



VERDER LTD

Pump Systems & Services

Chemical Dosing | Package Plant Systems | Mixing & Material Handling | Project Management | Design & Build | Installation & Commissioning | Contract Maintenance & Servicing | Repairs & Overhaul



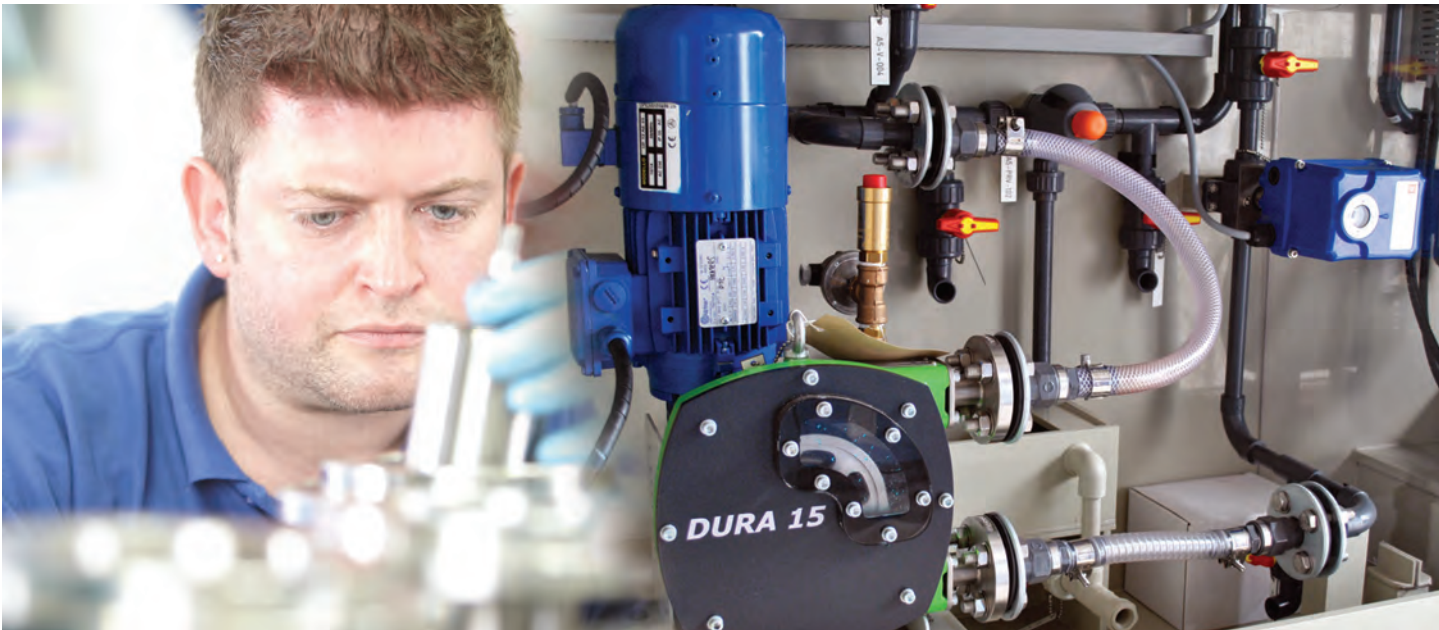
We put our heart into pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pumps and our service. We do so with energy, dedication and - most importantly - with our heart.

VERDER – PASSION FOR PUMPS

Overview of our systems and services

Verder UK provide pumping systems and services to some of the biggest companies in the UK, using expertise and knowledge of pumps and fluid handling to provide the best solution for the customer.



- Package plant systems for chemical dosing
- Dura packaged dosing unit with mixer
- Dosing skids
- Chemical storage solutions
- Poly make-up
- Lime mixer & circulation system
- Slurry and sludge handling systems
- Bespoke turnkey systems
- System design
- Production & assembly
- Installation & commissioning
- Pump repair & servicing
- Preventative maintenance program



Our Products

Verder products are created through consultation with our customers. We listen, learn and understand to provide the answer. We make our products reliable, fit for purpose and fully support them with engineering, spares and administrative assistance.

Packaged Plant Systems

Packaged plant systems are complete dosing and mixing solutions housed in a kiosk.

A packaged system allows for the full assembly and testing of the dosing solution at the Verder premises, minimising site work.

- GRP kiosk with bund area
- Dosing rig and control system
- Chemical storage/mixing tanks
- GRP walkways and access
- Tanker fill points
- Booster set, wash-down and emergency shower facilities

Kiosks are shipped to site requiring the connection of electrical and dosing lines.

