



richard alan

integrated
engineering
solutions



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Work of Art

‘Is it as good as Mythe?’ is becoming a commonly asked question amongst our clients at Severn Trent Water / CiM6, when they inspect any installation work. It’s because the standard of work carried out by Richard Alan at their site in Mythe has become somewhat of a benchmark for quality – with the term ‘work of art’ being quoted due to the attention to detail.

Richard Alan is, at heart, an engineering company with an ambition to exceed customer expectations – by delivering the best products and services tailored to meet the unique needs of each client.

From humble beginnings the company has grown from a partnership between two friends to a successful international business with specialised skill sets that complement each other.

This collection of talent and resource allows Richard Alan to provide integrated engineering solutions across a variety of applications, making for a more collaborative, cost effective and professional service.

> Installation of a cyclone unit designed and manufactured by Richard Alan, as part of the Line 7 Project for the BASF chemical plant at Bradford.





Core Business

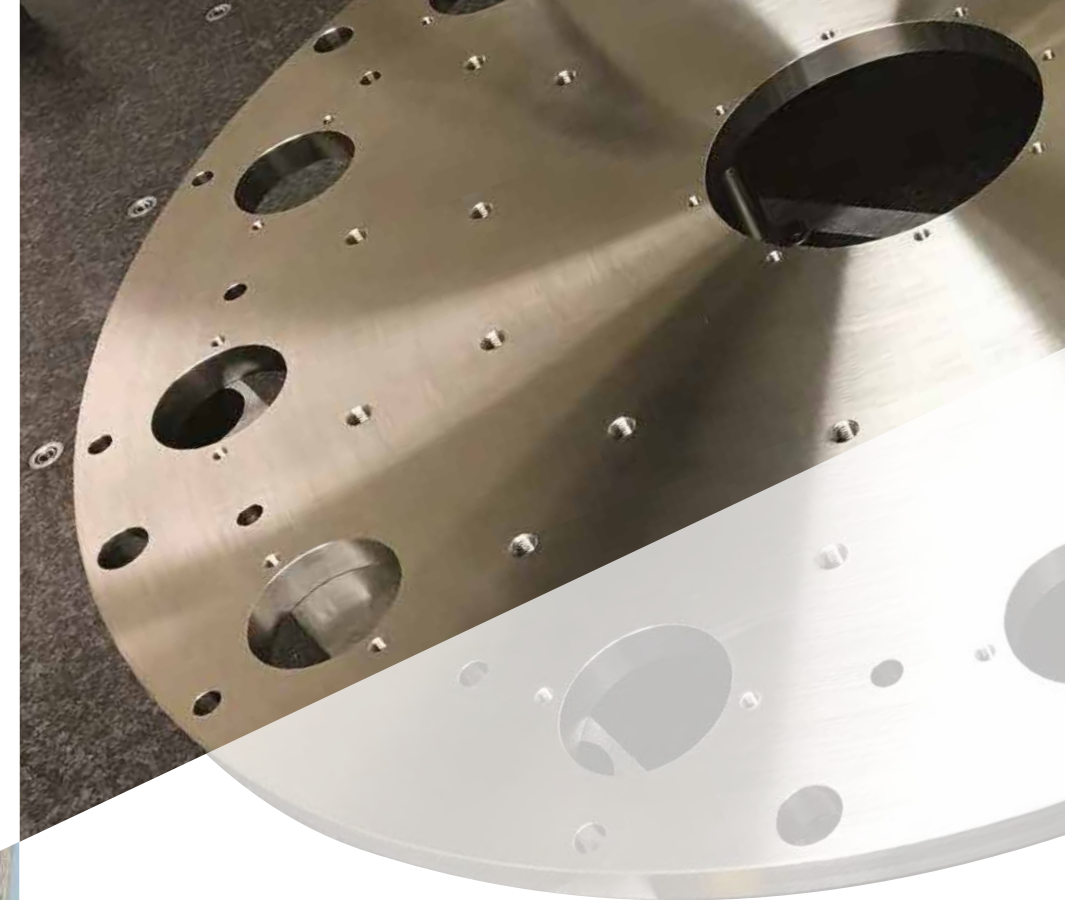
Our expertise lies in major fabrication and installation, encompassing highly skilled design, manufacture and comprehensive maintenance services.

Integral to our business are our skills in: **sheet metalwork, structural steelwork, process pipework** and **mechanical, electrical, instrumentation** and **control**.

This core business is extended through our specialised range of engineered **equipment for water and wastewater treatment**. We can provide complete systems for dry and liquid chemical preparation, storage and dosing. Handling every step of the process demonstrates our capabilities as a single-source supplier, serving both municipal and industrial sectors.

With a focus on **design for manufacture and assembly (DfMA)** and **off-site modular builds**, we can offer our clients flexibility over project control. Designing, manufacturing, assembling and testing products in-house prior to delivery, reduces disruption to site operations and offers benefits in terms of costs and time scales.

At Richard Alan our mission is to deliver innovative engineering products and services when and where they're needed.



