# HIGH PERFORMANCE AQUEOUS COMPONENT CLEANING MWX300 – MWX400



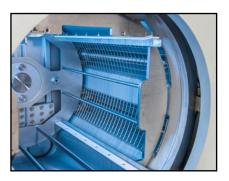


## **PRECISION CLEANING** OF ENGINEERING COMPONENTS

### SOLVENT FREE • SMALL FOOTPRINT • HIGHLY VERSATILE ENVIRONMENT FRIENDLY • COMPETITIVE PRICE • ENGINEERED TO LAST

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

The MWX300 and MWX400 are designed to process complex and intricate machined or pressed parts 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.

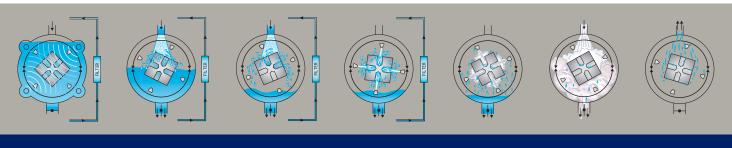


The MWX range's industry leading functionality includes:

- 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 only)
- doubled ultrasonic power providing 20 watts/litre in the MWX400 and 30 watts/litre in the MWX300 gross power at 25kHz
- high volume rinse tank enabling full chamber 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 MWX400 is designed to be a versatile workhorse for precision engineering cleaning challenges – the system's direct jetting is ideal for larger automotive, fluid power and other complex components. The robust design makes the MWX400 equally able to cope with heavy machined castings / engine blocks and large hydraulic manifolds, delivering consistently high cleanliness standards.

The MWX300 is the latest compact system and 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 electronics sectors where highly stringent standard are required for cleaning, surface finish and drying.



Ultrasonics

Flood

Spray

**Dedicated Jetting** 

Purging

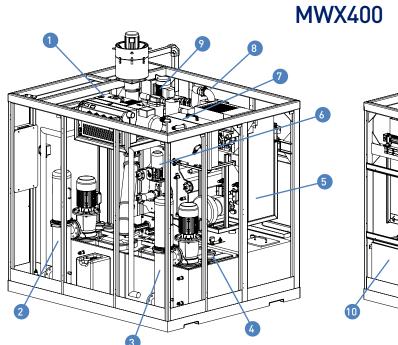
Hot Air Drv

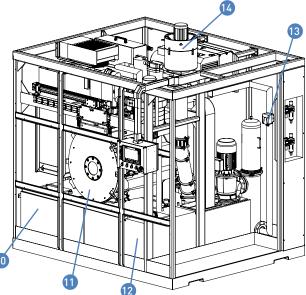


The dedicated jetting option flushes the most complex shapes, targeting blind holes, oilways and galleries.



From basic baskets and manual loading through sliding load pallets and automated conveyors to robotics, the MWX400 integrates easily with any other production layout.





1.	Vacuum Pump	6.	Drive motor	11.	Process Chamber
2.	Wash filter	7.	Oil separator	12.	Wash Tank
3.	Rinse filter	8.	Air heater	13.	Detergent dosing pump
4.	Immersion heater	9.	Air blower	14.	Vapour condensor
5.	Aqua-Save	10.	Rinse Tank		



### MECWASH MWX RANGE - TECHNICAL DETAILS

General specification	MWX300	MWX400				
Overall Machine Size (w x d x h)	1400 x 1750 x 2470mm	2500 x 2100 x 2230mm				
Machine Unladen Weight	1800kg	2500kg				
Wash Chamber Size (w x h x l)	300 x 300 x 400mm	400 x 470 x 650mm - 2000				
Maximum Load Weight	50kg	150kg				
Load Height	900mm	900mm				
Basket Rotation/Oscillation Speed	3 – 10 rpm	3 – 10 rpm				
Noise Level	75 dBA	75 dBA				
Wash						
Wash Tank Volume	280 litres	650 litres				
Wash Pump Rating	1.1kW	3 - 7.5kW				
Wash Flow Rate	200 – 250 litres/minute	500 - 600 litres/minute				
Wash Pressure	1.5 bar	1 - 5 bar				
Wash Tank Heater	12kW	24kW				
Maximum Wash Temperature	90°C	90°C				
Rinse						
Rinse Tank Volume	280 litres	650 litres				
Rinse Pump Rating	1.1kW	3 - 7.5kW				
Rinse Flow Rate	200 – 250 litres/minute	500 - 600 litres/minute				
Rinse Pressure	1.5 bar	1 - 5 bar				
Rinse Tank Heater	12kW	18kW				
Maximum Rinse Temperature	90°C	90°C				
Drying						
Drying Blower	1.1kW	1.1.kW				
Blower Flow Rate	200m3 / hour	360m3/hour				
Drying Heater	9kW	12kW				
Maximum Drying Temperature	120°C	120°C				
Vacuum Drying						
Flow	40m3 / hour	200m3/hour				
Flow Ultimate Vacuum	40m3 / hour c10 mbar	200m3/hour c10 mbar				
Ultimate Vacuum	c10 mbar	c10 mbar				

#### 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)
- Stainless steel wash and rinse in-line cartridge filters (10 -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 only)
- Automatic wash and rinse chemical dosing units
- Demineralised water 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.

#### 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 SYSTEMS LIMITED

64 Hundred, Severn Drive Tewkesbury Business Park Tewkesbury, Gloucestershire GL20 8SF, UK

**Tel** +44 (0)1684 271600 **Fax** +44 (0)1684 271601 Email enquire@mecwash.co.uk Web site www.mecwash.com