



**Shepley** Engineers Ltd

# Shepley Engineers

Part of the Shepley Group



@ShepleysUK



Shepley Engineers Ltd



engineers@shepley.vhe.co.uk



01946 599022



www.shepleyengineers.co.uk

# Engineering Sustainability.



# The Shepley Group

The Shepley Group consists of Shepley Engineers Ltd and our two wholly owned subsidiaries – PPS Electrical Ltd and West Cumberland Engineering Ltd (WCEL).

Together we can offer a full ME+I capability from manufacturing, machining, fabrication, control panel build, through to installation and commissioning.

## Contents

Shepley Engineers .....	4
What We Do .....	5
PPS Electrical.....	8
West Cumberland Engineering (WCEL).....	10
Nuclear Decontamination .....	14
Restoration Services .....	17
Permit & Commissioning Services.....	19
HVAC Services.....	21

# Shepley Engineers

## Introduction

Shepley Engineers Limited are a wholly owned subsidiary of Renew Holdings plc. Based in Cumbria we are a major multidisciplinary contractor and project manager specialising in term contract works predominantly within the nuclear and chemical process plant environments. Our work involves high integrity site and workshop activity within these particularly challenging sectors. In addition, Shepley has also developed a highly specialised capability and excellent reputation for the sympathetic restoration, strengthening and conservation of historically significant iron and steel structures.

## Brief History

Shepley Engineers Limited was founded in Manchester in 1947 and has had a permanent presence at the Nuclear Establishment, Sellafield, since that time. In 1948 we 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. Via both organic growth and complementary acquisitions we have become established as a major contractor. We have two wholly owned subsidiaries:

- **PPS Electrical** - an electrical and instrumentation installation specialist and panel manufacturer
- **West Cumberland Engineering** - a class A1 fabricator certified to EN1090 and ISO3834 and a precision parts machinist.

Our range of service offering means that we are engaged in a number of capacities from main contractor to sub-contractor and in some instances as advisor and consultant. We work individually or in collaboration with complimentary service providers or partners and a significant proportion of our current workload is delivered via long term framework agreements. It has been necessary to develop our processes, systems and culture to be effective and responsive across the full range of these engagement arrangements.

## Health & Safety

We are proud of our health, safety, security and environmental performance. Achievements in this area remain the number one corporate objective and this is actively supported from the executive board and down through the entire organisation. We are fully aware of the need for continuous improvement and we actively support ongoing development of our compliance and assurance systems. We have achieved gold medal awards every year since the late 1990's and in 2019 we achieved 14m man hours without a RIDDOR reported accident on the Sellafield nuclear site in Cumbria.

# **What We Do**

## **Mechanical & Electrical Supply and Installation**

Shepley are now established as a major multidisciplined contractor with one of the largest pools of skilled trade resources within the entire UK nuclear programme. We have a very healthy training and development agenda with a large domestic apprenticeship scheme to deal with the future anticipated demands in our sector. We have a vast and proven track record of safe and effective ME&I project delivery across a range of environments and sectors. Shepley have been involved in and continue to be associated with many of the UK's major nuclear projects and our group business model provides a self delivery solution including supply, manufacture, installation and commissioning.

## **Nuclear Operational Support and Asset Care**

Working closely with a range of clients across a broad portfolio of nuclear facilities and assets, Shepley have a proven track record for a safe, cost effective and responsive operational support service. Our work in this area includes routine maintenance as well as major outage work and asset enhancement. Our business model has been developed so that we are able to self deliver the key disciplines in the areas of Mechanical, Electrical and HVAC as well as minor Building and Civil activity. This has greatly enhanced our flexibility and therefore our ability to respond quickly when operational support becomes a priority.

## **Nuclear Engineering, Decontamination, Decommissioning and Demolition**

The Shepley decontamination, decommissioning and demolition teams offer a unique blend of practical conventional decommissioning experience together with a safe and proven track record involving the introduction of new and innovative technologies where appropriate. This flexible approach to challenging decontamination and decommissioning tasks combined with our proven programme management capabilities provide our various clients with effective and reduced risk solutions. In 2016 we strengthened our decommissioning capability through the addition of Nuclear Decontamination Services Ltd (NDS) to the group. These decontamination specialists have over 30 years' experience in the development and delivery of decontamination solutions utilising a wide range of techniques. We can now offer a full and bespoke service covering every aspect of decontamination requirements, covering everything from consultancy, to technique selection, test rig design and build, and off site testing, through to hands on decontamination. We have delivered over 200 decontamination projects for a wide range of clients, including Sellafield Ltd, Magnox, and BAE, and also have an ultrahigh pressure water jet cutting and cleaning capability which has been successfully used in active areas across the UK. We offer a cradle to grave service across a range of small, medium and very large complex nuclear decontamination and decommissioning challenges. We are also a founder member of Cumbria Nuclear Solutions Ltd, who have successfully delivered decommissioning and demolition projects since 2006.