Integrated Specialties in-house projects and independent ventures



At RAMCO CNC, we serve a diverse range of industry sectors with **precision component machining**. We have the capability of milling, drilling and turning a variety of materials to produce individual components or multiple items for both OEM supply or as part of larger in-house projects.



www.scas.co.uk

Specialising in the supply and erection of platform systems, we can develop a total access plan for any project. With a comprehensive understanding of the challenges that arise within differing working situations, from small access towers to major construction works. Our design and calculation facility can cater for load bearing, weather protection, independent access and temporary roof cover scaffold types.



www.pumpsandgearboxes.co.uk

We specialise in the selection, supply, repair and service of pumps, gearboxes, motors and inverters for the domestic, commercial and industrial sectors. Our ranges include Positive Displacement Pumps and Centrifugal Pumps from a variety of leading manufacturers with gearboxes, motors and inverters available from renowned producers including our sister company Yilmaz UK Ltd.



www.yilmazuk.co.uk

In 2015, Yilmaz UK Ltd became a Richard Alan group company. We are the UK assembly centre for European industrial gearbox manufacturer Yilmaz Reduktor and have a vast portfolio of industrial gearboxes, electric motors and variable speed drives for a wide range of industries. All products are offered with a two year manufacturer's warranty. Standard products are of a European footprint design and are therefore interchangeable with many other manufacturer's products.

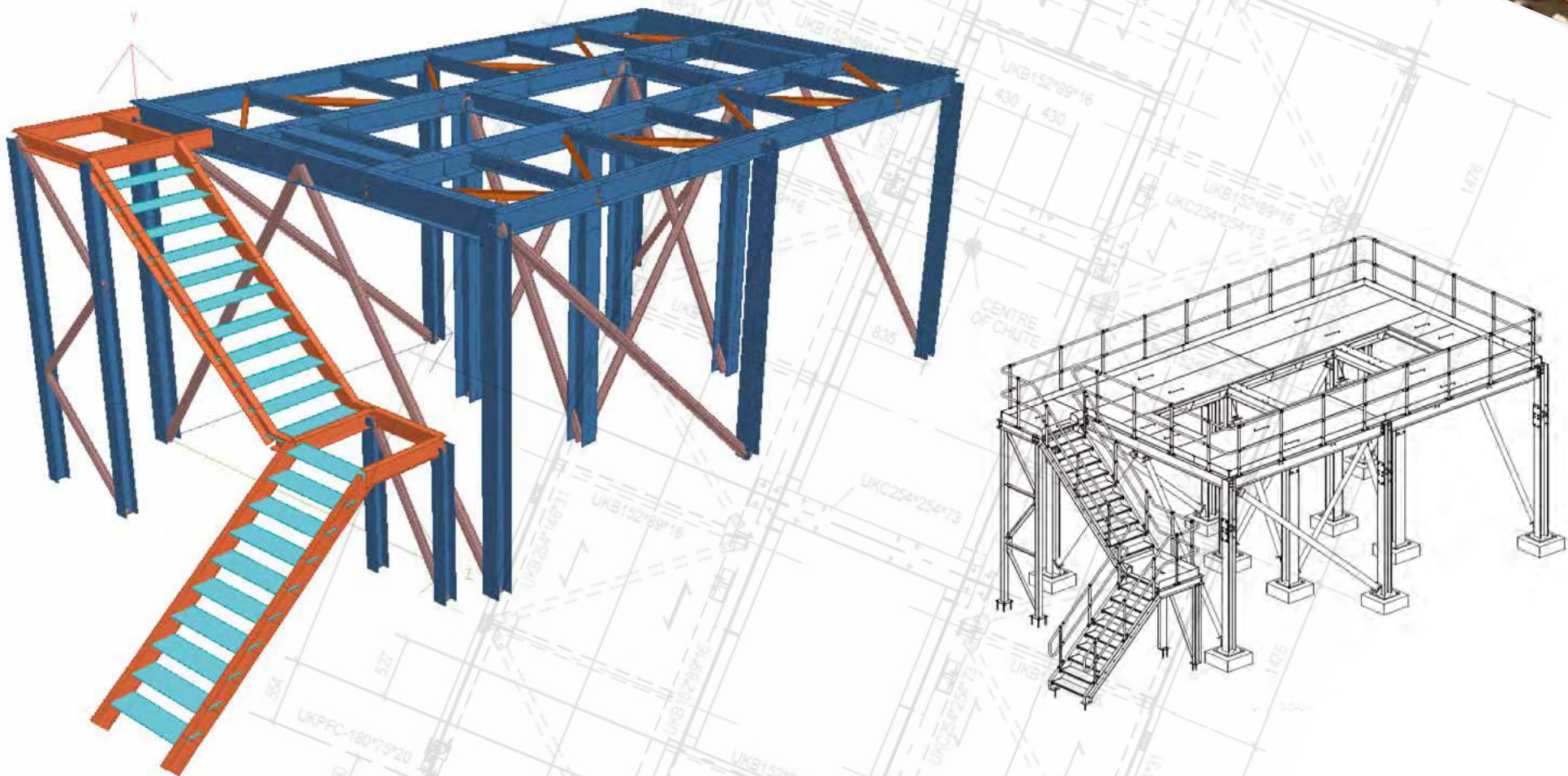
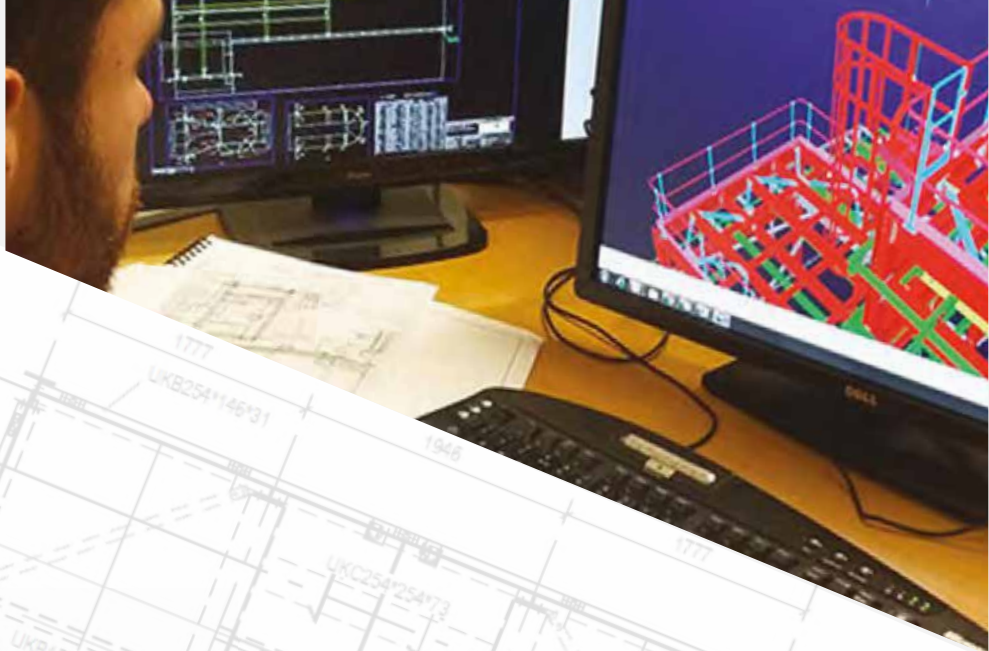


