



INDUSTRIAL WASHING MACHINES

crusader

ISSUE 3

...taking hygiene to the 21st Century

Contents: P2 Out with the old, in with the new for IWM at Cavaghan & Gray. IWM washes the whole bin! P3 IWM helps Papa Johns to ditch the freeze! P4 IWM up the ante in pallet washing, IWM offers sanitising on a budget.

IWM Cleans Up For Borg Warner

A customised cabinet washer, developed and supplied by Industrial Washing Machines (IWM), is helping Borg Warner, a recognised leader in solutions for the vehicle manufacturing industry, to achieve and maintain the highest standards of cleanliness in its production operations.

The new washer is used to clean the plastic tubs that transport small components for commercial vehicle turbochargers between the various processes involved in their manufacture. Keeping these tubs scrupulously clean ensures that there is no risk of these critical precision-engineered components becoming contaminated or soiled.

Approached by Borg Warner to develop a machine for this application, engineers at IWM faced the special challenge of having to deal with soiling on the tubs that could include oils of various types and, in some cases, heavy grease. They determined that the best and most economical solution would be provided by a highly customised version of the company's popular EDi 13 cabinet washer.

This is a well-proven machine designed for manual batch loading. All major components, including the body of the machine, are manufactured from stainless steel to ensure durability. Revolving wash and rinse arms are provided to ensure optimum cleaning efficiency, and the machine features easy extraction wash racks for fast convenient loading and unloading. An intuitive operator interface panel is provided that uses a membrane keyboard to ensure IP67 protection against the ingress of water and dust.

After carefully analysing Borg Warner's requirements and examining samples of the tubs to be cleaned, IWM modified its standard design to include a fine particulate filter system, and a skimmer to remove oil residues from the wash water. The control system was also customised to meet the user's requirements, including provision for the wash water to be preheated automatically prior to the start of a shift so that the machine would be ready for immediate use.

To meet Borg Warner's exacting safety standards, IWM additionally provided an automatic locking mechanism for the washer door, which ensures the door cannot be opened accidentally while the washer is in operation. To minimise maintenance requirements and to ensure a long reliable service life, the machine also features an integral water conditioner that guards against the build up of scale.

The customised EDi 13 cabinet washed supplied by IWM to Borg Warner employs a hot wash cycle using a low-foam detergent specifically formulated for use in the automotive industry, followed by a hot rinse. After the tubs have been rinsed, they are retained in the machine for an adjustable dwell period to allow them to dry naturally before being returned to use.

"Although the machine is still undergoing trials, we're already finding that, used in conjunction with the low-foam detergent, it cleans the tubs really well," said Gavin Atherton, Senior Shift Leader at Borg Warner. "The machine is ideal for our environment as it's compact, easy to set up and easy to use. We're confident that it will be a big asset in our constant quest to ensure that our products always offer the highest possible quality and best possible performance."



IWM's new catalogue is awash with new products

IWM has published a new and extensively updated version of its spare parts catalogue, making it an indispensable resource for everyone who specifies, purchases or uses high quality washing equipment. Details of over 26 different families of spare parts – from wash nozzles to extraction fan units – are included in the new catalogue.

The 20-page colour catalogue provides easy-to-navigate content and, for every product range, it offers a short overview, with ordering information, delivery details and photographs to easily identify products.

With the new catalogue is also available as an online spares shop which has been added to the IWM website, identifying and ordering spares for the company's products is a simple and convenient process that takes just minutes. The online shop also means that users of IWM machines have access to the spares ordering facility 24 hours a day, every day of the year.

Copies of the new catalogue is available in print or electronic form and can be obtained by calling IWM on 0121 459 9511, emailing spares@indwash.co.uk, by downloading or ordering from www.indwash.co.uk.



Out with the old, in with the new for IWM at Cavaghan & Gray

When changing requirements made it necessary for Cavaghan & Gray, one of the UK's largest producers of chilled foods, to replace an existing combination bin washer, the company chose a new machine from the same supplier – Industrial Washing Machines (IWM). The decision to buy from IWM was based not only on the exemplary performance of the old machine, which was still working well after more than 100,000 hours of operation, but also on the high specification and competitive pricing of the replacement that IWM was offering.

The original machine is one of 20 that IWM has supplied to Cavaghan & Gray, a division of Northern Foods, for use at its large-scale food preparation plant in Carlisle. It was originally designed to be a dual-function machine capable of washing both BOC plastic distribution crates and 200-litre Eurobins, which was a major innovation for the time, when single-function washers were the norm.

The site's washing requirements have, however, evolved substantially since the machine was supplied, and it was no longer sufficiently versatile to meet the current needs. After a closely contested competitive tendering process, Cavaghan & Gray ordered its replacement from IWM.

