



Tank Cleaning Technologies a division of

inTank Technologies Limited



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Arcus VASA Automated Drum Cleaning System Case Study 1

Arcus recently supplied a VASA Automated Drum Cleaning System to a new client in Ireland. They are a chemical production and water testing company and were looking for a solution to effectively clean used 20 and 25 litre drums, a large quantity of which had built up over several years. The client wanted to dispose of the drums in the stockpile, and any drums used in the future, by recycling them responsibly.

Drums which contain chemicals are considered hazardous to transport. Once they have been emptied, disposing of these barrels whilst they contain chemicals, even trace amounts, can become extremely expensive. Specialist waste recycling companies will charge to collect and dispose of them –up to €3 per drum.

Manual cleaning of these 20 and 25 litre drums, considering the quantities, would have been highly time and cost consuming. It is also potentially dangerous for the operator, and detrimental to the environment due to unintentional spillages.

The design process:

After receiving a recommendation from one of our existing clients, the client contacted Arcus to discuss the design and supply of an automated drum cleaning system. The client had some specific requests that would allow the machine to use existing infrastructure and help them with compliance. Engineers from both companies were in regular contact to ensure the design of the system met the exact requirements.

The system was designed with operator safety, water consumption and cleaning quality as the primary focus points. The client had an assigned Project Manager who was their single point of contact and received bi-weekly updates of the overall project progress on top of the various design suggestions and discussions.

Arcus VASA Automated Drum Cleaning System details:

The VASA gives the client the ability to clean up to nine drums in 3–5 minutes with minimal operator input. The client's drum cleaning capabilities have massively increased, with 100–150 drums cleaned per hour a realistic achievement. It also enables our client to label these barrels as non-hazardous—This means disposal costs are reduced to zero in many cases, saving the client a huge amount of cost per year, as well as keeping labour costs and barrel handling to a minimum, allowing for a rapid return on investment.

The operator is able to easily load drums and start the automatic cleaning process by simply pressing one button. The drum cleaning system completes the 3-stage cleaning

cycle, before sounding an alarm to signal completion. The 3-stage clean includes a pre-rinse, a chemical wash and a final rinse, all within a sealed enclosure. A sump also catches all the wash water which is then pumped to the client's water treatment plant.



Other benefits and features:

A key factor for the client was minimising water consumption. The VASA Automated Drum Cleaning System does this by having an intelligent pumping system, which only pumps the volume of water required relative to the number of drums being washed, and the innovative 'Push-to-Wash' 360° cleaning heads, which ensure that only the cleaning heads with drums mounted to them are in operation during the cleaning cycle.

Operator safety and minimising Health & Safety risks were also at the forefront of the design. Sensors and safety mechanisms were fitted that shut the machine down if the wash chamber doors are opened in operation.

This VASA also has the optional IBC cleaning head and external wash gun attachments, allowing IBCs to be cleaned, using the same 3-stage cleaning cycle. The wash gun allows the exterior of IBCs and drums to be cleaned.



Arcus specialise in the design and manufacture of industrial washdown, spraying and cleaning solutions for a range of industries including Food & Beverage Production, Chemical Production, Marine, Agriculture, Oil & Gas, Pharmaceutical and many more across the UK, Ireland and worldwide.

If you would like to know more about the VASA Automated Drum Cleaning System, please get in touch:

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