www.am-recruitment.co.uk

Offering services to the engineering and commercial sector, we provide permanent and temporary office based staff, as well as engineering and technical positions. The team are trained to obtain detailed and accurate job and person specifications and take the time to know and understand each business and its culture, carrying out face-to-face, competency-based interviews and checks on qualifications and proof of right to work.

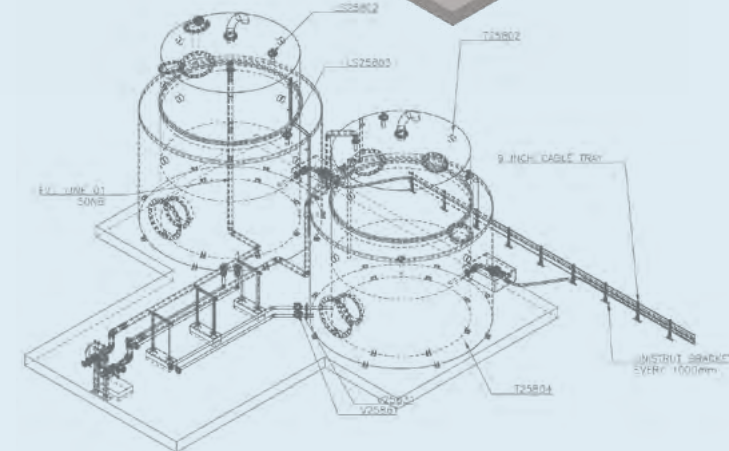
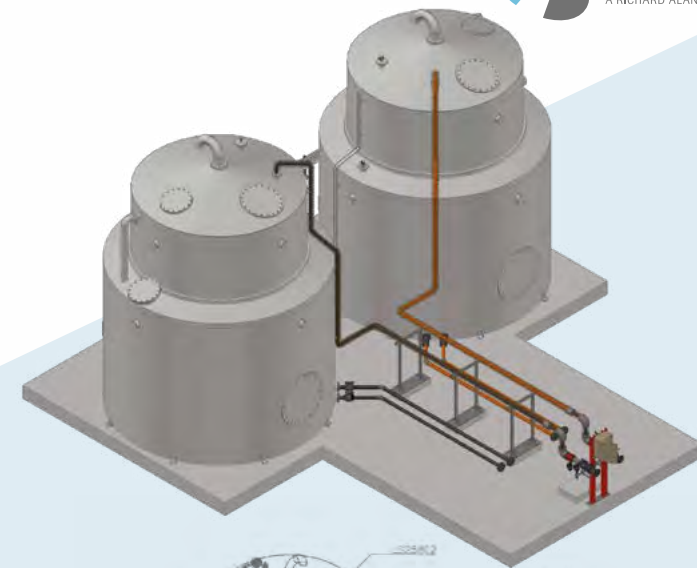
Design concept to visualisation

From a single bespoke pressure vessel to a complex turn-key factory expansion, a detailed design is essential in ensuring a smooth project delivery, on time and within budget. Clients come to us for our ability to provide simple answers to difficult questions - incorporating complex process pipework into a confined limited space, detailing requirements of operating conditions and calculations of loads, it's all in a day's work for our engineering design team. Whether a project involves structural steelwork or a complex chemical dosing system, we're here to help and advise.