## **Restoration & Renovation**

Shepley became established as a specialist restoration and conservation contractor in 1985 when we completed a major iron project on the Grade 1 listed Dorchester Hotel on Park Lane, London. Since that time we have been engaged as the specialist contractor on numerous large high profile restoration schemes as well as a vast array of smaller private commissions. We have made significant investments in the specialist resources which are essential to deal with the unique challenges within this sector and this includes the promotion of trainees through the various key craft skills. We have also made significant investments in our facilities which are capable of dealing with all aspects of the work from the initial cleaning processes, through the various restoration tasks to the application of a range of protective coatings. In all cases our approach is carefully considered to provide a sympathetic solution which can involve a blend of conventional craft skills with technologies which protect the conservation records.

## **HVAC Services**

Shepley HVAC services are dedicated to providing the highest levels of quality and customer service to our clients. Over the last two decades our highly experienced teams have successfully delivered a large number of high profile projects and have established a reputation for being proactive in providing bespoke solutions for the most exacting of HVAC design and installation requirements. We are able to support end to end management of works from the identification of a business requirement through early engagement scoping, sanctioning, design support, completion and testing of an installed system

## **Permit & Commissioning Services**

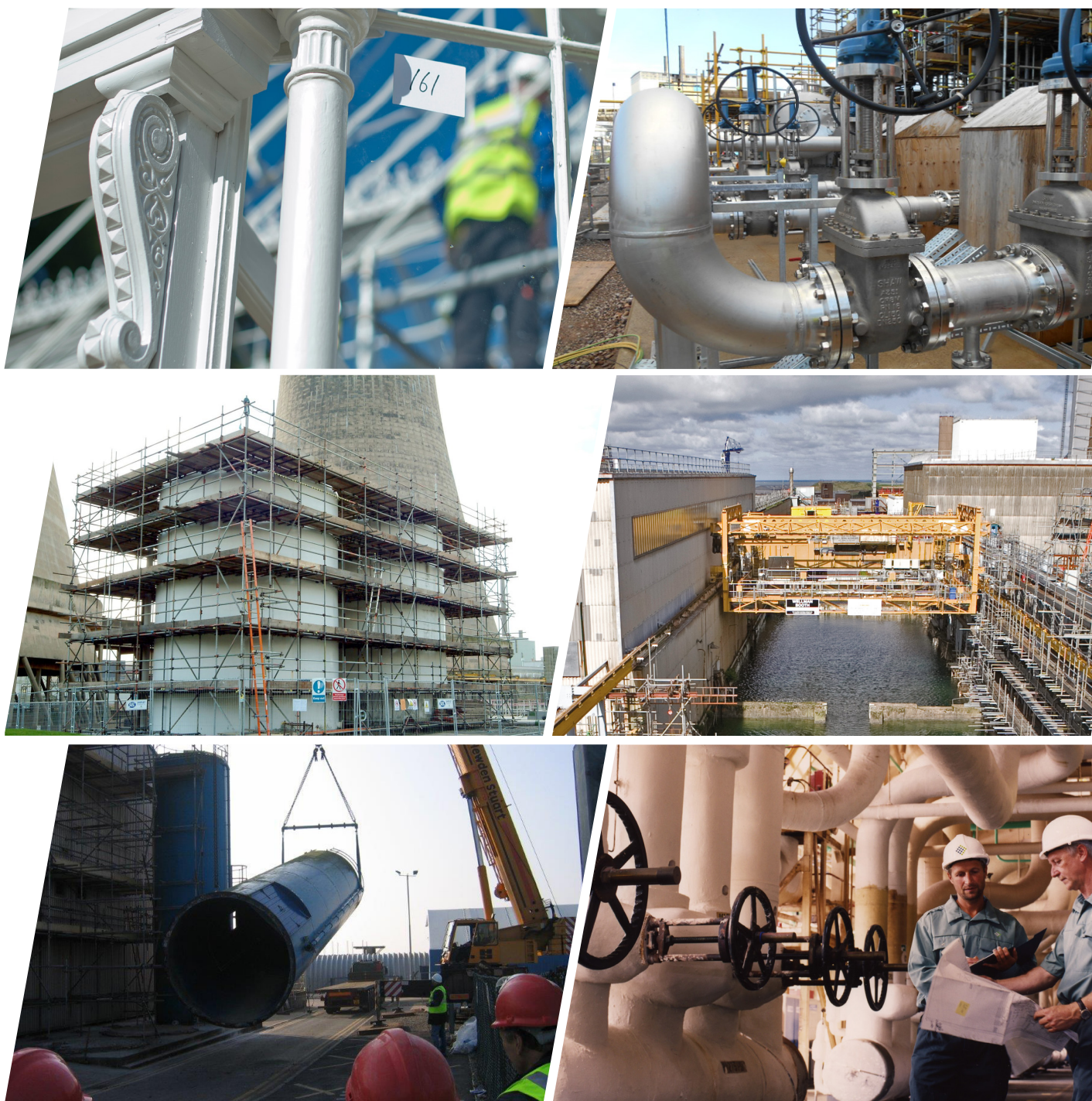
Working in close collaboration with the Sellafield Senior Authorised Person (SL SAP) forum we have extended our existing business offering and developed a comprehensive range of procedures and services that can be adapted to meet any customer requirement. Supporting this adaptive business model we have assembled a team of highly skilled experienced personnel from Shepley and our subsidiary PPS Electrical with a proven record of delivering this type of service. The service provision proposals we have developed have been well received by both the supply chain and client communities and that has led to the successful award of contracts to provide our services on a number of key projects.

