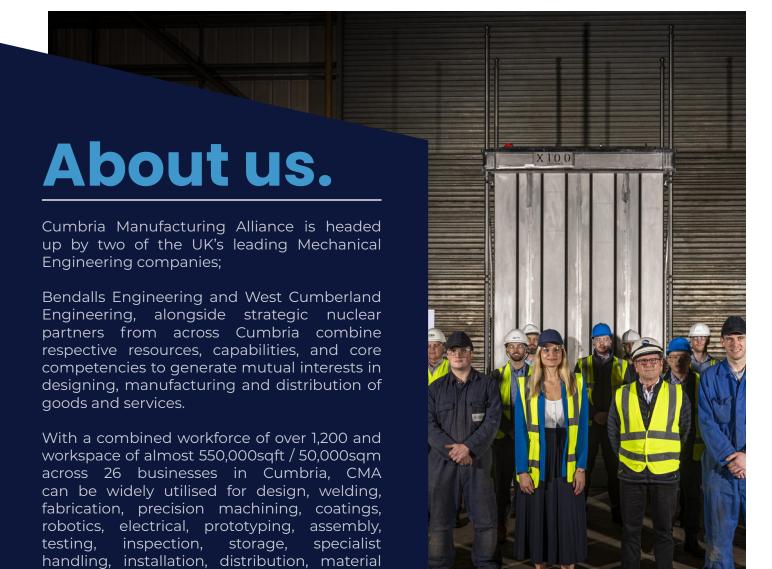


CUMBRIA MANUFACTURING ALLIANCE

Bringing together Cumbria's manufacturing capability to deliver end-to-end solutions that drive economic sustainability and growth in the region.





OUR MISSION

& consumable supply, project control, work winning solutions and training & development.

To promote and enhance the competitiveness and resilience of Cumbria's manufacturing industry by providing a platform for collaboration, knowledge-sharing, and skills development. We aim to create a Cumbrian manufacturing community that embraces sustainability, emerging technologies, creates high-value jobs and economic growth for the region.



OUR VISION

To inspire and support manufacturing excellence in Cumbria, where collaborative businesses can grow and prosper while driving innovation and contributing to the economic development of the region.

WHO WE ARE

Bendalls Engineering

Bendalls Engineering, part of the engineering division of Carr's Group plc has a strong reputation in engineering, located in Carlisle, Cumbria. With a history dating back to 1894 the Company has grown to become a leading provider of engineering solutions to a diverse range of industries, including nuclear, defence, and renewable energy.

Over the years, Bendalls Engineering has developed a reputation for delivering high-quality products and services to its clients, utilising cutting-edge technology and innovative engineering techniques. The company prides itself on its commitment to safety, quality and client satisfaction, and has built long term partnerships with it's clients.

Bendalls Engineering has a team of highly skilled engineering, designers and technicians, who work closely with clients to understand their specific needs and develop tailored solutions that meet their requirements. Bendalls comprehensive range of services includes design, fabrication, welding, precision machining, inspection, testing and site work.

Carr's Group plc the parent company of Bendalls Engineering was founded in 1831 and quickly became one of the largest baking businesses in Britain. They later diversified into agriculture then in 1996 Bendalls Engineering became the first engineering business to be acquired by them. This was followed by Carr's MSM, Swindon in 2003, Wälischmiller, Germany in 2009, Chirton Engineering, North Shields in 2014, NuVision Engineering, Pittsburgh USA on 2017 and finally NW Total Engineered Solutions, Barrow-in-Furness in 2019.

West Cumberland Engineering

West Cumberland Engineering are a well established and experienced fabrication company focusing on the manufacture of high-quality welded fabrications such as process pipework, tanks, vessels, modules, waste containers and high integrity ductwork mainly for the nuclear and petrochemical industries.

They have been supplying high integrity fabrications to Sellafield for over 25 years and are based at Lillyhall, Cumbria. Their management team and workforce have considerable experience in servicing the high-quality demands within these important and challenging sectors. The extensive facilities at their Lillyhall site are also widely utilised for final assembly, mock-ups, testing & familiarisation training prior to the installation of equipment within the live plant environment. They have developed a very flexible and responsive fabrication service which can be applied across a wide range of task size.

West Cumberland Engineering are a member of the Shepley Group, a wholly owned subsidiary of Renew Holdings plc. Shepley Engineers were founded in 1948 and have had a permanent presence at Sellafield since that time. In 1948 they were involved in the installation of stainless ducting systems on the Windscale Reactors, and in the early 1950's we were involved in the commissioning of the world's first commercial nuclear power station at Calder Hall. Based in Cumbria, they are a major multidisciplined contractor and project manager specialising in term contract works predominantly within the nuclear environment.



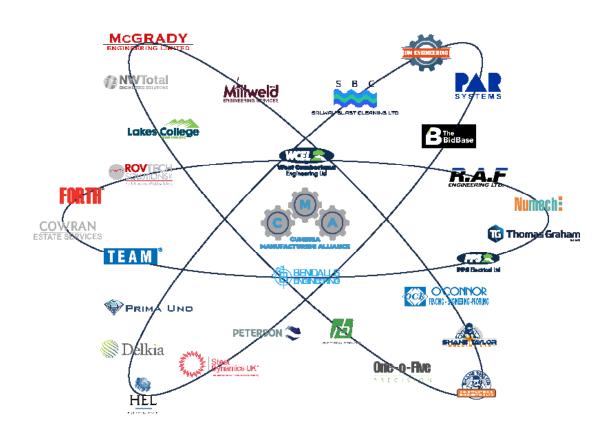


The Strategic Partners of Cumbria Manufacturing Alliance are a collaboration of business and organisations dedicated to support the growth and development of the manufacturing industry in Cumbria. The alliance brings together manufacturers, suppliers, educators and government bodies to promote collaboration, innovation and best practices in the manufacturing sector.

The alliance provides a platform for strategic partners to share their expertise, knowledge and experiences, and learn from one another.

The alliance also works to identify and address the challenges facing the manufacturing industry in Cumbria, such as skills shortages, supply chain disruptions and challenging market demands.