Our large team of designers and draughtsmen specialise in 2D and 3D modelling with the additional capacity to work with Building Information Modelling (BIM). We can develop and prepare drawings and models from specifications and outline plans, allowing clients to fully visualise the finished project. We have also established working relationships with selected consulting partners to commission services such as seismic and blast calculations.

> Design (and manufacture and installation) of a ferrous chloride storage and dosing system and centrifuge support platform for Costain Ltd at Severn Trent Water's Hayden site.



Our range of design tools include:

- > **STAAD Pro V8i** Calculation for structural analysis and design
- > **TEKLA** 3D structural modelling and drawing
- > **FINGLOW / PV Elite** Pressure vessel and heat exchanger design, analysis and evaluation
- > **AutoCAD 2017 / Autodesk Inventor Professional 2017** 2D and 3D mechanical drawing and design for vessels, pipework, skids, GA's
- > **Intergraph CADWorx** Pipework modelling and the production of isometric fabrication drawings



> 316L grade stainless steel pressure vessel, designed and manufactured to PD5500:2015+A2:2016 for Valtris Specialty Chemicals.

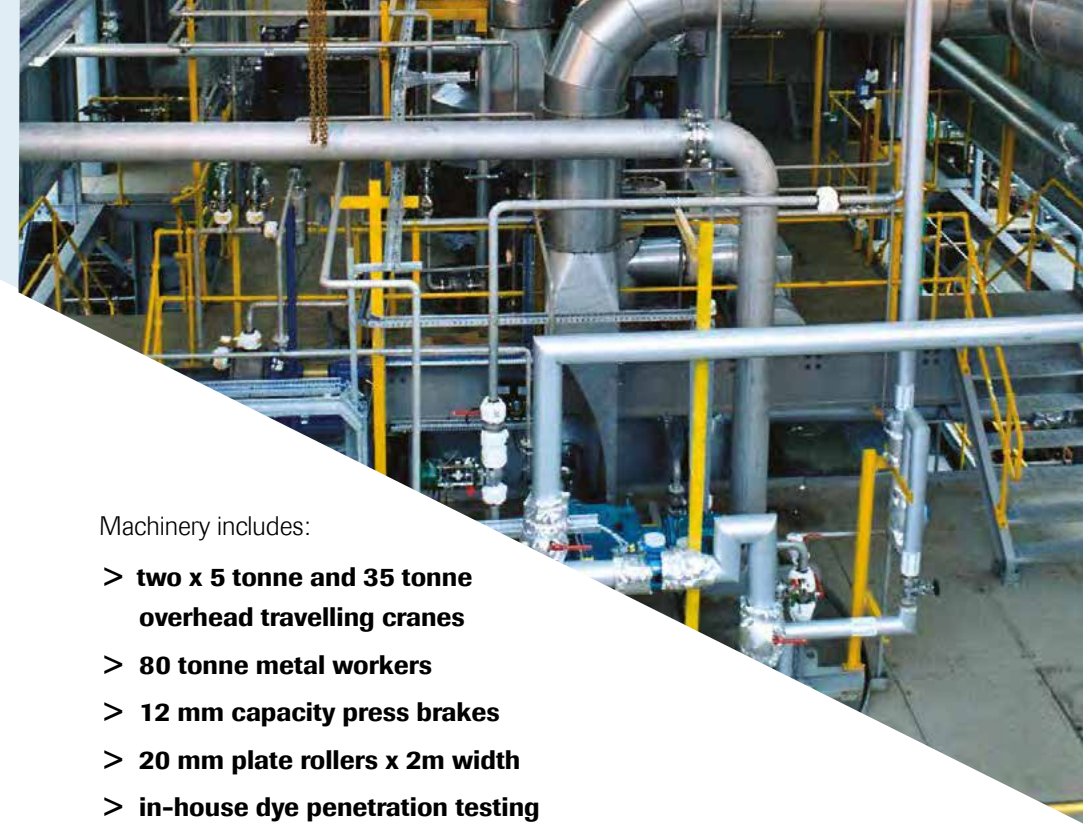
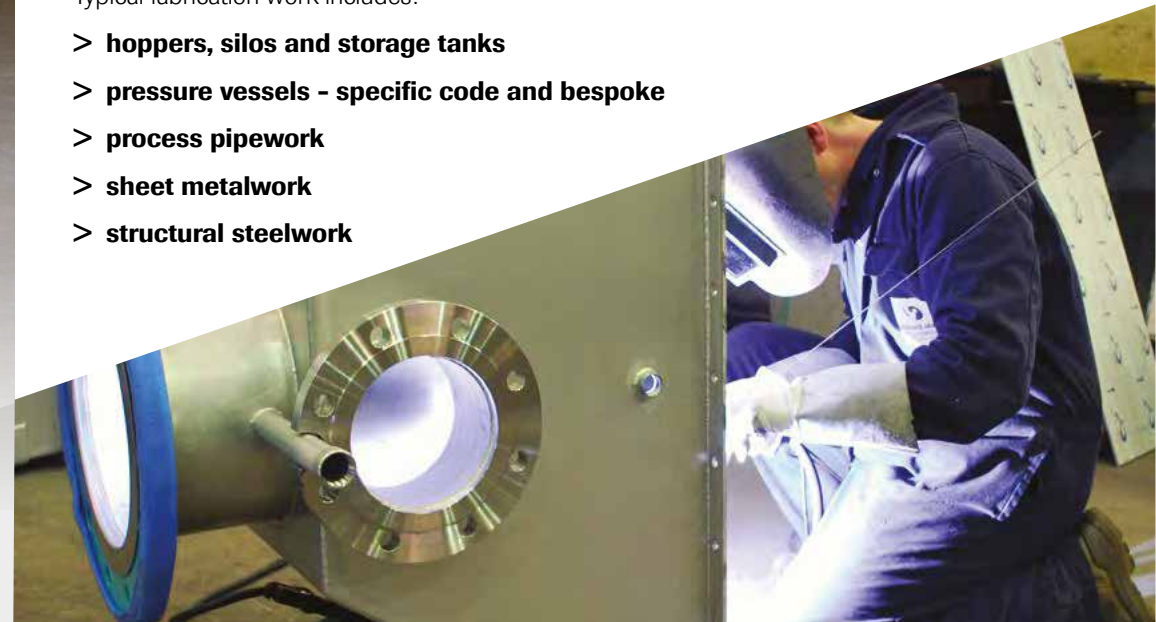
Fabrication in-house manufacturing capabilities