## **Roofing & Cladding**

Key members of our personnel have over 30 years' experience in the industrial roofing and cladding industry. Example projects include re-cladding 14,000 m<sup>2</sup> (designed and installed on the Sellafield Site), 5,500 m<sup>2</sup> Kalzip over roof and cladding (also designed and installed) and numerous other projects including Sika Decothane projects and profiled sheet refurb / replacement projects. Our dedicated team are approved installers of Kalzip, Sika Decothane & Rapid systems, Kingspan, EuroClad, Corus, Steadmans and many more.

## Cultural Statement

Shepley are a non-confrontational, zero claims orientated contractor and continuous improvement is the promoted culture within the company. The avoidance of contract disputes and maintenance of good working relationships with clients, colleagues and suppliers is of the highest importance. We constantly strive to improve the behaviour, skill and competence of the whole team to deliver the best possible service to our clients. We actively support our local communities through engaging with local charities and third sector organisations and participate in local issues including the provision of support across a wide range of Cumbria community initiatives. We operate an endowment fund through the Cumbria Community Foundation, which we grow every year, which provides long term benefit to a wide range of groups in Cumbria and will do so in perpetuity.





**PPS** Electrical Ltd

# **PPS Electrical**

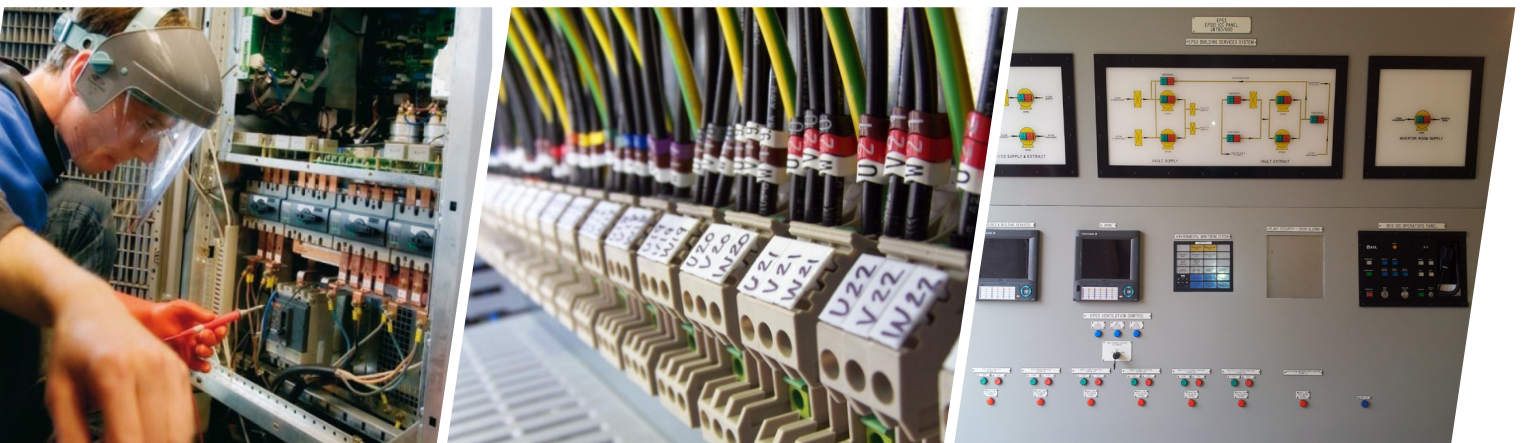
## **Overview**

PPS Electrical are a well established CE&I contractor with an excellent reputation for delivering a wide range of services and products to the most exacting quality and safety standards. The successful business model we have developed has seen us become a major presence in the extremely challenging nuclear sector and we are currently exploring opportunities to expand into the rail sector through our in-house manufacturing division. Our approach to delivery is simple and is based around the ethos of applied learning and collaborative working practices. The sharing of our knowledge and expertise we feel adds value to our customers and is instrumental in helping us meet their individual expectations.