Through a variety of steering groups, networking, training programmes and other initiatives, the Partners of CMA aim to create a thriving and sustainable manufacturing ecosystem in Cumbria by driving innovation, productivity and growth, and by enhancing the economic and social well-being of the Cumbrian community.





26 PARTNERS

26 key manufacturing delivery partners located throughout Cumbria.



1,200 WORKFORCE

A combined workforce of over **1,200** from various areas in Cumbria



550,000sqft WORKSPACE

A combined workspace of almost **550,000sqft** across 25 partners.

OUR CAPABILITIES

Milling Machines

57

Max: x6m x y3.75m x 21.5m

Lathes

50

Max: 1.2m x 3m

Inspectors

40

PCN L3 in NDT - write and approve procedures to British Standards

Cranes

38

Max crane 300te

Wet Test Facility

1,350m³
1.2m litre capacity, one of the largest wet test facilities in the UK.

Metal Forming

13

Up to 4.42m x 3200kN

Welding

9 processes - including 111 MMA (Manual Metal Arc Welding), 121 SAW (Submerged Arc Welding), 131 MIG (Metal Inert Gas Welding), 135 MAG (Metal Active Gas Welding – Solid Wire), 136 MAG (Metal Active Gas Welding – Flux Cored Wire), 141 TIG (Tungsten Inert Gas Welding – Manual), 141 Orbital TIG (Tungsten Inert Gas Welding – Liburdi Diametrics /AMI Arc), 721 Electroslag Welding with Strip Electrode, 783 Drawn Arc Stud Welding with Ceramic Ferrule, BSEN ISO 9606-1: Qualification of Welders – Fusion Welders: Steels, BSEN ISO 9606-2: Qualification of Welders – Fusion Welding: Aluminium, ASME IX: welding, Brazing and Fusion Qualifications

Pressure Vessels

Break Press: Width 3.1m, 150 ton, Plate Rollers: Width 3m, 3-100mm, Pipe Bending: 15NB to 50NB, PD 5500: Specification for Unfired Fusion Welded Pressure Vessels

Reciprocal Saws

Guillotine 1: Width 3m, 12.5mm C/S 8mm S/S, Guillotine 2: Width 2.5m, up to 3mm, Pipe Cutter: Square cut, up to 80NB 3D and 4D

Testing and Inspection

Proof load testing, hydraulic & pneumatic, functional tests. Radiography & interpretation, ultrasonic, positive material identification, magnetic particle, dye penetrant, hydro, helium leak testing and paint inspection.

Precision Machining

Correa Fox with a max. spindle speed of 6000rpm, max. weight of 25000kg/24.5t, an X6000mm x Y3750mm table with height under bridge of Z1750mm. Largest Turning: 800mm x 3000mm

Electrical

Panel manufacture, CE&I installation across the complete project spectrum, installation of instrumentation pipework services, accredited fire alarm installer, commissioning and permit control services, integrated test facility and rig hall, passive fire protection

Training

Apprenticeships, upskilling courses, short courses, bid writing, marketing, project planning, project controls, forensic planning, dispute resolution and training

ACCREDITATIONS & PROCEDURES

ASME B31.3: Process Piping

ASME VIII: Boiler and Pressure Vessel Code

ASME 7: Welding, Brazing and Fusion Qualification

ASME 'U': Pressure Vessel Quality

BS EN ISO 1090-2 up to execution class 4: Execution of steel structures

BS EN ISO 14001: Environmental Management

BS EN ISO 15614-1: Qualification of Welding Procedures – Arc Welding: Steel and Nickel Allovs

BS EN ISO 15614-2: Qualification of Welding Procedures – Arc Welding: Aluminium

BS EN ISO 14555: Arc Stud Welding of Metallic Materials ASME IX: Welding, brazing and Fusion Qualification

BS EN ISO 9001: Quality Management Standard

ES_0_5391_2: Fabrication of Plant and Equipment (Stainless Steels) (Build 1&2 Pipework, Vessels, Heat Exchangers, Build 1 Tanks, Build 3&4 Heat Exchangers, Build 2&4 Tanks)

ES 0 5393 2: Fabrication of Plant and Equipment (Stainless and Carbon Steels)

ES_0_5394_2: Fabrication of Plant and Equipment (Stainless and Carbon Steels)

ES_0_5395_2: Fabrication of Plant and Equipment (Nickel Alloys)

BS EN 19443:2018: Manufacture associated testing of pressure vessels, tanks, columns, hoppers, general fabrications and machining services

PED & PESR Certification

500 Approved Weld Procedures

400 Approved Stainless Steel Weld Procedures

Commercial Grade Stainless Steels

In-House Inspectors

Different Welding Processes

In-House Design Teams

OUR AWARDS

BECBC Highly Commended Collaboration Award

Highlighting our delivery working together as CMA

RoSPA President's Award

WCEL have achieved eleven consecutive RoSPA Gold Awards

PPP Supply Chain Excellence Award

Presented by Sellafield, commending WCEL's Right First Time performance, local workforce and apprenticeship intake

EHS Innovation Award

Peterson were awarded the Operational Risk Management award for its use of Pro-Sapien risk assessment software

In-Cumbria Innovation Award Finalists

RovTech are shortlisted in the innovation awards



OUR PROCESS

How it works

Relevant opportunities for tender are considered by the CMA Steering Group, this consists of a panel of senior team members from Bendalls Engineering and West Cumberland Engineering. Where CMA agree the opportunity fits the Alliance, they break down the tender and propose which Partners are deemed the 'best athlete' for each broken down section of the scope. This is then presented to all Partners for agreement on involvement, and those who express interest are invited to tender for a section of the scope that suits their capabilities. Award of scope is then determined by CMA based on resource availability, current workloads, timelines and cost.

All Partners involved will then have a place on the CMA Project Panel and decisions will be made as to who is best placed to lead and play the major roles in each project.

Bendalls and WCEL have made a commitment to assist all Partners in any aspect in which they require additional support, e.g. bid writing, planning, quality control & assurance and document control.