We can offer an off-the-shelf design, however we welcome where customers request specific components, pipe work, dimensions and other requirements to ensure the end product fits your site perfectly.



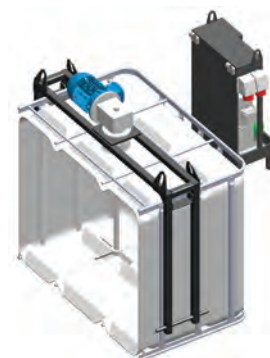
Dura packaged dosing system with mixer

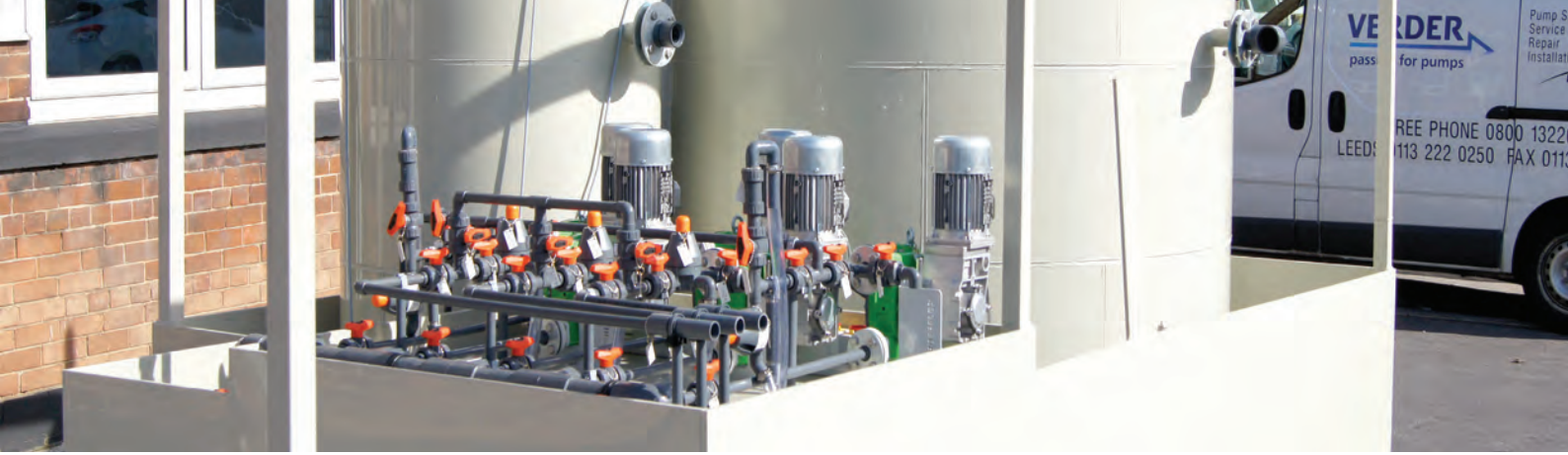
A lightweight, portable compact dosing system that may be freestanding or mounted to an IBC.

The system can be built for flow rates of up to 500l p/h and is suitable for small-scale, temporary and emergency breakdown applications.

The system is quickly operational with connection to the main line and power to the system and mixer.

Mounted with the mixer unit and IBC





Bespoke systems

We operate an 'open door' policy for customers requiring fluid handling systems for specialist applications.

- ➔ Poly make-up
- ➔ Chemical storage facilities
- ➔ Rig systems for use in chemical facilities for transfer and wash-down areas incl. ATEX rated
- ➔ Trolley systems for silt drainage in reservoirs
- ➔ Fresh water transfer in canal locks
- ➔ Chemical injection skids for lithographic plate manufacturing
- ➔ Slurry-handling systems for macerated food waste and bio gas in anaerobic digestion facilities



Lime mixer & circulation system

Where sewage treatment works experience problems with lime dosing, Verder offer a solution to help maintain lime suspension in the mixing tank. The design of many other tank systems feature 'dead spots' which allows the lime to fall out of suspension.

The Verder system both mixes and circulates the suspension, preventing sedimentation, clogging, blockages and causing the pump to work harder and fail prematurely.

Our circulation system

- ➔ Verdermix dynamic mixer
- ➔ Verderhus screw-channel pump circulation pipe work



The Verderhus screw-channel pump features an open impeller design which handles the abrasive lime chemical with ease.

The unit is extremely efficient and maintains an even concentration of the lime chemical.

Our Customers

Our customers are the life-blood of our business and we always put them first. From the boardroom to your apprentices, we go the extra mile to be dilligent, organised, punctual and professional. We are proud to say we have established relationships with many leading organizations.

