## HIGH PERFORMANCE AQUEOUS COMPONENT CLEANING







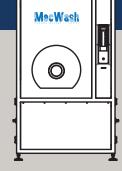


## SOL0

#### INTER-STAGE WASHING & DRYING SYSTEMS

Developed to satisfy the needs of inter-stage, in-cell and in some cases final cleaning of machined components. The Solo system is supplied in three sizes, all of which provide rotational washing, mist rinsing and hot air drying in a very compact footprint, saving on valuable floor space. The Solo far outperforms traditional dunk washers, rotary basket and tunnel washers for cleanliness and effective drying.

- Effective removal of preservative oils, machining lubricants, metal swarf and chips from machined components
- Fully enclosed no steam and unpleasant odours
- Rotational high volume spray washing, mist rinsing and hot air drying
- Very compact footprint, saving valuable floor space
- Over 200 Solo systems have been supplied to customers around the world



Solo 400 Spray Wash; Mist Rinse; Hot Air Dry. Wash Chamber 400 x 450 x 600 – 1000mm Machine Dimensions 1275 (W) x 1445 (D) x 2100mm (H)

#### Solo 300

Spray Wash; Mist Rinse; Hot Air Dry. Wash Chamber

- 300 x 300 x 400mm Machine Dimensions
- 1125 (W) x 1230 (D) x 1900mm (H)

#### Solo 600

Spray Wash; Mist Rinse; Hot Air Dry. Wash Chamber

600 x 600 x 800mm Machine Dimensions 1575 (W) x 1845 (D) x 2700mm (H)



### DUO

#### GENERAL PURPOSE WASHING, RINSING & DRYING

The Duo system is a natural progression of the established Solo system. The Duo has the added benefits of flood/immersion washing, which provides higher standards of cleaning by full solution contact with all component surfaces, and a re-circulating heated spray rinse, which provides higher standards of surface finish by removing detergent residues left by the wash solution. The rinse stage can also be used to apply a longer term corrosion inhibitor for ferrous components. All finished off with a hot air dry.

- Highly versatile aqueous cleaning system, suits both large components and dense baskets of small parts
- Final wash quality with intermediate wash cost
- Precision cleaning, but footprint small enough for a cell
- Optional integrated oil separator and steam condenser

# MecWash

 
 Duo 400

 Flood/Spray Wash;

 Spray Rinse; Hot Air Dry.

 Wash Chamber

 400 x 450 x 600 - 1000mm

 Machine Dimensions

 1530 (W) x 1635 (D) x 2235mm (H)

#### Duo 600

Flood/Spray Wash; Spray Rinse; Hot Air Dry. Wash Chamber 600 x 650 x 800 – 1000mm Machine Dimensions 2063 (W) x 2295 (D) x 2985mm (H)



### MWX

#### PRECISION CLEANING TO THE HIGHEST STANDARDS

The MWX range provides the ultimate flexible aqueous component cleaning and degreasing systems. They can combine ultrasonics with high flow washing, rinsing, dedicated jetting (MWX400) and vacuum drying.

The MWX range is designed to process complex and intricate machined or pressed parts that require very high standards of cleanliness, surface finish and drying. This includes the removal of all types of contamination, from soluble and mineral oils to greases, polishing compounds, lapping pastes and dye penetrants.

- Satisfies the high demands of the aerospace, defence, nuclear, medical and other precision industries
- The MWX300 is a compact version of the MWX400, for location in small volume high precision machining cells
- Very high quality cleaning and drying of precision engineering components



#### MWX300

Flood/Spray Wash; Flood/ Spray Rinse; Ultrasonics; Hot Air & Vacuum Dry. **Wash Chamber** 300 x 300 x 400mm **Machine Dimensions** 1400 (W) x 1750 (D) x 2470mm (H)

#### MAXI 600

Flood/Spray Wash; Flood/ Spray Rinse; Ultrasonics; Hot Air & Vacuum Dry. **Wash Chamber** 600 x 600 x800 - 1000mm **Machine Dimensions** 3830 (W) X 2015 (D) x 2400mm (H) MWX400

Flood/Spray Wash; Flood/ Spray Rinse; Ultrasonics; Hot Air & Vacuum Dry. **Wash Chamber** 400 x 470 x 600 - 2000mm Machine Dimensions

2500 (W) x 2100 (D) x 2470mm (H)









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



## **BESPOKE BUILDS**

Sometimes a new product or a unique cleaning requirement demands a truly bespoke process or system and we are always delighted to work with our customers to overcome these engineering challenges.

Working closely with our customers enables MecWash to build machines that are uniquely suited to particular cleaning challenges and give excellent results.