The intention is that as a collective, CMA will have the capability to bid for orders considered too large or complex for a single business entity within Cumbria alone. CMA will also provide the client the confidence that risk is reduced in the supply chain delivery as there are several businesses who can step in or cover one another should issues occur.

CMA brings a new style of supply chain resource based in Cumbria, delivering high quality, value for money, co-ordinated, co-operative and reliable service to support our clients.



Cowran Estate Services

Cowran Estate Services is a highly skilled and accredited multidisciplinary company with a civil engineering focus that provides a diverse range of services across various sectors. We possess high competence in construction, civil engineering, steel fabrication and erection, fencing and grounds maintenance. Our team is accredited as a principal contractor with practical experience alongside CHAS, SMSTS and SSSTS certifications, as well as expertise in concrete, drainage, and sea and flood defence.

With a wealth of knowledge and experience in a variety of environments and situations, we have the capability to undertake a range of projects of varying complexity. Our team's breadth of expertise enables us to provide a comprehensive range of services that can be tailored to meet the unique requirements of each project and client.



At CES, we are committed to delivering high-quality workmanship and outstanding customer service. We take pride in our work and go above and beyond to ensure that our clients are completely satisfied with the results. We believe in fostering long-term relationships with our clients and working collaboratively with them to deliver projects that meet their exact requirements.

Our commitment to safety and environmental responsibility is at the forefront of everything we do. We are dedicated to ensuring that all of our projects are carried out in a safe and sustainable manner, with a focus on minimizing our environmental impact and delivering our customers goals. Beyond the project we care about the land.

Delkia

Delkia is a specialist systems integrator operating throughout the UK and Internationally for mission critical and highly regulated sectors, with a focus on Clean Energy, Aerospace and Maritime sectors.

Founded in 2013, Delkia has developed an impressive bluechip portfolio providing safety and mission-critical electrical, instrumental and control system engineering design and build services to high-integrity industries.

Our offering includes digital engineering, systems and technical consultancy, systems integration, engineering design, build-to-print, control panel build and complex control systems support, all of which are harnessed specifically for each projects needs, maturity and technology requirements.



With a team of dedicated experts to evaluate, design systems to integrate, install, commission and maintain, we're an innovative engineering services provider dedicated to the profession. We believe we have a flexible and personal approach to all of our clients, and we work hard to build lasting relationships. We are unique in being able to offer our clients in-house solutions.

No. 9

DM Engineering

DM Engineering Ltd is a family-run precision engineering company based in Maryport, Cumbria. As an ISO 9001 certified company, we take great pride in delivering a range of mechanical engineering services to our esteemed customers. Our machinery encompasses both high-volume production and heavy-duty capabilities, empowering us to create anything from large bespoke parts to mass-produced precision components. Leveraging the latest CAD/CAM software, we ensure optimal accuracy and efficiency throughout the manufacturing process.

Our well-equipped machine shop boasts a wide array of Manual and CNC Lathes and Milling machines, enabling us to offer a capable and dependable precision machining service, giving a







maximum turning capacity of 700mm diameter and 2500mm length, while our milling capacity reaches an impressive 1800mm x 800mm travel with a weight load limit of 3500kg.

We have over 40 years' experience in manufacturing and refurbishing Press Tooling and other bespoke equipment, where high tolerances are achieved using our Jones & Shipman Grinders, and Tool and Cutter Grinders. Additionally, we offer Fitting and Assembly services, encompassing the assembly of trial builds and mock-ups in our 800m2 workshop. Our skilled team also provides on-site breakdown repairs, routine maintenance, refurbishment and installation of new machinery.

With a proven track record of manufacturing top-quality machined parts for the nuclear sector and other highly regulated industries, we have cemented our position as a trusted supplier within Cumbria's Nuclear and Renewable Energy supply chain.

Forth Engineering

At Forth, we dedicate ourselves to Engineering excellence, working closely with industry leaders in a wide range of sectors to help them deliver innovative and ground-breaking solutions to complex problems.

While the range of industries Forth serves are extremely diverse, they all have a common thread of focussing on trying to remove "people" from hazardous, potentially life-threatening situations. Much of Forth's recent work has been based around providing remote solutions to allow decommissioning operations to be



undertaken from a safe environment with operatives being distanced from the workface.

Our ability to apply a common sense & pragmatic approach to Engineering aligned with state-of-the-art technologies and extensive Research and Development has allowed us to deliver a wide range of solutions to many complex scenarios. These solutions are achieved by combining engineering knowledge and experience with in-depth knowledge of what is achievable within the restrictions of Oil & Gas, & Nuclear environments from both physical and political viewpoints.

Capabilities include; remote solutions, robotic solutions, pigging tools, asset integrity, caisson inspection, HD visual inspection, HP water jet cleaning, ultra sonic inspections, restricted access inspection, asset inspection, debris recovery, and bespoke project solutions. Our 22.5m long by 10m wide and 6m Deep Recovery Facility holds 1.2 million litres of water and is one of the largest wet test facilities in the UK. We also have a trade counter on site at our facilities in Maryport, Cumbria.

Forth welcomes problem statements from any business or organisation and develops new methods using innovative technology which allows operators to achieve what was considered not possible before.

Hold Engineering

At Hold Engineering Ltd, we have established a strong reputation for the successful delivery of fabrication, on-site installation and decommissioning services in the nuclear industry. Based two miles from the Sellafield site, our highly trained team are local to West Cumbria and have worked within our business for many years, bringing stability to the company and the services we offer.

We have skilled Project and Fabrication teams and an Installation team who have carried out works in both clean and radiologically hazardous areas and can provide a wide range of services, including; Design for Manufacture,



Steelwork Fabrication, Testing and Erection, Plant, Equipment and Pressure Pipework Installation, Steelwork Refurbishment, Infrastructure Support, Setting Out and Inspection, Decommissioning Support and Rapid Response to Emerging Works.

Our teams are fully SQEP for working in contamination-controlled areas up to C5 conditions. Our quality management system is certified to ISO 9001:2015 and we also have in-house capability for the CE marking of our fabrications in accordance with BS EN 1090.