With a production facility of 60,000 sq.ft. combined with an expanding team of experienced chartered engineers, fabricators and coded welders, we can deliver all aspects of fabrication for any commercial project - large or small.

From specialised process equipment for the chemical, pharmaceutical and beverage industries, structural steelwork for sports stadiums to containerised kiosk units and custom-made pressure vessels. Projects can be stand-alone, delivered directly to the client for their own end use or as part of a turn-key in-house installation. With vast experience of working with stainless steel, carbon steel and exotic metals, we are proficient in highly skilled manufacture across a multitude of capabilities. A glimpse of our diverse client list illustrates the range of work we can do - BASF, Thames Water, Solvay, Smurfit Kappa, Huddersfield Town Football Club, Nufarm, Valtris...

Typical fabrication work includes:

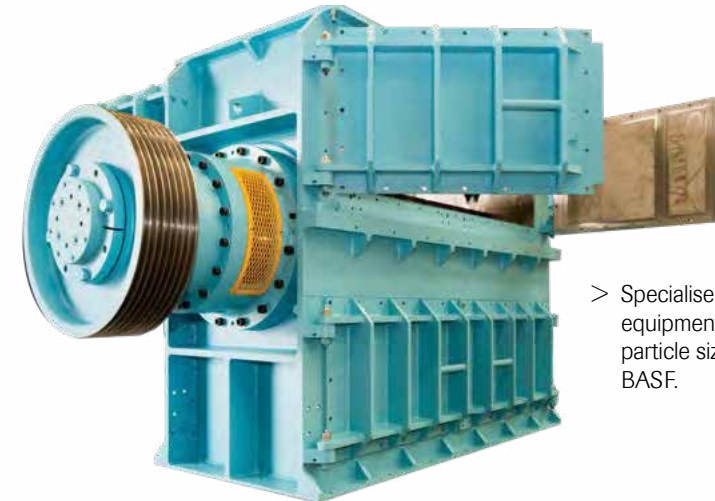
- > **hoppers, silos and storage tanks**
- > **pressure vessels - specific code and bespoke**
- > **process pipework**
- > **sheet metalwork**
- > **structural steelwork**



Machinery includes:

- > **two x 5 tonne and 35 tonne overhead travelling cranes**
- > **80 tonne metal workers**
- > **12 mm capacity press brakes**
- > **20 mm plate rollers x 2m width**
- > **in-house dye penetration testing**

Our dedicated procurement department sources raw materials responsibly, timely and cost effectively and oversees stock levels of common materials and components.



> Specialised granulator equipment (coarse / fine particle size reduction) for BASF.

> Process pipework and structural steelwork for Degussa.