#### HIGH PERFORMANCE WASH WATER RECYCLING & WASTE WATER TREATMENT

The Aqua-Save range is designed to recover and re-use industrial waste water such as wash and rinse solutions, waste coolant and dye penetrants. This reduces the potentially high cost and inconvenience of off-site disposal with an environmentally sustainable approach. The Aqua-Save maintains optimum process performance, reduces downtime and satisfies environmental demands for recycling and waste reduction.

- Up to 95% reduction in disposal costs
- Range recycles 10 30 litres per hour
- Wash water, waste coolants and general waste water all treated
- Can be added to an aqueous wash system to maintain solution cleanliness and washing performance, whilst reducing machine downtime and minimizing effluent disposal

Aqua-Save Ultra Machine Dimensions 650 (D) x 1600 (W) x 1500mm (H) Solution processed/hour 20-30 litres/hour

MecWast

MecWash



Aqua-Save Junior Machine Dimensions 415 (D) x 1100 (W) x 1500mm (H) Solution processed/hour 10-15 litres/hour



## **PRECISION CLEANING** OF ENGINEERING COMPONENTS

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

MECWASH SERVES MANY OF THE LEADING NAMES IN ENGINEERING, IN SECTORS SUCH AS AEROSPACE, AUTOMOTIVE, FLUID POWER, DEFENCE, MEDICAL, MOTORSPORT AND GENERAL ENGINEERING. OUR RANGE OF SYSTEMS INCLUDES INTERMEDIATE WASH MACHINES AND HIGH PRECISION FINAL WASH MACHINES.

MecWash are true experts in the process of washing, supported by our laboratory for wash trials and developing our own detergents to ensure the perfect finish in challenging applications. Our machines are both highly efficient and robust, thriving in tough industrial environment. MecWash systems are used to clean turned parts, machined castings, pressings and extrusions and many other engineering components.

MecWash apply very high volumes of water to produce heavy spray and flood washing processes that penetrate and clean masses of small parts in baskets or complex parts in specialised fixtures.

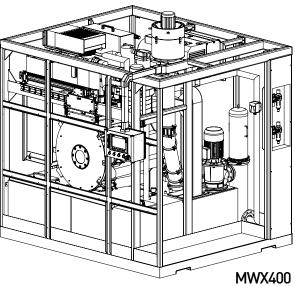
Full rotation of the workload exposes all the component surfaces, machined holes, recesses and galleries to the process solutions and provides effective draining and drying. Parts with simple geometries can also be gently oscillated from side to side.

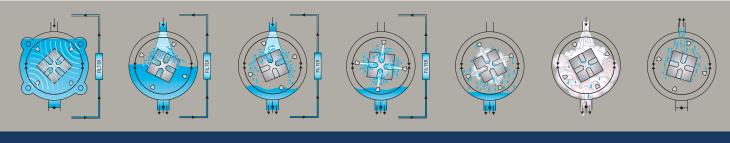
Ultrasonics can be specified to help clean small holes and to remove fine particles and tenacious contaminants such as heavy oils, polishing compounds and lapping paste from the component surfaces.

For components with complex geometries, internal galleries, oil ways or blind holes we have developed a dedicated jetting system. This comprises nozzles that rotate with the moving part, continuously blasting solution into the critical features using tailored fixtures.



This ensures fast, effective and consistent cleaning. The process concludes with high velocity hot air and vacuum drying to ensure rapid removal of water from the cleaned components.





Ultrasonics

Flood

Spray

**Dedicated Jetting** 

Purging

Vacuum Drying

Hot Air Drv

SYSTEM SELECTION CHART	SOLO	DUO	MWX300	MWX400	MAXI 600
Ultrasonic wash			•	•	•
Flood Wash		•	•	•	•
Spray Wash	•	•	•	•	•
Ultrasonic Rinse			•	•	•
Flood Rinse			•	•	•
Spray Rinse		•	•	•	•
Mist Spray Rinse	•	•	•	•	•
Dedicated Jetting				•	•
Hot Air Dry	•	•	•	•	•
Vacuum Dry			•	•	•
Single Direction Fixed Speed Rotation	•	•			
Both Direction Variable Speed Rotation		•	•	•	•
Wash Bag / Cartridge Filter	•	•	•	•	•
Rinse Bag / Cartridge Filter		•	•	•	•
Oil Separator / Skimmer	•	•	•	•	•
Vapour Condenser	•	•	•	•	•
Manual / Automatic Load Tables or Roller Conveyors	•	•	•	•	•
Siemens PLC / HMI Display	•	•	•	•	•

## 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

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