We pride ourselves on being able to offer assurance that all works will be completed in a safe and professional manner, with all phases being subject to risk-assessed processes and procedures undertaken by SQEP resource and are committed to working collaboratively throughout all stages of the project with our clients and suppliers alike.

Lakes College

Lakes College is the largest provider of further and higher education in West Cumbria, with a wide range of technical and vocational education, training and services on offer.

More than 700 employers across Cumbria work with the college, which delivers apprenticeships from Level 2 to Level 6 (degree level) programmes and supports 1,000 apprentices every year.

The college is constantly evolving and will open its £1 million Digital Accelerator Hub this summer – a high-specification space to upgrade Digital skills in West Cumbria.



The development of the Engineering Skills Academy on campus provides apprentices with an in-depth introduction to engineering for one year before joining their employer in the workplace in Carlisle and West Cumbria. The Carr's Engineering Skills Academy in association with Lakes College has opened its doors at the Bendalls Engineering site in Carlisle and delivers apprenticeships up to degree level and courses to upskill or retrain employees in an engineering and office based capacity.

Lakes College has strong links with the nuclear sector and supply chain and hosts the National College for Nuclear northern hub on its campus. The college also supports companies of all sizes to sustain social value processes, recruit apprentices, deliver placements for T Level students, and grow corporate responsibility and sustainability.

No. 11

McGrady Engineering

McGrady Engineering Limited (M.E.L), formerly known as G J McGrady Engineering, was established in 1981 and was originally based in a workshop at Howgate, Whitehaven. Outgrowing that site, we moved to the current workshop at Red Lonning in 1994. Over the years M.E.L have and still do, continually strive to improve in every aspect of the Business. We currently hold accreditations to ISO 9001 & EN 1090-2 to execution class 4, and are aiming to have accreditation to BS EN ISO 3834 before the end of 2023.



In addition to the two carbon steel workshops M.E.L

have recently invested in a bespoke fully segregated workshop to able the production of stainless-steel fabrications for nuclear and other sectors. M.E.L's core services include but are not limited to; pipework & pressure testing, small vessels, bespoke fabrications, containment, security & structural steelwork including F.A.T and trial building of all fabrications, offered in both carbon steel & stainless-steel.

M.E.L carry out most NDE & NDT activities in house with CSWIP 3.2 & 3.1 welding inspectors and PCN level 2 technicians for MPI, DPI & radiography Interpretation and work closely with local SME's to provide UT and radiography services.

We have always worked for a wide range of clients and sectors from food to nuclear and is used to working to a wide range of client, national & international standards, specifications and customer requirements.

Millweld

Millweld Engineering Services were established in Workington in 2005. Having outgrown our previous premises, we located to larger premises in 2012, and in 2018 we moved to our purpose built facilities in Seaton, Workington.

Millweld undertakes steel fabrication of complex structures in stainless, carbon and aluminium. Products can include tanks, platforms, ladders & staircases, brackets & supports as well as bespoke items made to order. We also offer a full design process and will produce CAD drawings for client approval.



We offer pipe fabrication and welding, from small bore to large diameter pipes, holding several weld procedures which are compliant with BS-EN-ISO-15614 part 1, and we also undertake various tasks for the wind turbine industry including onshore/offshore welding & fabrication and bespoke design solutions, and the team is fully certified for offshore servicing to GWO standard. All of our offshore technicians are authorised and trained on VESTAS V90-3.0 MW turbine training.

We pride ourselves on customer care and will always go that extra mile to accommodate your requirements. The company has built a solid reputation for its reliability and the quality of its workmanship, and we have invested in the latest processes and training to keep us at the forefront of the industry.

Together with business owner Des, the employees form an experienced and reliable team – always committed to making sure that the customers are supplied with what they want, when they need it!

Numech

Numech are Engineering specialists who are dedicated to delivering dynamic, responsive and flexible services that are tailored to meet the unique needs of our customers. We offer a comprehensive range of solutions to various industries throughout the UK. Our expertise spans across machining, fabrication, pipe work, welding, mechanical fitting, site work, plant installation and maintenance, assembly testing, and repair.



As a company committed to continuous improvement, we are constantly expanding the scope of our services

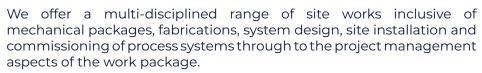
to provide an unrivalled and diverse range of solutions in the West Cumbria region. At Numech, we take great pride in our ability to deliver projects that adhere to stringent quality specifications while maintaining swift turnaround times and utmost precision.

Whether as the main contractor, subcontractor, or collaborator through framework agreements, Numech is well-equipped to engage in various project roles to suit our clients' requirements. We proudly serve as a Tier 2 supplier to Sellafield Ltd, delivering high-quality grade 02 products that meet the strict standards of this esteemed organisation.

Numech is your trusted partner for all your engineering needs. Our dedicated team of professionals is ready to provide outstanding services that exceed your expectations.

NW Total

NW Total Engineered Solutions Ltd. are a manufacturing and engineering company specialising in process equipment packages and product supply. Within our facility we have core skills allowing us to manufacture and test a wide range of equipment. Two areas we specialise in are pipe welding and mechanical fitting which lends itself well to the types of work we are involved in. We also have in-house level 2 weld inspection and non-destructive test capabilities across several divisions including Nuclear, Site Services, System Build, and Utilities.





We are able to offer a range of specialised products and services to the Nuclear Sector from the supply of bespoke fabricated items utilising our BS-EN coded welders, to modular assemblies incorporating pipework, instrumentation, pumps and valves and associated equipment as well as having the capability to design, supply, manufacture, install and commission systems.

Our testing capabilities include Life Cycle Testing, Pressure Testing, Functional Testing and the setting and testing of Pressure Relief Valves. We also have in-house test beds to allow us to perform hydraulic testing of various pump types.

We are committed to the promotion and maintenance of excellence in Health & Safety inclusive of environmental management systems.