Water Companies

Working directly with water companies to supply package plant systems, dosing rigs and supply of pumps, mixers and contract maintenance across multiple sites for:

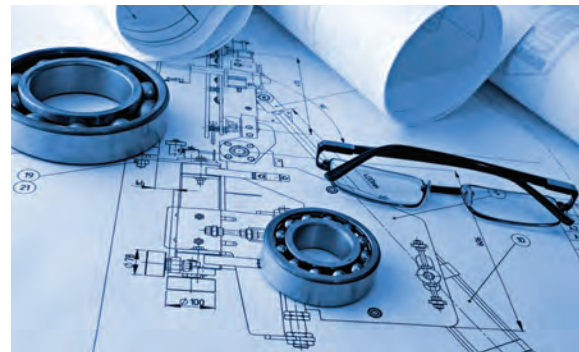
- *Scottish Water*
- *Yorkshire Water*
- *Severn Trent*
- *United Utilities*
- *Veolia*
- *British Waterways*
- *Thames Water*



Utility Contractors

Working in partnership to supply pumping systems for water frameworks and major tenders:

- *Costains*
- *GBM JV*
- *MWH*
- *Black & Veatch*
- *Carillion*
- *ETM4*
- *Interserve*



Energy Providers

Verder has produced dosing solutions for a power station for the neutralisation of cooling water and slurry handling systems for macerated food and organic matter in the production of bio gas. The systems included dosing of enzymes to increase yield and the speed of the AD process:

- *Kilroot Power Station*
- *AD & Biogas facilities*
- *AES*



Manufacturers

Our project team have been approached for turnkey systems for the handling of chemicals. The skids are typically built in frames/rigs to be mobile or for confined spaces. The skids are typically for transfer or injection of chemicals with ATEX certification:

- *Chemical process*
- *Production of lithographic printing plates*



Case studies

United Utilities

Complete package plant systems for 6 sites across the north-west.

The systems were assembled, installed and commissioned as part of a single tender to update the dosing facility at each site. The units dosed a number of chemicals including lime and sodium hydroxide.

In addition to the dosing systems, the installation included emergency showers and booster sets.



Thames Water

3 sites including package plant systems, chemical storage, poly make-up and refurbishment with temporary dosing solution.

Verder UK updated their own system at Crawley STW with the latest generation of Verderflex Dura pumps, housed in a cabinet with control system.

At Shalford STW, Verder completed a renovation of the dosing system, control panels, floors and make-up tanks with temporary dosing facility to keep the treatment process operational.



Kilroot Power Station

Turnkey system built for dosing and neutralizing the corrosive cooling water which was damaging pipe runs.

The system featured a built-in make-up tank and dosing rig. Due to confined space The unit was built to be crane lifted into position with a tank-top 'shute-feed' for easy delivery of the chemical.

The unit was constructed in-house at the Verder Service centre and delivered to site ready for operation.



Verder Service Centre

The Verder UK Service Centre is located at the head office in West Yorkshire and is a state-of-the-art facility with the latest diagnostic and test instrumentation. Our Service Centre team is staffed by highly qualified and experienced engineers. All work is ISO 9001/14001 accredited.

The Verder Project Team

Our in-house team of project specialists includes onsite engineers, workshop technicians, CAD design and procurement with a project manager ensuring the system comes online on time and in budget.

Consultation

From the first meeting, the Verder Project Team listens and learns about your process, your expectations and what you hope to achieve.

The Verder Project Team have an 'open door' policy on all pumping solutions. Many of the established system designs may suffice, however bespoke and custom options are featured regularly.

Where there is no conventional design established, the Verder team will work with you and your media to create a bespoke turnkey system.

Project planning

The project team agree a production plan, risk assessment



and HAZOP. A GANTT chart is produced with lead times and dates for the project to come online. This is agreed with the customer and the design phase begins.

Design

Water companies will typically work to a standard specification and with various reference sites. Verder UK have provided many successful compliant systems and operating procedures for water companies. The design team will use existing capital equipment

where possible and retrofit and refurbish existing systems in situations where other framework suppliers may only want to offer their new systems. Verder conducts site surveys, compiles the lifting plans, method and risk assessments, GA drawings and all other documentation.