Quality and Accreditations

We are committed to the continual improvement and support of our people, products and processes and are accredited to the following standards covering: fabrication, installation, engineering, procurement, inspection, testing and special processes:

- > **ISO 9001:2008** Quality Management System
- > **BS EN ISO 3834-2** Quality requirements for fusion welding of metallic materials
- > **BS EN 1090-1** Certificate of Conformity of the Factory Production Control for fabricated structural steel products up to and including Execution Class 3
- > **BS EN ISO 14001:2015** Environmental Management System

Regular internal audits and recorded non-conformance ensure that we maintain our accredited status. We are also **Achilles UVDB Audited**, enabling the utilities sector to be assured of our credentials as a quality supplier.



> 170m³ Sodium MCPA / PCOC storage tank for Nufarm UK Ltd. Fabricated from 2205 Duplex 4.7 m diameter x 12.6 m tall.

Engineering Installation

mechanical, electrical, instrumentation and control

Our dedicated team of NEBOSH¹ qualified project managers and engineers can oversee full installations, with project capabilities including:

- > **vessels and pipework** including **on-site fabrication**
- > **structural steelwork**
- > **specialist equipment**
- > **electrical and instrumentation**
- > **thermal and acoustic insulation**

Adding value to our service is our experience as site principals for health and safety, CDM² and supervision of sub-contractors, especially on COMAH top tier sites. We are familiar with site safety systems such as induction procedures, method statements, risk assessments and permits to work. In addition, our teams of site operatives hold a spectrum of competency cards ensuring we are capable of handling anything from small, local installations and plant upgrades to multi-million pound contracts for global corporations.

- > Line 7 project at BASF site, Bradford.
- Right: installation of fluid bed drier (designed and manufactured by Richard Alan).
- Below: installation of force draught fans.



- 1 National Examination Board in Occupational Safety & Health
- 2 Regulations for Construction - Design & Management
- 3 National Inspection Council for Electrical Installation Contracting
- 4 Global certification scheme for electrical and mechanical craftspeople and designers working in potentially explosive atmospheres
- 5 Appareils destinés à être utilisés en ATmosphères EXplosibles - directive consists of two EU directives describing what equipment and work environment is allowed in an explosive atmosphere.



On completion of a project installation we can provide complete mechanical and electrical testing and commissioning, providing relevant and appropriate training to ensure efficient and effective handover. We can provide FAT testing, SAT testing, pre-commissioning on water equipment and final commissioning on chemical equipment.

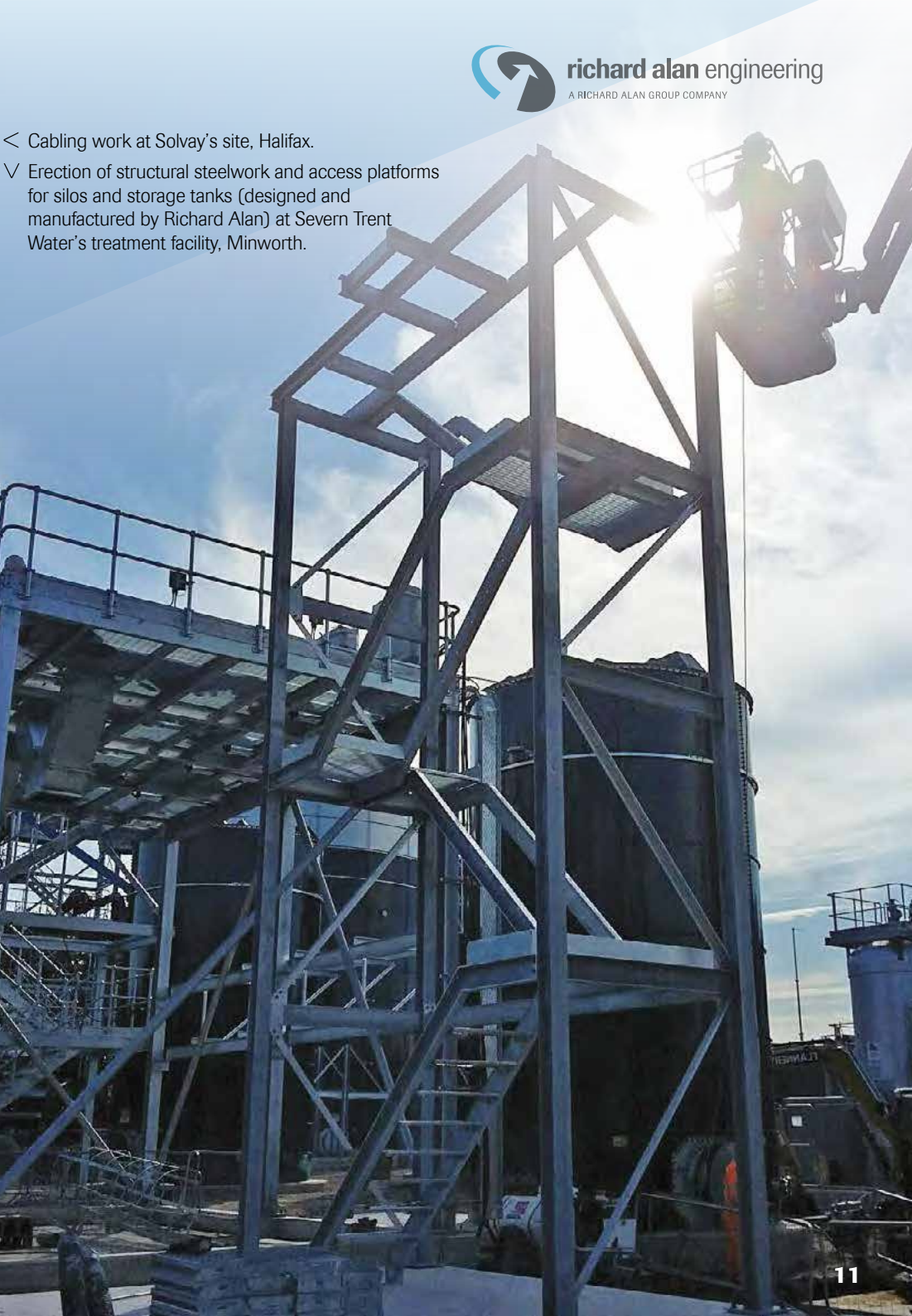
Electrical and Instrumentation installation