No. 13

O'Connor Fencing

O'Connor Fencing is a Whitehaven based Manufacturing, Fabrication & Fencing company with over 40 years' experience of working within nuclear licensed sites across the UK.

We specialise in the manufacture of carbon steel staircases, cat ladders, handrails, steel framed canopies and steel framed covered walkways, and in the manufacture and installation of high specification security fencing, barriers, gates and turnstiles.



programmes and schedules, fabrication drawings and mock-up trials, and we have various capabilities in machining, Plasma, Laser & Flame Cutting, fabrication, welding, inspection, storage, office space and conference facilities.

Maintaining a 28,000 square foot fabrication workshop including a 5-tonne overhead crane. Offering the capacity to undertake large orders but located close enough to make/modify components at short notice. Giving OCF a distinct advantage when undertaking complicated bespoke projects. OCF also own a further fabrication / storage facility adjoined to the above unit giving a further 27,000 square foot fabrication workshop including office accommodation for up to 30 people & 5 tonne overhead crane.

Our coded fabricator/welders work to independently approved weld procedures, our inspector is CSWIP 3.1 inspector/RWC certified and our visual and MPI procedures are Sellafield approved. All fabrication and fencing projects are installed by experienced teams who are led by a SQEP supervisor. We hold numerous accreditations such as ISO9001, UKCA Marking to 1090-1 Ex Class 2 and most recently gained accreditation to ISO3834.

One-O-Five

One-O-Five Precision was founded by Richard Pratt in January 2021 and has grown to be an up and coming name in the Cumbrian Engineering Sector.

We undertake Milling & Turning works and can carry out one off and batch work. Currently, we carry out works in the Motorsport, Oil & Gas and Defence Sectors.

Our aspirations are to increase the sectors that we work in and collaborate with local companies and organisations. We would also like to explore the

use of unmanned robotic machining and see One-O-Five grow alongside the use of new and advancing technology.

The One-O-Five team has grown since 2021, taking on a Workshop Foreman and an Apprentice in 2022. Alongside our experienced Machinist and Office Manager, our team has a combined experience of over 35 years.

We are on track to finish our Quality Manual and receive certification to ISO 9001:2015. With the belief that continual improvement, working safely and taking responsibility for our work are key elements to the company, #team105 have come together to bring a family feel to a growing business.

Our vision is to become a leader in the Cumbrian area for quality of product and development of machining capabilities. We value every customer, employee and supplier and aim to put Employee Satisfaction, Customer Service, Quality and Safety at the forefront of our business whilst minimising any Environmental Impact we may have.



PAR Systems

PAR Systems Ltd are a UK based SME and since 2021 have been a part of the Nuclear Site Services Group (NSSG). We are a specialist in the Nuclear Industry and have worked with our key customers to develop a product and service range that is tailored to the requirements of this environment.

PAR Systems specialise in the design, build, installation and lifetime support of Nuclear site remote and material handling systems which include telerobotic manipulators, MSM's, robotics, high radiation cameras, Nuclear cranes and a range of tooling and support



equipment which are deployed around the world in high radiation environments.

Our rounded offering of support begins with pre-studies and design and runs through manufacture, trials and testing, installation, commissioning and most importantly, lifetime support on site. Our ability and willingness to look after equipment once in a high radiation environment sets us apart from many other companies and in taking on that lifetime support approach, helps develop our culture of right first time

Peterson Energy Logistics

Peterson is a world-leading, innovative and highly trusted international energy logistics and supply chain solutions company. We work in partnership with our customers to efficiently plan and manage the safe movement of critical, high value equipment and resources globally.

Our main operational bases are strategically located in the Netherlands and the UK, with supply bases in other parts of the world including Australia, Qatar, Trinidad & Tobago and Guyana. We have had a presence in Cumbria since 2015 and are



committed to making a positive impact in the communities we work in by supporting local projects and initiatives.

We have built on our extensive experience in the energy sector to include the supply of logistics and distribution services to nuclear clients. This consists of security and distribution centre management, as well as the provision of delivery management system software to reduce on-site traffic flow at peak times. We also run quayside operations throughout the UK, managing extensive warehouses, port facilities and a dedicated fleet of vehicles.

Our wide range of knowledge and expertise is supported by Lighthouse, our suite of industry leading digital applications, which provides real-time visibility across the entire logistics supply chain. Lighthouse allows us to identify and create opportunities to share resources and optimise operations, resulting in significant cost savings.

Peterson Energy Logistics is a certified carbon neutral business under the PAS 2060 accreditation scheme, with a commitment to achieving net zero by the end of 2025. Our customers now benefit from the assurance that our logistics services are carbon neutral certified and will receive consistent and accurate carbon data to support their scope three emission targets.

PPS Electrical

PPS Electrical are a well established specialist electrical and instrumentation contractor who have developed an excellent reputation within the Nuclear and Chemical Process Plant environments. Part of the Shepley Group, we were acquired in 2006.

Our work involves a comprehensive range of electrical and instrumentation support within these particularly challenging sectors. We have a head office including a large workshop and panel manufacturing facilities in Barrow-in-Furness as well as several site specific establishments.



We've been engaged on the Sellafield site since 1995, where we have an office complex and a site compound including stores and a large workshop. PPS Electrical are a JIB registered organisation and members of the Electrical Contractors Association as well as the ECIA. We have a very healthy training and development agenda with a large domestic apprenticeship scheme to deal with the anticipated demand within our sector.

We have a passion for accuracy and getting it right first time, every time. Our teams work diligently to implement our proven processes and procedures throughout the lifecycle of a project. Our success stems from the ethos across the business to drive projects and achieve positive outcomes for our customers and delivery partners.

Prima Uno

Prima Uno are an award winning West Cumbrian consultancy providing programme management, cost consultancy, project controls, dispute resolution, programme audit / interrogation and associated specialist consultancy services to public and private sector clients in the UK and around the world. We are experts in project planning, project controls, earned value management, critical path analysis, forensic planning, claims and disputes. We operate in many sectors such as Nuclear, Rail, Civil, Water, Utilities, Highways, Oil and Gas, Pharmaceuticals, Tunnelling, Mining and Renewables.