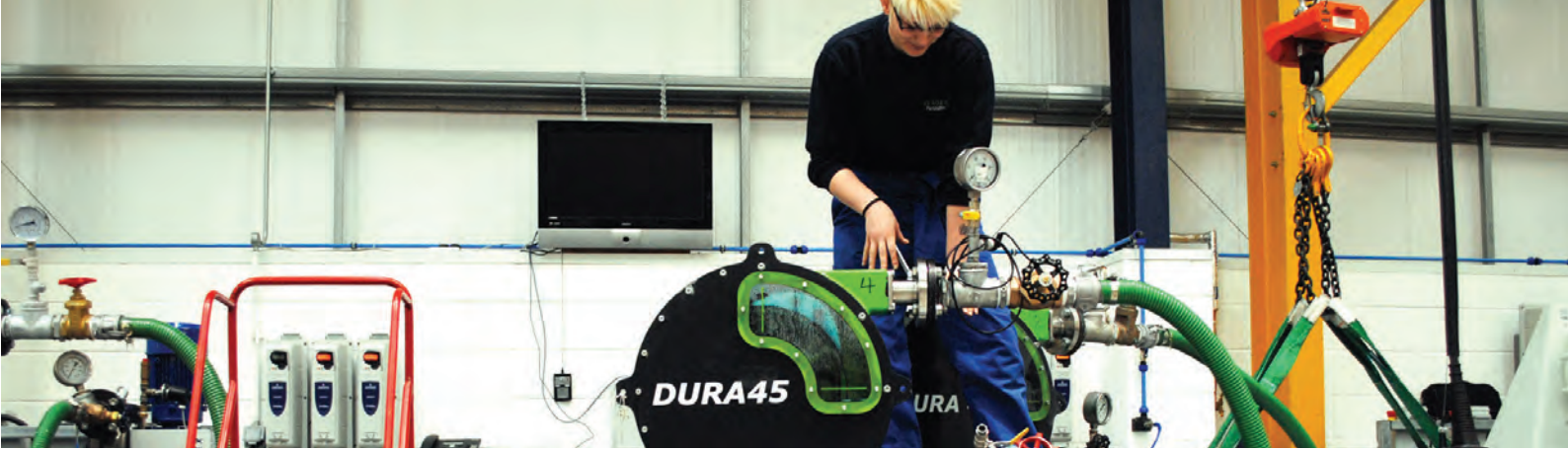
Production

The Verder UK project team can manufacture and fabricate a pump system to virtually any specification. Much of the production process can be completed at the Service Centre, which ensures the quality and management of the production process is of the highest standard.

Installation

Verder Engineers have extensive experience in the installation of package plant and turnkey systems, refurbishment and repairs. All engineers are fully trained and all hold CSCS, clean water and confined space cards as well as all electrical engineers being 17th edition qualified.





Verder works with site operators and engineers to discuss their requirements. Whether the setting is in the boardroom or at site, Verder Engineers present a professional attitude with courtesy and respect.

Commissioning

Verder can deliver a program of commissioning of your pump system and control philosophy ensuring the correct operation and that the specified duty of the unit installed satisfies all of its requirements. The Verder project team will give a full training program to all users of the system.

System survey

- Identification of system requirements, pipe work, materials and control methods
- A stock and stores review to identify critical spares
- The management of stock with a view to reducing client owned inventory without compromising critical plant cover

Pump repair and servicing

Verder offers a comprehensive repair and refurbishment service for your pumping equipment, including motor panels and drives.

The Verder Service Centre can provide repairs on all Verder pumps and 3rd party brands. Quality is assured with all repairs being completed with genuine OEM parts. Verder also manufactures a range of different pumps and can therefore provide cost-effective replacements of old or obsolete equipment.

All serviced pumps can be checked with diagnostic, performance and hydrostatic testing with certification/reports included. At our Service Centre we have the facility for calibrated testing of new, repaired and specialized pump package sets.

- Frequency inverters up to 22kW
- Star delta start up to 30kW
- Data Capture – Rhodes, Fluidwell and Anders data display
- Flow measurement 67-7250 litres per minute- 1.5"/3"
- Turbine flow meter, 4" Mag flow
- Hydrostatic pressure up to 460 bar
- SGS Pressure transducer on discharge
- Suction technic transducer and manual gauges
- Vibration
- Power consumption
- PAT testing
- Insulation
- Volume



Servicing and maintenance program

- Identifying critical plant processes and minimizing production down time
- Extending the cycle between maintenance periods
- Reduce your costs and improve profitability
- Identify and manage potential failures before they occur
- End of asset life
- At the end of the pump's efficient working life Verder can assess your process and recommend the best course of action for renewal or replacement



Commissioning

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Other services

System survey

- Audit of system requirements, pipe work, materials and control methods
- A stock and stores review to identify critical spares
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Servicing and maintenance program

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Any questions? For more information, please visit our website www.verder.co.uk or call on tel.: +44 (0)1924 221 001