Our services include:

- > **supply and installation of industrial cable tray**
- > **armoured and non-armoured power and instrument cable**
- > **electrical trace heating**

We are an NICEIC³ registered contractor, and staff are CompEx⁴ trained and are familiar with the demands of hazardous area installations. We can provide inspection services with documented results, in accordance with the appropriate ATEX⁵ directives.

- < Cabling work at Solvay's site, Halifax.
- ✓ Erection of structural steelwork and access platforms for silos and storage tanks (designed and manufactured by Richard Alan) at Severn Trent Water's treatment facility, Minworth.





Water Treatment engineered systems and equipment

We have developed a range of products for dry and liquid chemical preparation, storage and dosing, with a particular specialism in polymer handling technologies.

With dedicated teams of process engineers and designers, in addition to our fabrication and production capabilities, we can provide full project management and delivery – from small treatment applications to large scale utility projects.

Our systems and equipment are well regarded within the water treatment industry

Schemes can be housed within security rated kiosks and containerised if the application requires, with mechanical, electrical and instrumentation installation. As well as off-the-shelf equipment and systems we can also provide purpose built and bespoke designs, supplied as part of a combined skid arrangement or separate assemblies.

Richard Alan products are backed by a full after-sales support service, including planned preventative maintenance, operator training and spares.

> JetWet® wetting head - part of the AeroWet™ polymer dosing system.*



^ Dual AeroWet™ hopper arrangement contained within product silo.

Depending on the nature of your water treatment application, we can also design, manufacture and install every aspect of a project including, structural steelwork, access platforms and process pipework. We offer handling, mixing and storage from 50kg hoppers to 50 tonne silos and above, plus tank packages ranging from 0.3 m³ to in excess of 35m³, manufactured to specific design codes or custom-made.

Our portfolio covers a variety of industries including regional and national utilities, paper and pulp, mining, quarrying, industrial process and chemical plants.

The benefits include:

- > **project management from experienced supplier**
- > **provision of integrated services ensuring greater collaboration**
- > **systems can be tailored to your requirements**
- > **testing and commissioning of units can be completed prior to delivery, resulting in on-site installation time and safety risk being significantly reduced**

> Bespoke Bentonite dosing and pump skid units.



^ Large scale silo, mixing and storage tanks, including structural steelwork and access platforms, all designed,





Design for Manufacture & Assembly (DfMA) and off-site modular build

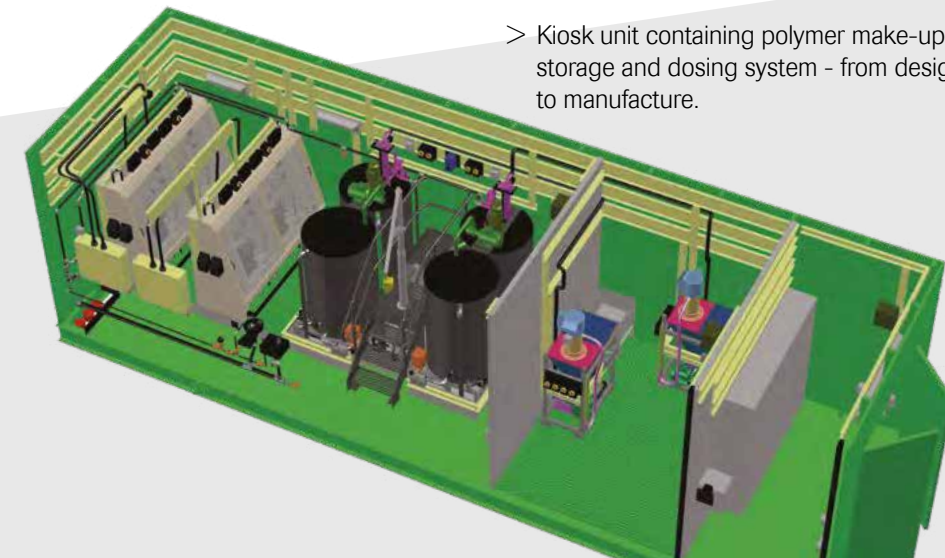
At Richard Alan, we believe by fully embracing Industry 4.0, we are ideally placed to serve our clients in an ever changing environment. Utilising BIM in our range of standard products enables us to collaborate in complex supply chains. By using CAD software, cloud based asset management and modern manufacturing technologies, we can provide a Totex approach to asset investment in all our DfMA and off-site modular build projects.