Our team of project controls specialists and project & programme managers have experience in taking lead roles on some of the worlds largest highest profile infrastructure projects bringing LFE and sharing experience with our integrated teams. We are an SME with a national reach of the elite of resource.

We are a true West Cumbrian based SME and spend in excess of £1m per annum in our local economy of West Cumbria. We have a proven record of supporting major multi sector projects in Cumbria and the UK and our core principles for delivering projects are built on trust, consistency, repeatability, reliability and an approach that allows us to continually refine our service to offer the best value to our clients.

What distinguishes us from others are our people. Prima Uno's consultants combine an in depth project planning and project controls expertise with world class skills and techniques. We pride ourselves on delivering the best service above and beyond your expectations because our name is our reputation.

R.A.F Engineering

R.A.F Engineering Ltd is an SME with highly skilled engineers producing mild and stainless-steel precision engineering and machined items incorporating welding, fabrication, and assembly. We offer a professional service for all our customers, proudly working to the ISO 9001:2015 quality standard. Our extensive facilities allow us to carry out a wide range of projects from over-the-counter sales to the general public, through to the steel & nuclear sectors.



Our independent engineering firm is committed to providing the highest quality service possible, and we pride ourselves

on our customer service ethic. We constantly strive to improve our skills and knowledge, so you can be confident that our customers are receiving the best possible service. With our fully experienced and dedicated workforce, up to date equipment for CNC milling/turning and a single point of contact, you are always assured of a rapid and flexible response to all your enquiries.

We have earned ourselves a strong reputation for continuous improvement and innovation. Our facilities currently comprise of various size and capability machine centre's including 4-axis, CNC turning machines and manual lathes, we also have a dedicated space for our welding capabilities. Together, we are pushing the limits of what is possible, we stay ahead to create the best standards for our customers' needs.

Being part of CMA allows R.A.F Engineering to gain & offer support to other companies within Cumbria while also supporting the economic growth within the region through collaboration and innovation.

RB Electrical Services

RB Electrical Services is a dynamic, solution focussed SME based in Cumbria. We have gained an excellent reputation for our quality of work, dynamic approach and cost-efficient delivery of projects, working across all of the main sectors, including industrial, commercial and residential. This also includes work within schools for the local authority. We also have a key focus in the nuclear sector, both working in collaboration with other SME's and directly with existing Tier 2 companies.



Our core business is focused around Installation of Electrical, Control and Instrumentation systems, Inspection and Testing of new and existing

Electrical, Control and Instrumentation systems and installations, including Fixed installation testing (EICR), Power Monitoring and Data Logging, PAT Testing & 3rd party inspections of installed systems, Validation, Commissioning and Handover of Electrical, Control and Instrumentation, Mechanical and Process-based systems, installed by ourselves and for third parties, Design of Electrical, Control and Instrumentation systems – small scale design projects can be catered for in house.

For larger projects we would engage with our supply chain partners for support at the current time, although this is an area that we are keen to expand on with Panel Build & Testing facilities, and Storage & Workshop facilities.

We also have experience in Construction Management, Project Management, Early Contractor Involvement (ECI), Constructability reviews, Design surveys, Project Life Cycle delivery.

We continue to build a strong relationship with Lakes College, though both apprentice placements and work experience opportunities.

Responsive

Responsive NDT are based in the UK and an independently owned specialist in non-destructive testing and inspection. We provide NDT examinations on sites around the UK and into Europe in addition to our independent testing facilities and mechanical testing laboratory in the UK.

We operate from 3 strategic locations allowing UK wide coverage from Cumbria, Manchester and the Southampton. From our UK based NDT locations, we can be on most sites at worst case within hours, offering same day non-destructive testing and inspection services.

Responsive set the standard for high quality efficient testing and inspection services. We have in house PCN and ASNT Level



We utilise technology within NDT. Our custom built, bespoke, reporting system our inspectors utilise controls all operations in real time and ensure reports are created the same day with minimal mistakes. Everything from consumable batch numbers, equipment calibration and staff qualification is controlled online, real-time reporting. We are one of the only UK non-destructive testing companies that can offer this service.



Roytech Solutions

Rovtech Solutions Ltd provide solutions to some of industries most difficult remote engineering challenges. For over 3 decades Rovtech have been market leaders in the design and manufacture of fit for purpose tooling in support of inspections and operations in the nuclear, oil & gas and marine industries.

Engineering capability; includes EC&I and Mechanical Design, Fabrication, CNC and Manual Milling and Turning, Mechanical and Electrical/Electronic Assembly and comprehensive testing facilities to deliver turnkey solutions in the most efficient, cost-effective manner.

RSL provide a wide range of off the shelf products purpose built for remote inspection and remote intervention in harsh environments, with a large back catalogue of bespoke equipment designed to provide a safe interface between humans and hazardous processes (engineering beyond arm's length). Products include in air and submersible cameras and DVR systems and LED lighting, long reach tooling, manipulators and grippers, and ground based and submersible ROVs.



Shane Taylor Welding

Shane Taylor Welding Ltd is a specialist welding, fabrication, pipework and mechanical engineering company, which has been trading since 2014, based on Solway Trading Estate, Maryport with a dedicated team of professional and skilled welders, pipefitters, fabricators and labourers. We offer practical solutions from specialist pipework fabrications, full site installations, repairs and all fabrications in the Engineering, Manufacturing and Construction industries.

Our on-site welding and engineering services cover the whole of the UK. Our staff are trained in the use of mobile access platforms, scaffolding, forklift, telehandlers & small crane. Plus,



confined space trained and carry CSCS cards. We are experienced in working on and for highly regulated site's such as Chemical, Nuclear, Construction, Food Manufacturing & Marine situations. Specialising in Biogas, Chemical & Oil sites, pipework Fabrications & much more.