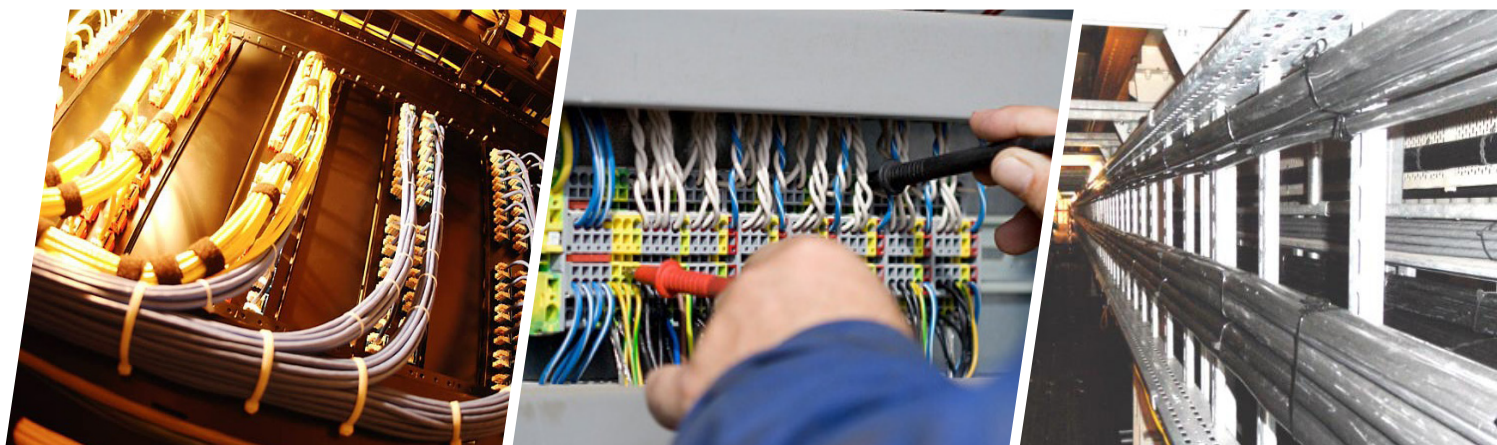
As with any successful organisation our greatest asset is our people and it is our continued investment in their development that ensures excellence in everything we do. That commitment to excellence through training extends through all levels of the organisation from boardroom right down to the shop floor. At PPS we also recognise that we have a responsibility to protect the future of our industry by developing the next generation of engineers. In partnership with our training providers PPS operate one of the most comprehensive apprentice development schemes sponsoring candidates from NVQ level right through to our graduate training programme. The development of our business model allied to our investment in personnel has afforded PPS significant opportunities to expand the range of services we offer to compliment our traditional installation and manufacturing capabilities.

## **Our Commitment to Quality**

Quality Management is afforded the highest priority and we regard it as fundamental to managing our customer needs and expectations. We recognize that quality performance has a significant influence on all aspects of the products and services we provide and to maintain our standards we operate a Quality Management System compliant with the requirements of BS EN ISO9001:2015.







## Health, Safety and Environment

As an employer we have a responsibility under law to ensure the health, safety and welfare of not only our employees but also those who may be affected by our operations. PPS are a CHAS registered company, we are currently accredited to BS EN ISO 45001. The primary objectives of our organisation are to achieve the highest standards in conventional safety but also more importantly because of the environment we operate in to lead the way in nuclear safety. We actively invest in training, equipment and process development to ensure we maintain a robust safety culture throughout all levels of our organisation. The success of this approach has been evident in that we have been awarded ROSPA Gold Awards or Orders of Distinction in consecutive years since 2001 and are regularly in receipt of the Sellafield Management of Contractors Safety Award.