The new machine is a custom-designed multifunction tray washer that is based on the tried and tested IWM High Care Design. Developed specifically to meet the most demanding of food industry requirements, this includes pre-wash, hot water detergent wash, high temperature rinse and a sanitising

function. The new machine has a mesh belt conveyor that can accommodate all types of trays, wheeled dollies, baking sheets and plastic crates.

To achieve this level of versatility, IWM has developed a unique and ingenious hold-down system to secure items to the conveyor during the washing process. To minimise environmental impact, routine maintenance requirements and running costs, the new machine also incorporates a high-efficiency rotary filter that keeps the wash water cleaner for longer.

"As always, IWM came up with a customised design that exactly matches our needs at a very attractive price," said Cameron MacIntosh of Northern Foods. "Installation went very smoothly and the machine is fully living up to our expectations in terms of washing performance, throughput and ease of use. The flexibility of the machine is exceptional and delivers real operational benefits as it will handle almost anything we load into it!"

In addition to custom machines like that produced for Cavaghan & Gray, IWM also offers an extensive range of standard washing machines available on short deliveries at very competitive prices. These include tray washers, bin washers, keg washers, rack washers, cabinet washers, layer pad washers and sanitisers for applications not only in the food, beverage and pharmaceutical industries, but also in other sectors such as logistics and the automotive industry.

IWM washes the whole bin!

The unique design of the new EC20-30 single-stage cabinet-type bin washer from Industrial Washing Machines (IWM) ensures that the whole of the bin – including the wheels – is thoroughly washed, making it easy for users to maintain the highest standards of hygiene and cleanliness.

IWM's new washer, which is the latest addition to the highly successful EC20 range, offers exceptional versatility. It is compatible with Eurobins as well as Vemag skips and buggies, and it accommodates both 200 litre and 300 litre bins without the need for any operator adjustments. The machine is also suitable for use with the 400lb and 600lb dump buggies that are widely used in the USA.

To deliver its comprehensive cleaning performance, the EC20-30 fully inverts the bin and washes the inside with a high velocity rotating spray manifold, while the outside is washed simultaneously with a full surround jetting system. The powerful 15 kW pump fitted to the machine

ensures that all of the washing actions are both vigorous and thorough.

The new machines are equipped with a flexible control system that provides a high level of automation and allows the wash cycle to be optimally matched to the user's requirements. Running costs and environmental impact are minimised by re-circulating the wash water from a heated tank via an efficient rotary filtration system that reduces the need for water changes.

As standard, the machines are configured for a cold rinse, using a solenoid-controlled supply of fresh water from the mains. Options for hot and/or chemically assisted rinsing are, however, available.

EC20-30 bin washers are constructed from stainless steel throughout to ensure long life, and they feature a robust streamlined design that is not only hygienic, but also allows easy access to all areas for cleaning and maintenance.





IWM helps Papa Johns to ditch the freeze!



Papa Johns, the world's third largest pizza chain, is now using fresh dough exclusively for all pizzas sold by its fast growing UK operation. Equipment supplied by Industrial Washing Machines has played a key role in facilitating the production of fresh dough.

Papa Johns is dedicated to producing quality pizzas using the best ingredients, and the company is clear that one such ingredient is fresh pizza dough, rather than the frozen dough used by many of its competitors. Handling fresh dough is, however, significantly more challenging than handling the frozen product.

From its new plant in Milton Keynes, which has been specifically set up to prepare and supply pizza ingredients of the highest quality for the UK market, Papa Johns despatches fresh dough on trays to its franchisees throughout the country. After the dough has been used, the empty trays are returned to the plant, where they are washed and sterilised ready for immediate re-use.

Because of the sticky nature of fresh dough and the fast turnaround needed for the trays, the requirements for the washing and sterilising processes are more than usually onerous. For help in meeting these requirements efficiently, reliably and cost effectively, Keith Bingham, engineering consultant for the whole of the new Papa Johns plant, approached Industrial Washing Machines (IWM).

"I've worked with IWM on many previous projects," said Keith Bingham, "and I've always been favourably impressed by the performance of the company's products and by their excellent value for money."

"In addition, IWM has wide expertise in the design of washing machines, and is always amenable to customising its products so that they meet the end user's exact requirements. Importantly, this customisation is carried out at modest cost, and without significantly affecting deliveries."

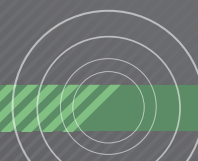
For the new Papa Johns factory, IWM supplied a custom-designed two-lane tray washer with an integrated drier. The machine has a nominal maximum capacity of 1,000 trays per hour to allow for future increase in demand.

To ensure maximum washing efficiency with effective and dependable removal of the dough residue from even the most heavily soiled trays, the machine uses sustained jetting with hot water and detergent throughout the wash cycle. For maximum economy, the wash water is recirculated from a heated tank, and effective filtration is provided as an aid to reducing the frequency of water changes needed.