Due to demand for our Construction services, we set up a separate division in 2023, Shane Taylor Construction & Engineering Ltd, we offer a wide range of buildings services to both commercial, industrial & domestic customers, across the UK, specialising in Industrial & Commercial buildings, such as Industrial Units, Factories, Warehouses, manufacturing site's etc. From small projects to large we can offer a high-quality service on time & in budget. Construction services include: New Build Constructions, Extensions & Refurbishments, Ground Works & Foundations, Concrete Slab Base, Steel Frame Structures, Brick & Block Work, External Cladding, Demolition/Clearances, Drainage & Mains Service Supply, Fencing, Car Parks & Access Roads, Canopies & Stockyards, Roller/Access Doors, Shot Blasting, Spray Painting and Joinery Works.

Solway Blast Cleaning

Solway Blast Cleaning Ltd is a well-established company based on the Clay Flatts Industrial Estate in Workington. We offer High Quality Services in Blast Cleaning & Protective Coatings to all sectors.

In our facility we can clean most materials from large structural Carbon Steel to the smallest delicate machined components. In this process we can remove, rust, paint, milscale and any hard coatings. We also have a vast selection of abrasives used in house to cover most aspects of the industry. SBC can even remove the gel coat from composite panels without damaging the material, these processes are controlled in house by experienced and qualified staff.

Working to the highest standards in the industry daily, all carbon steel work is cleaned to BS EN ISO 8501-1 and a minimum Swedish standard of SA 2, we can achieve any cleanliness specification required and a surface profile up to 200um peak to trough if required.



Protective coatings are applied on completion of the cleaning and inspection process in our controlled environment within in our facility, coatings can be applied by hand, conventional spray, pressure spray or we can use the latest technology from Graco in the Airless Spray System for the larger items or larger coats, such as fire protection. Multi coats systems are easily covered in house, all items are masked off in house to drawings and specification.

Solway Blast Cleaning also offer coating inspection out on site for all industrial works using a BGAS/CSWIP Grade 2 Coating Inspector.

No. 19

Steel Dynamics

Steel Dynamics Ltd are the world's first metal service centre to be accredited to the Nuclear approval ISO 19443, for supplying products and services Important To Nuclear Safety (ITNS).

With the economy of scale that our 15,000 tonnes of inventory bring coupled with our added value processes such as de-coiling of plate supported by potentially the largest & most powerful water jet in the



UK, at $14m \times 4m$, laser processing up to $8m \times 2.5m$ and CNC-Machining to $4m \times 2m \times 1m$, Press Brake to $4m \times 320$ tonnes and edge weld prep. We can provide one touch solutions ensuring lowest total acquisition cost, best value & best practice are realised utilising our supply chain management system TSC-Total Service Concept., reducing the metal content per project and releasing valuable capacity.

TSC is a structured, systematic approach that guarantees to streamline, removing cost, risk and waste from your supply chain allowing you to focus on your core competences. TSC challenges existing manufacturing processes and procedures ensuring the minimum amount of metal is consumed per programme, delivering improved material sustainability and product time to market, maximising efficiencies.

With our purpose to relentlessly work together to reduce our customers costs enabling UK manufacturing to flourish, we can ensure that we develop mutually beneficial business partnerships that leads to mutual growth and prosperity.

All our stainless steel is processed through our 100% SS only processing facility, with all our carbon separated within our carbon steel processing facility.

TEAM

Team Industrial Services is an International Specialist Engineering Services Company based in Kendal, Cumbria and other global locations. The Team manufacturing facility in Carlisle is one of the leading engineering companies specialising in precision machining and fabrication services in Cumbria. With over 40 years' experience in the manufacture, assembly, and testing of a wide range of complex specialised equipment for various industrial applications including Nuclear, Renewables, Oil and Gas Industries, Petrochemical, Aerospace, Medical, Construction, Food & Beverage.

Team can work on both small-scale, intricate machining projects and large-scale, mass production projects; making it possible for us to quickly address even the most complex and demanding requests of our clients. The Team Carlisle Manufacturing Centre has a combined manufacturing area of 16,865 square feet, 2,800 square feet of planning and testing space, and overhead cranes with a lift capacity of 250 kg to 6.3 tonne.



Capabilities include CNC Milling, CNC Turning, EDM, Vertical Boring, with automated CMM touch probe and Image Dimension Measurement Systems. Fabrication and Welding of Carbon and Stainless, GTAW, SMAW, FCAW, MCAW including NDE inspection that ensures we are prepared to undertake required processes and procedures to exacting specifications in a range of materials in a timeous manner.

Team has been approved by Lloyd's Register to the following standards: ISO9001:2015, ISO14001:2015 and ISO3834-2:2005 Quality Requirements for Fusion Welding of Metallic materials

From concept to engineering and from prototype to running the final production, TEAM provides a single source solution to resolve your engineering and manufacturing machining needs.

The BidBase

The BidBase provide work winning solutions helping organisations secure more work! The BidBase team represents over 40 years' experience in articulating customer greatness through sales, marketing, bid writing and operational delivery in construction, engineering and energy sectors.

Although based in the North of England, an international service is provided for customers in maximising work winning rates, increasing revenue and profit, and providing support from initial pipeline management to final contract negotiations.



Strategic management and targeted bidding make the most efficient use of bid budgets, allowing more bidding work, and to drive a higher probability of winning. Integrating to supplement customer teams during peak workloads also minimises internal overhead costs.

The bid services portfolio broadly offers support in marketing, sales and qualification, tendering and delivery. Specifically, this includes opportunity and pipeline development, production of bid strategies and win themes, bid writing and editing, bid management, production of bid procedures, staged bid review processes, technical services support, and bid training.

The promotional services portfolio covers creation of design-led, professional material to differentiate customers from their competitors by elevating and showcasing organisational capabilities. Specifically, this includes company branding development, digital design, photography and videography, and digital marketing including social media management.

The specialist services portfolio includes development of sustainability strategies - accounting for environmental, social, and economic impacts - to nationally recognised standards that afford long-term benefit to local communities. Carbon management strategies, reporting techniques, and measurements also assist in reducing customers' carbon footprint in materials and operations.