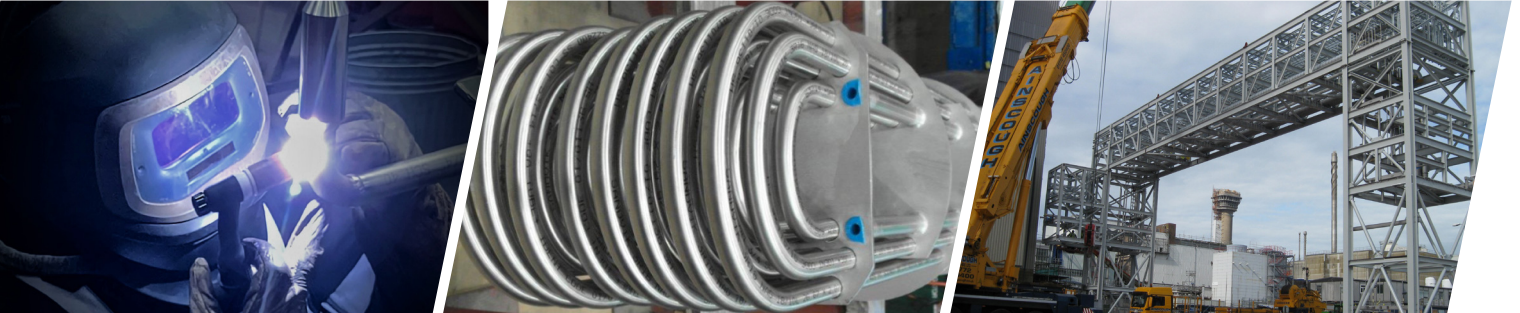
As well as the safety and welfare of our personnel we also recognise that we also have a responsibility towards the environment we operate in. At PPS we operate an environmental management system compliant with our BS EN ISO 14001 accreditation. As an organization we operate several initiatives to promote our environmental awareness culture and also to improve our performance in this extremely important area

## Trade Association Accreditation & Membership

PPS are registered members of both the JIB and the ECA which are the leading trade associations for the electro-technical services industry.

PPS operates an occupational health and safety management system which complies with the requirements of BS OH SAS 18001: 2007. In 2018 we also became an accredited installer of fire safety systems under the BAFE SP203-1 registration scheme.

# West Cumberland Engineering (WCEL)



## Overview

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. Our management team and workforce have considerable experience in servicing the high quality demands within these important and challenging sectors. The extensive facilities at our 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. We have developed a very flexible and responsive fabrication service which can be applied across a wide range of task size.

## NDT (Non Destructive Testing)

Our NDT capability extends to;

- Visual Inspection
- Ultrasonic Testing
- Radiography
- Liquid Penetrant Testing
- Magnetic Particle Testing

## Welders

Our welders are qualified in accordance with the following standards;

- BSEN 287-1: Qualification of Welders - Fusion Welding: Steels
- BSEN ISO 9606-1: Qualification of Welders - Fusion Welding: Steels
- BSEN ISO 9606-2: Qualification of Welders - Fusion Welding: Aluminium
- ASME IX: Welding, Brazing and Fusion Qualification

## Accreditation

- ISO 9001:2015 Quality Management
- ISO 3438-2: Quality Requirements for the Fusion Welding of Metallic Materials - Comprehensive Quality Requirements
- EN 1090-2 and 3: Fabricated Steel Components for use in Building and Construction up to EXC 4

## Welding Procedures

Our welding procedures are qualified in accordance with the following standards;

- BSEN ISO 15614-1: Qualification of Welding Procedures – Arc Welding: Steels and Nickel Alloys
- BSEN ISO 15614-2: Qualification of Welding Procedures – Arc Welding: Aluminium
- BSEN ISO 14555: Arc Stud Welding of Metallic Materials
- ASME IX: Welding, Brazing and Fusion Qualification

## Work Space and Craneage

Shop 1 (Stainless) - 2047.5m<sup>2</sup>

Overhead Cranes: 2 x 5 ton, 1 x 8 ton, 1 x 15 ton

Shop 2 (Carbon) - 2112.5m<sup>2</sup>

Overhead Cranes: 1 x 2 ton, 1 x 3.2 ton, 1 x 10 ton

Machine Shop - 500m<sup>2</sup>

## Specifications

We have experience working with various industrial specifications including the following;

### **ASME**

- ASME B31.3: Process Piping
- ASME VIII: Boiler and Pressure Vessel Code

### **Nuclear Specific**

- ES\_0\_5391\_2: Fabrication of Plant and Equipment (Stainless Steels)
- 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)

### **Power Generation**

- DNV-OS-C401: Fabrication and Testing of Offshore Structures

## Welding Processes

We have vast experience and various qualified welding procedures for the following processes for use on pipework and plate work;

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)

141 Semi-Automatic TIG (Tungsten Inert Gas Welding – TIP-TIG)

783 Drawn Arc Stud Welding with Ceramic Ferrule

## Materials

We can fabricate and weld using the following materials in thicknesses ranging from 0.5mm through to 200mm;

- Austenitic Stainless Steels (NAG, 304L, 316L, 316Ti, 321, 18-13-1, 235MA, 254SMO, Nitronic 60)
- Precipitation Hardened Stainless Steels (17/4 PH, FV520B)
- Martensitic Stainless Steels (S416S21)
- Duplex Steels (2205, Ferralium 255)
- Nickel Alloys (NiCu)
- Aluminium (6086 T6, 5083)
- Quenched and Tempered Steels (Dillimax 890T)
- Carbon Steels (S275/S355J2/S460, API 5L)
- Dissimilar: Combinations of the above materials

