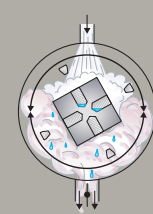
Spray



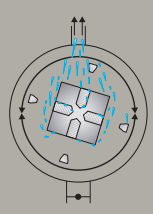
Dedicated Jetting



Purging



Hot Air Dry



Vacuum Drying

MECWASH MWX RANGE – TECHNICAL DETAILS

General specification	MWX300	MWX400	MWX600
Overall Machine Size (w x d x h)	1400 x 1750 x 2470mm	2500 x 2100 x 2230mm	4254 x 2780 x 2500mm
Machine Unladen Weight	1800kg	3500kg	6000kg
Wash Chamber Size (w x h x l)	300 x 300 x 400mm	400 x 450 x 600mm - 2000	600 x 600 x 800mm - 2000
Maximum Load Weight	50kg	150kg	200kg
Load Height	900mm	900mm	900mm
Basket Rotation/Oscillation Speed	3 – 10 rpm	3 – 10 rpm	3 – 10 rpm
Noise Level	75 dBA	75 dBA	75 dBA
Wash			
Wash Tank Volume	280 litres	650 litres	1480 litres
Wash Pump Rating	1.1kW	3 - 7.5kW	5.5 - 11kW
Wash Flow Rate	200 – 250 litres/minute	500 - 600 litres/minute	600 - 800 litres/minute
Wash Pressure	1.5 bar	1 - 5 bar	1 - 5 bar
Wash Tank Heater	12kW	24kW	36kW
Maximum Wash Temperature	90°C	90°C	90°C
Rinse			
Rinse Tank Volume	280 litres	650 litres	1480 litres
Rinse Pump Rating	1.1kW	3 - 7.5kW	5.5 - 11kW
Rinse Flow Rate	200 – 250 litres/minute	500 - 600 litres/minute	600 - 800 litres/minute
Rinse Pressure	1.5 bar	1 - 5 bar	1 - 5 bar
Rinse Tank Heater	12kW	18kW	36kW
Maximum Rinse Temperature	90°C	90°C	90°C
Drying			
Drying Blower	1.1kW	1.1kW	2.2kW
Blower Flow Rate	200m³/hour	360m³/hour	500m³/hour
Drying Heater	9kW	12kW	24kW
Maximum Drying Temperature	120°C	120°C	120°C
Vacuum Drying			
Flow	40m³/hour	200m³/hour	300m³/hour
Ultimate Vacuum	c10 mbar	c10 mbar	c10 mbar
Motor Size	1.3kW	4kW	7.5kW
Ultrasonic			
25 or 40 kHz	Up to 30W / litre	up to 20W/litre	up to 20W/litre

Standard Equipment

- Stainless steel process chamber, solution tanks, solution pipework
- High volume heated re-circulating spray/flood wash
- High volume heated re-circulating spray/flood rinse
- Insulated solution tanks
- Incalloy water heating elements
- Automatic water level control with inlet filter
- Stainless steel wash and rinse strainer baskets (500µm)
- Polypropylene wash and rinse in-line cartridge filters (5 - 100µm)
- Integral wash oil separator
- High velocity hot air dry
- Rotation, oscillation and stationary wash options
- PLC controlled with operator HMI display
- Ethernet and I/O link compatible
- Automatic process door with viewing window

Optional Equipment

- Ultrasonics - 25 or 40 kHz, up to 30 W/litre
- Vacuum drying
- Rotational direct jetting system (MWX400 & MWX600)
- Automatic wash and rinse chemical dosing units
- Demineralised rinse water polishing cylinders, meter and alarm
- Aqua-Save wash and rinse water recycling system
- Wash baskets, containers and fixtures
- Roller conveyors, powered conveyors, manual or automated load tables, integration to customer automation.
- Process monitoring

THE CHOICE OF THE WORLD'S LEADING ENGINEERS...

MecWash systems are supplied and supported around the world, either direct from the UK, or through a network of agents and distributors, with installations in the USA, Canada, Mexico, China, India, Singapore, Thailand, Indonesia, Australia and throughout Europe.

Customers include Rolls-Royce, ZF TRW, BorgWarner, JCB, Parker Hannifin, Perkins, Collins, Pall, Eaton, Renishaw, Jaguar Land Rover, Pratt & Whitney, Cummins and Triumph Motorcycles. These blue chip companies are not only leading organisations within their fields, they are also part of a track record of which we are proud. It is our deep knowledge of the process, chemistry and technology of aqueous component cleaning which provides valued, tangible benefits that our customers worldwide readily acknowledge.

MecWash



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