Thomas Graham & Sons

Thomas Graham & Sons is a reputable and long-established company based in Cumbria, that has been providing exceptional service and expertise in the field of steel and industrial supplies since its inception in 1892. With over a century of experience, the company has built a strong reputation for delivering high-quality products and solutions to a wide range of industries.



Thomas Graham offers an extensive inventory of industrial supplies, including tools, fasteners, safety equipment, abrasives, welding equipment, adhesives, steel, hygiene products, workwear and protective equipment,

and much more. Their comprehensive range of products caters to the diverse needs of their customers, whether they are small businesses or large industrial operations. The company takes pride in stocking leading brands, ensuring reliability and performance.

What sets Thomas Graham apart is their commitment to customer service. They have a team of knowledgeable and experienced professionals who provide expert advice, helping customers find the right products for their specific requirements. Whether it's providing technical support, suggesting alternatives or offering tailored solutions, their friendly staff go above and beyond to ensure customer satisfaction. Beyond their dedication to customer service, Thomas Graham also prioritises sustainability. They actively promote eco-friendly products and implement environmentally responsible practices.

Overall, Thomas Graham is a trusted name in the industrial supplies industry in Cumbria. Their long-standing history, diverse product range, exceptional customer service, and commitment to sustainability make them the go-to choice for businesses and industries seeking reliable solutions and supplies.

No. 21

SOCIAL IMPACT

LIGHTHOUSE RESTORATION

Bendalls Engineering and West Cumberland Engineering represented Cumbria Manufacturing Alliance at the reopening of the North Pier Lighthouse in Whitehaven following restoration works where they had collaborated to produce new metalwork for the balcony, railings, bench and stairwell platforms.

The West Pier lighthouse was built in 1841 and is now fully functional again, with a new LED light beacon which can be seen from 10 nautical miles away.

There were two lighthouses restored, the West Pier lighthouse and the North Pier lighthouse. The West Pier lighthouse was the first lighthouse to be restored to its former glory.

CMA contributed towards the refurbishment of the North Pier with West Cumberland Engineering apprentices producing all fabrication drawings for the lighthouses, platform and hand railing. West Cumberland Engineering apprentices then manafactured the platform and handrailing which replaced the old corroded ones. Bendalls Engineering apprentices fabricated the bench brackets for the north lighthouse, and all works and materials were gifted by Cumbria Manufacturing Alliance as part of their ongoing commitment to delivering social impact in the local area.

















63 CAN FUEL RACKS

The UK currently has only one storage pond for Advanced Gas-cooled Reactor (AGR) fuel, located at Sellafield's Thorp plant.

The 7 currently-operating AGR power stations have limited storage space for spent fuel, constraining the speed at which they can be defueled.

The current storage compartments can hold 20 cans of spent fuel, however this new design has the capacity to hold more than triple this, hence the name 63 Can Racks. This will ensure accelerated bulk defueling of the AGR reactors, from 8 years to 3.5 years.

Following the manufacture of the Hybrid 1 fuel racks, an improved Hybrid 2 design was made to further increase efficiency.

Cumbria Manufacturing Alliance were successful in winning the manufacture of 80 Hybrid 2 63 Can Fuel Racks.



DELIVERY.

The first 8 Hybrid 1 Racks have been delivered to site and placed in the THORP Receipt and Storage Pond. The manufacture of the enhanced Hybrid 2 Rack is ongoing with the first one been delivered by CMA in November 2022 achieving a major NDA milestone.



PROJECT IN NUMBERS

PROJECT DURATION

48 mth

TOTAL RACKS

87

TAXPAYER SAVING

£2bn

CASE STUDY

EVAPORATOR D

At the time of construction, Evaporator D was the largest nuclear decommissioning project in the UK. It was designed to continue reduction of the volume of highly active legacy waste.

West Cumberland Engineering completed over 100 contracts directly associated with Evaporator D, ranging from small spools and pipe supports through to large vessels, approximately 20,000m of pipe/ducting and a modularised pipebridge.

The pipebridge featured 13 modules, weighing a combined 150 tonnes of structural steelwork. These modules were pressure tested, and the largest was over 30 metres in length.

West Cumberland Engineering carried out over 10,000 pipe butt welds with a repair rate of less than 2%. Individual condenser manufactured from NAG material over 2.5km of manual tig weld with zero repairs neccesary.

COLLABORATION.

The scope of service drew upon the complimentary support of all three of the Shepley Group companies, Shepley Engineers, PPS Electrical and West Cumberland Engineering.

PROJECT IN

NUMBERS.

PIPE BUTT WELDS

10,000

20km+ of high integrity pipework

Right First Time Weld Rate

98%

MODULE WEIGHT

150t



CASE STUDY

VESSEL AND PIPE MODULE

Carr's Engineering Group are in the process of manufacturing a number of stainless steel tanks and vessels for the SIXEP Continuity Plan (SCP), including 7 Universal Vessels (UVs). We were approached by PPP to design and develop a test rig which could be used to functionally test two of the UVs and to simulate how the vessels would perform 'in-cell'.

To test the vessels a rig was designed and is currently being constructed. The rig itself consists of a substantial steel structure, various pumps, valves and pipework and instrumentation used to record the performance of the process during testing. The instruments feed into a common datalogger which records process information in real time allowing quick analysis by the PPP engineering and commissioning teams.

Carr's Engineering Design Team worked collaboratively with the PPP engineers to design the rig and to ensure it met the functional requirements. Multi-discipline involvement from both teams, including Mechanical, CS&A, Process and CE&I, was necessary to input into the design process to achieve the required results. The rig itself measures 10 metres x 11.5 metres x 10 metres high. The design also needed to include for 2 x 128,000 litre water tanks, an air compressor and receivers and a diesel generator to ensure an uninterrupted electrical supply to the pumps and compressor.

Testing is planned for a 6-month duration and will be undertaken by the PPP commissioning team. Carr's Engineering will hand over control of the rig to PPP, once stringent safety checks have been undertaken and agreed.







PROJECT IN NUMBERS.

PROJECT VALUE

£1.9m

MODULE WEIGHT

55t

INTERNAL VOLUME

 $23m^3$



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