## Cutting Processes

- Air Plasma 1: up to 12mm
- Air Plasma 2: up to 38mm
- Oxy-propane/acetylene cutting
- 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

## Forming Equipment

- Break Press: Width 3.1m, 150 Ton
- Plate Rollers: Width 2.5m, 6-8mm
- Pipe Bending: 15NB to 80NB

## Jigs / Fixtures

- Rotary Manipulators (various sizes)
- Column and Boom: 4m x 4m,
- Vessel/Tank Rollers: 20 ton, Width 3m

Lathes						
Manual/CNC	Manufacturer	Spindle	Bed Length	Swing over Bed	Swing over Cross Slide	Swing over Gap
CNC Turning Centre	HYUNDAI	Ø63	500	Ø280 max cutting dia	N/A	N/A
CNC Turning Centre	TAKAMAZ EM-3A	Ø51mm	500	Ø280 max cutting dia	N/A	N/A
CNC	XYZ 555 PROTURN	Ø104mm	2000mm	Ø560	Ø350	Ø780 X 227mm BACK
CNC	XYZ 1630 PROTURN	Ø54	760mm	Ø400	Ø218	N/A
CNC	XYZ 410 PROTURN	Ø80	1100mm	Ø480	Ø280	N/A
MANUAL	HARRISON 400	Ø66	1000mm	Ø420	Ø250	Ø600 X 140mm BACK
MANUAL	HARRISON 400	Ø66	1500mm	Ø420	Ø250	Ø600 X 140mm BACK
CAD CAM SOFTWARE	ONE CNC	N/A	N/A	N/A	N/A	N/A
CAD CAM SOFTWARE	DOLPHIN	N/A	N/A	N/A	N/A	N/A

Grinders					
Manual/CNC	Manufacturer	Magnetic Table	X-Travel	Y-Travel	Z-Travel
MANUAL SURFACE GRINDER	JONES AND SHIPMAN	460mm x 150mm	600mm	200mm	210mm

Milling Machines							
Type	Manual/ CNC	Manufacturer	Maximum Table Load	X-Axis	Y-Axis	Z-Axis	4th-Axis
BED MILL	CNC	MTE BF-3200	11,000KG	3000mm	1000mm	1000mm	N/A
VERTICAL MACHINING CENTRE	CNC	XYZ 1100 HD + 4TH AXIS	1500KG	1100mm	610mm	610mm	CHUCK Ø190 SWING OVER BED Ø280
VERTICAL MACHINING CENTRE	CNC	XYZ1020	800KG	1020mm	520mm	546mm	N/A
VERTICAL MACHINING CENTRE	CNC	XYZ 1010 VMC	450KG	1010mm	500mm	520mm	N/A
VERTICAL MACHINING CENTRE	CNC	XYZ 710 HD + 4TH AXIS	500KG	710mm	450mm	510mm	CHUCK Ø190 SWING OVER BED Ø380
VERTICAL MACHINING CENTRE	CNC	XYZ 710	N/A	800mm	345mm	406mm	N/A
VERTICAL TURRET MILLING MACHINE	MANUAL	XYZ 710 HD	500KG	710mm	450mm	510mm	N/A
RAM HEAD UNIVERSAL	MANUAL	HURON MU6	N/A	1500mm	700mm	550mm	N/A
3D CAD CAM SOFTWARE	N/A	ONE CNC	N/A	N/A	N/A	N/A	N/A



EDM - Electrical Discharge Machining					
Type	Manual/ CNC	Manufacturer	X-Axis	Y-Axis	Z-Axis
SINKER SPARK EROSION MACHINE	MANUAL	Sparcatron SPF 40W	370mm	600mm	400mm
WIRE SPARK EROSION	CNC	SYKES FANUC W2	350mm	480mm	290mm 200 max cut
WIRE SPARK EROSION	CNC	SYKES FANUC W2	350mm	480mm	290mm 200 max cut
WIRE SPARK EROSION	CNC	SYKES FANUC W2	350mm	480mm	290mm 200 max cut
CAD CAM SOFTWARE	N/A	DOLPHIN	N/A	N/A	N/A

Larger jobs can be accommodated in the EDM machines as they are open sided please enquire.