Design, manufacturing, assembly and testing of a total project, delivered in-house, ensures non-reliance on third party sub contractors and allows for complete control over project delivery, resulting in:

- > **site installation time being significantly reduced**
- > **a reduction in site safety risks**
- > **reduced multi contractor interfaces on-site**
- > **testing and commissioning completed prior to delivery giving the client early confidence of project success**

> Above left: chemical process equipment on a modular skid unit.

Centre: foam proportioning skid units for Angus Fire, for export to oil refinery in Ruwais.



> Kiosk unit containing polymer make-up, storage and dosing system - from design to manufacture.

Machined Precision Components

RAMCO CNC is a recognised brand in the precision machining industry. Specialising in components for the oil & gas, water treatment, food and beverage, chemical and automation industries - whilst also providing support for in-house fabrication projects. Our workshop has the CNC capabilities of handling exotic and super alloys, ferrous and non-ferrous materials as well as plastics.

A highly skilled team of engineers provides a direct point of contact for the customer, reacting quickly to requests with an efficient product turnaround. Working to client requirements on consignment orders and also supporting new product development and prototypes.

The comprehensive range of varied capacity machinery, includes:

- > **CNC milling, drilling and turning** (Doosan Puma, Haas)
- > **conventional machines** (Turret Mill, Webster Bennett vertical borer, radial arm drill, Colchester centre lathe)
- > **inspection and measuring** (Mistral CMM, Quantum CMM, Surfcom)
- > **calibrated instruments and gauges**



> 300mm square, subsea manifold housing block.

✓ In-house collaboration project - fabricated and machined damper body for regeneration industry.

> EN24 grade, crane track wheel 661mm diameter x 407mm tall.

Service and Maintenance facility management

As a continuation of our installation service, in many instances Richard Alan remain 'on-site' providing planned preventative and reactive maintenance. Through the supply of mechanical fitters and electricians, pipe fitters, welders, project engineers and AutoCAD draughtsmen, we provide integrated service contracts to the chemical, food and beverage, water, manufacturing and pharmaceutical sectors.

Outsourcing site maintenance to a specialist supplier such as Richard Alan can deliver a range of benefits including streamlined operation, reduced overheads and the peace of mind of not having to recruit and train in-house personnel.

When it comes to protecting your assets, prevention is better than cure. Planned preventive maintenance ensures plant and machinery operate smoothly on a daily basis, encouraging profitability, staff morale and effective time management. Not to mention minimising the risk of equipment damage and costly environmental incidents, whilst meeting safety and legislative requirements.



Services include:

- > **planned & preventative maintenance**
- > **asset management**
- > **mechanical, electrical, instrumentation & control, scaffolding, interior fit out / refurbishment, HVAC**
- > **plant shut down - planning and resource**
- > **mobile service engineers**
- > **critical spares identification & consignment**
- > **emergency call out facility**

These services are provided on a contract or routine daily work basis, on fully managed or client managed terms. A single contract covering all aspects of site maintenance results in easier control and management of the budget.

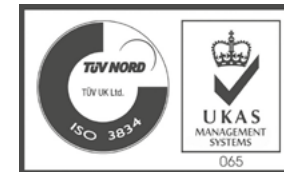


Health and Safety

At Richard Alan we place great emphasis on the well being of our employees, as well as recognising our corporate responsibilities towards our wider circle of stakeholders.

It is our aim to achieve a working environment that is free of work related accidents, dangerous occurrences and ill health. By working within the recognised industry standard HSE's 'Managing for Health & Safety' (HSG65) guidelines, we can be sure we are in compliance with current legislations in addition to working to our own stringent standards. We continually monitor and review all of our policies and quality accreditations.

- > We achieved a significant safety milestone of 100,000 man-hours without a single Lost Time Accident (LTA) during work on the BASF Line 7 Project in Bradford. From the start of factory fabrication in September 2016 to the end of October 2017, the total included both off-site and on-site time accumulated by Richard Alan Group employees, contractors and sub-contractors.



“Richard Alan is an exciting brand led by highly talented people who possess a passion to succeed. We never lose sight of the fact that our people are our business. Our continued growth stems from these empowered individuals working together as a team. The investment in people is reflected in our apprenticeship programme, designed to attract and retain young people with the skills necessary to take our business forward. The fact that apprentices make up 10% of our workforce is something in which we take immense pride.”

Robert Johnson, Managing Director



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