Special provisions are also made for hot-air drying, as it is imperative that the trays are bone dry when they are delivered to the dough production line.

"The machine was ordered at the end of November, and was manufactured to our requirements and delivered to site by the first week of February," said Keith Bingham. "This is excellent service, especially given that this period includes the Christmas break. Only a very few minor changes were needed at the pre-delivery inspection, and the machine was straightforward to install and commission. In short, IWM provided an excellent machine backed with great service."

The IWM tray washer at Papa Johns Milton Keynes plant has now been in daily use for almost six months, and it is fully meeting the company's requirements in every respect. It dependably delivers clean dry trays, it is easily able to meet and sustain the necessary high rate of throughput, it is economical in operation and it is proving to be exceptionally reliable.



IWM ups the ante in pallet washing

With a throughput of up to 100 pallets per hour, increased washing efficiency and enhanced construction, the new P100 pallet washers from Industrial Washing Machines (IWM) set new standards for performance, efficiency and operational convenience. Developed from IWM's popular P25 series of pallet washers, the new machines share their predecessors' space-saving compact design, environmentally friendly energy efficient operation and exceptionally competitive pricing.

The new P100 machines can optionally be supplied with an economical high-efficiency single-stage drying system that uses an air knife to deliver pallets that are, in almost all applications, dry enough for immediate re-use. Multi-stage driers are also available for applications where total dryness must be assured.

The maximum throughput of the new machines has been increased by a factor of four compared with IWM's older models, making them suitable for use in even the busiest of environments. Higher power pumps for the washing system have also been incorporated. These produce more powerful jets with increased volume, which offer enhanced washing performance that is particularly useful when dealing with heavily soiled pallets.



The overall design of the machine has also been upgraded to maintain its robustness, ensuring that it will have a long reliable life even in tough operating conditions, while eliminating flat surfaces, joints and creases in its construction, making it easier to clean and improving its hygienic characteristics. These improved characteristics make the new machine particularly well suited for applications in the food and pharmaceutical sectors.

Like all IWM pallet washers, the new P100 models have been designed from the outset to be economical in their use of water and energy, thereby minimising their environmental impact and running costs. Water and detergent are recirculated from a heated tank to provide economical operation of the sustained jet washing system used to clean the pallets and, in standard machines, the cold-water rinse incorporates precision solenoid valve control to ensure efficient use of water from the mains.

In addition to providing drying sections, IWM offers a wide range of other customisation options for its new P100 pallet washers. Examples include hot water and/or chemically assisted rinsing, extended conveyor infeed and outfeed systems, and stacking/destacking facilities.

IWM offers sanitising on a budget

The latest addition to the popular range of sanitising tunnels from Industrial Washing Machines (IWM) is the new entry-level SAN100e model, which has been developed specifically to offer dependable and effective sanitisation at an exceptionally attractive price point.

Suitable for sanitising produce in buckets, bags, tins and trays up to a maximum size of 450 mm wide by 450 mm high, the SAN100e conveys the produce through a tunnel where a solution of sanitising fluid in mains water is misted onto the items from top, bottom and sides. The speed of transit through the tunnel can be set and easily adjusted to operate at between one and four metres per minute, according to the user's requirements.

The machine is arranged for manual loading and unloading, at a comfortably safe working height. After sanitising, items are discharged onto a small outfeed table. This is equipped with a photoelectric sensing and control system that stops the conveyor when the table is full and restarts it automatically when the items are removed.

SAN100e sanitisers are available in two versions: one uses fresh water supplies for all sanitising operations while the other re-circulates the water, and uses mains water only for make up. Both models are designed to be simple and economical to use, and to require a minimum of maintenance.



They feature solenoid-controlled proportional injector pumps to ensure efficient and accurate dosing of sanitising fluid and incorporate bayonet fitting spray tips that can be removed easily for cleaning or replacement. The body of the machines is fabricated throughout from T304/316 stainless steel, and their robust streamlined design allows easy access to all areas for routine cleaning – including a newly designed removable top canopy cover.

All machines comply fully with relevant UK and EU standards, and all are CE assessed and certified prior to shipment. They are supplied complete with detailed instruction and maintenance manuals.

IWM SHOWS

- ▶ **PACK EXPO, 26-28 September 2011**
Las Vegas Convention Centre, Las Vegas, USA
- ▶ **PPMA, 27-29 September 2011**
NEC, Birmingham, UK
- ▶ **PROCESS EXPO, 1 – 4 November 2011**
McCormick Place, Chicago, USA
- ▶ **Foodex, 25 – 27 March 2012**
NEC, Birmingham, UK



For further information contact:
Industrial Washing Machines Ltd
Facet Road, Kings Norton, Birmingham
B38 9PT, UK
T: +44 (0) 121 459 9511
F: +44 (0) 121 451 3241
E: tracy@indwash.co.uk
W: www.indwash.co.uk