# Nuclear Decontamination



## Overview

Our Decontamination specialists have over 30 years experience and delivered in excess of 200 Decontamination and Technical projects across the UK's nuclear sites and in the international arena. (Including Sellafield and Magnox sites)

## Services

We are able to offer the following technical capabilities:

- Decontamination Consultancy & Strategies.
- 'Hands on' Decontamination operation including Mechanical Chemical and Novel methods of Decontamination.
- Support to POCO studies and operations
- Pipework and Vessel Decontamination as well as Pipework Blockage Removal
- Sampling Operations for Characterisation
- Water jet cold cutting to support hydrogen venting
- Laser Scanning Service (for High Dose Rate & Contaminated Areas)
- Decontamination Tooling Concept Design
- Test Rig – Testing and Development for Deployment
- Test Rig – Trialling of Operations / Operator training

We also have the following SQEP personnel available:

- 2 Decontamination Consultants, 2 Decontamination Technicians.
- 7 experienced water jet 'cold cutting' personnel, 7 Ultra High / High Pressure Water Jetting personnel, plus the supporting services of Shepley's MCE&I and scaffolding teams.

## Water Jetting Decontamination Options

High Pressure (HP) Water Jetting

Pressures up to 1,700 bar

High volume flow rates from 60L – 160L/min

Ultra High Pressure (UHP) Water Jetting

Pressures from 1,700 to 3,000 bar

Relatively Low volume flow rates from 8L – 28L/min

High energy decontamination with Minimal waste effluent generated

UHP water jetting has been used to remove contaminated surface layers from steel and concrete to permit.

Examples include:

- Decontamination of pipe work & vessels
- Decontamination of Fuel Ponds & Bays.
- Decontamination of concrete hot cells and structures.
- Decontamination of floors.

## Decontamination Overview

On plant Delivery, including rapid response in all types of radioactive environments C1-C5 & R1-R5, using decontamination specialist experienced in Air fed & PVC suit working. Delivering services such as:

- Ultra High / High Pressure water jetting and Cutting
- Chemical Decontamination

We also offer CO2 blasting, concrete scabbling, ice pigging.

## Test Rig Development Work

- Test Rig Design & Build. Fit for purpose test rigs to meet client requirements
- To optimise concept designs and equipment functionality.
- Also for operator familiarisation to reduce working times in high radiation dose areas.

## Decontamination Strategies for POCO Decommissioning

Our recognised experts use real time experience and 'know how' knowledge to produce robust option studies underpinned with technical assessments that also consider:

- ALARP working
- Business case justifications
- Safety Case Documentation

## **Blockage Removal & Pipework Cleaning**

Adaption of decontamination deployment skills and technical knowledge to remove blockages in all types of nuclear environments, while considering, radiological containment and effluent minimisation.

Techniques include:

- HP & UHP water jetting
- Mechanical scouring
- Chemical dissolution

## **Decontamination Overview**

Delivery of a Glovebox decontamination handbook, incorporating a toolbox of techniques with application guidelines for the pre-conditioning /decontamination of alpha gloveboxes/items.

Independent bench marking and efficiency testing of existing & new technologies for glovebox decontamination, including; vacuuming, strippable coatings, and the chemical reagents; IGBC, CeIV, nitric acid and MINOX.

Alpha glovebox/items, robotic size reduction facility with decontamination sort/ segregation capability

## **Sampling for Characterisation**

We can provide an ILW Characterisation sampling service to support characterisation for decommissioning covering things such as:

- Pond sludge
- Reactor Dessicant
- Concrete
- Underwater skips



# Restoration Services



## Overview

Shepley Restoration Services are the UK's largest historical metalwork contractor and are dedicated to providing the highest levels of quality and service to our clients. We became established as a specialist restoration and conservation contractor in 1985 when we completed a major iron project on the Grade 1 listed Dorchester Hotel on Park Lane, London.

Over the past 30 years our highly experienced teams have successfully delivered a large number of prestigious projects across the UK and have established a reputation for being proactive in providing bespoke solutions for some of the most challenging of aspects of restoration. We can offer safe, high quality and innovative solutions to the heritage sector, we are able to operate as both a principle contractor and a specialist subcontractor on a wide range of projects. We offer a full service from initial assessment of heritage assets, to site works and in-house restoration and conservation, we also offer a specialist coatings application service also from our in-house team.

We have undertaken a significant programme of investment in our facilities which are now capable of dealing with all aspects of the restoration process. From the initial removal of historical lead-based paint systems utilising our automated blasting facility, assessment and condition reporting, through the various restoration tasks to finally the in house application of a range of protective coatings. In all cases our approach is carefully considered to provide a sympathetic solution which can involve a blend of conventional craft skills supplemented with technologies such as 3D modelling and BIM.

