

The Knowledge



Top Tips for... chemical dosing



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Chemical dosing is a critical element of water and wastewater treatment. To maintain quality, manage costs and ensure regulatory compliance, plant operators depend on dosing equipment that matches their process needs, as well as being effective and reliable. While most users choose to invest in their own dosing equipment, there are a number of circumstances where hiring could prove more expedient or cost-effective

7 TOP TIPS

1 Where range is concerned, size is important

While the short, medium or long-term hire of dosing equipment can be the optimum solution for many applications, the benefits of hire will only be realised if the chosen provider has the appropriate equipment, expertise and support infrastructure in place, and if they can bring those elements together into an offering that meets fully the end-user's requirements.

Site- and process- specific chemical storage and dosing requirements can vary by several orders of magnitude, so your provider must have dosing system solutions to meet the full range of applications. This might be anything from compact, integrated systems that can be carried to site, to high-capacity, containerised systems that can be filled by

drum, IBC or tanker. These systems must be designed to integrate seamlessly into your existing operating procedures and supply chain.

2 Ensure the equipment is up to the job

Equipment intended for hire applications must be suitable for a wide spectrum of potential customer requirements and ensure compliance with environmental and safety standards. This kind of versatility and compliance needs to be engineered-in from the start. Check the quality of the hire fleet – does it include high specification pumps, valves and pipework that are fully compatible with the majority of chemical products used by industry? Does the hire equipment feature easy-to-use integrated control systems that allow timings and dosage parameters

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to be easily set and adjusted?

This is just a flavour of the homework that you should undertake before appointing a hire partner.

3 Speed of response is the key

Hire equipment must be ready on time and at short notice, especially in time-critical breakdown situations. This requires a provider with a large, readily available fleet of equipment and the right logistics capabilities to deliver that equipment fast. Does your equipment hire team understand that getting processes up and running is your number one priority? Seek out a hire partner that can get equipment mobilised on a same-day basis and be in operation at your site within days.

4 Simplify installation

Hire equipment must be easy to move, fast to install and straightforward to commission, so check to see that your provider has developed its equipment range with these priorities in mind. Palletised or containerised systems simplify logistics, while robust, weatherproof enclosures maximise location flexibility. Does your hire company supply components that are pre-integrated and pre-tested, such as large tanks delivered with appropriate bunds and with filling equipment and safety systems already in place?

5 Compatibility counts

There's nothing worse than receiving your hired equipment and finding that there is incompatibility between yours and the hirer's equipment connections. The first duty of a responsible hire organisation is to ensure that this never happens. Check to see that your provider offers a broad range of pipework and connectors to make



A DS1500 chemical dosing system

on-site integration simple and straightforward, whether the system needs to link to existing dosing lines or come complete with its own. Moreover, establish whether or not the controls are designed to operate independently or will need to link to existing sensors as well as the on- or off-site control systems.

6 Do they know what they're talking about?

Dosing equipment design, installation and maintenance is a specialised activity and hire customers should expect a comprehensive range of engineering and technical services from their providers to ensure they get all the support

they need to select, install and manage their system. For example, does your provider offer equipment packages built to meet your technical specifications, or are they able to make recommendations based on a site survey?

7 Service flexibility

The operators of water and wastewater treatment systems may opt to hire dosing equipment for many different applications and many different reasons. To meet their requirements, the equipment provider must be flexible and responsive, able to meet your lead times and be prepared to cover the expected hire period no matter how long or short.



SUMMARY

Why should you hire rather than buy chemical dosing equipment? Hiring could be your best option in the following instances:

- Equipment will occasionally fail in service, so a prompt response from a hire company will ensure early resumption of process operations, giving onsite staff more time for diagnosis and remediation.

- When testing a new process that will require new treatment strategies, it may be premature to invest in equipment based on lab trials. Hiring a system for field trials can avoid the risk of wasting money on ineffective or inappropriate equipment.

- When a site has a seasonal dosing requirement - such as algal bloom - putting in place permanent equipment may be wasteful if it remains unused for large parts of the year.

- The cost of hiring a system represents operational rather than capital expenditure, which may be beneficial when facing Capex constraints. Hiring can also reduce labour and maintenance costs.

- When refurbishing a treatment works, temporary equipment may be needed in order to enable continuation of dosing during the changeover.

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