## Sheffield Restoration Facility

Conveniently located just off the M1, the modern 4200m<sup>2</sup> restoration facility consists of 7 work bays, Bays 2 to 5 are utilised for mechanical restoration or Fabrication works each bay has a 5 ton overhead with bay 3 having two 5-ton cranes giving capacity and flexibility to undertake a wide range of tasks. Bay 6 has a manual blast booth 16m x 6m again equipped with a 5-ton overhead crane. Bay 7 is equipped with an auto-blast machine capable of processing components up to 1600 x 820 this bay is also equipped with a 5-ton overhead crane

## Specialist Coating Capability

Bays 8 and 9 are the prep and coating application areas, Bay 9 has four paint booths, each 7.5m x 9m and can deliver a wide range of coating systems simultaneously, we can apply any coating system (We can offer zinc metal spraying in one booth) and are also able to apply intumescent fireproofing systems if required.

We have the flexibility to modify the existing paint shop layout to provide a single paint booth 22m x 9m. This also has a 5-ton overhead crane.

All Painters are ICATTS trained  
Two are authorised by Metallisation for metal spray.  
In-house NACE/ICORR level 2 painting inspector.  
In-house level 1 ICORR Painting Inspector.



## Restoration Services We Provide

- Initial asset assessment.
- Formulation of repair strategies.
- Advice on suitability of coating systems.
- Buildability assessment's.
- Structural assessment of structures, repairs & temporary works through our Structural Engineer partners.
- Main contractor services.
- Site works including coating application.
- Historic ironwork repairs
- Re-casting of historic ironwork.
- Draughting services.
- In house specialist coating application.

# Permit & Commissioning Services

## Overview

In recent years Sellafield have initiated a graded approach to the delivery of what were traditionally regarded as commissioning or decommissioning activities. Under the graded approach philosophy the scope of delivery for non-active commissioning is often the responsibility of the main construction contractor and is now more commonly referred to as “setting to work”. To facilitate these works in a safe manner requires management under a robust control process. Similarly safely removing equipment from service during decommissioning activities requires an equally robust control process.

Although these are vastly different working environments they share common core principles and we were quick to realise the potential opportunities afforded by moving into these fields. Working in close collaboration with the Sellafield Senior Authorised Person (SL SAP) forum we have extended our existing business offering and developed a comprehensive range of procedures and services that can be adapted to meet any customer requirement. Supporting this adaptive business model we have assembled a dedicated team of highly skilled experienced personnel from Shepley and our subsidiary PPS Electrical with a proven record of delivering this type of service. The service provision proposals we have developed have been well received by both the supply chain and client communities and that has led to the successful award of contracts to provide our services on a number of prestige projects.

## Our Service Provision

The services we provide are individually tailored to meet individual customer needs and expectations but they can be categorised into three main delivery streams by their controlling procedure.



## **Electrical Safety Rules**

Originally developed for the control of works on temporary construction supplies the principle control measures can be adapted to encompass primary level commissioning or “setting to work” activities. The procedure clearly defines roles and responsibilities of key personnel and is supported by a fully documented control process. Typically this procedure is adopted for single discipline low complexity tasks where there is minimal or no requirement for third party involvement. Under this procedure the work is controlled by a Duty Holder appointed Authorised Person and is undertaken by our nominated personnel. Our ongoing commitment to the development of our resource skill base through training allows us to appoint our nominated personnel from within the core construction teams. This approach ensures a seamless transition between project phases and can realise significant benefits to the client in terms of reduced plant familiarisation requirements.

## **Duty Holder Approved Third Party Procedures**

The requirement to provide this service has evolved from our involvement in the decommissioning frameworks. As part of their scope of supply we have been engaged to supply SQEP personnel to support the SL SAP teams in the delegation of their duties. The controlling document for these arrangements is often produced by a third party but it is reviewed and accepted by our Duty Holder prior to personnel being deployed. Personnel are authorised by the relevant SAP to undertake specific duties in accordance with the requirements of their SQEP role process. Typically these would include the control of isolations for plant changeovers or managing a team of our SQEP personnel removing equipment from service. To date we have supplied teams to support a number of key projects and their continued success bodes well for our future growth in this service sector.

## **Permit Office Control Procedure**

Where there is a requirement for co-ordination of multidiscipline works or to undertake more complex commissioning tasks it is often necessary to establish a project permit office. For CE&I works the control of third party interfaces necessitated the development of a more integrated permit control procedure. The permit control procedure we have developed retains the key elements required to ensure managerial control of safety whilst also providing the flexibility to realise the benefits afforded by the graded commissioning philosophy. Behind the control procedure sits a comprehensive document suite developed to ensure the smooth implementation of the process.

A key distinction between this process and the more traditional permit office service is the flexibility it affords in the use of SQEP nominated personnel. Under this control procedure the permit controller manages the interfaces between construction and commissioning activities but also has the capacity to control a SQEP nominated team deployed on “setting to work” activities. The SQEP nominated personnel can also be utilised to provide a direct permit office function in that they can be engaged to undertake energisations or isolations under the direction of the permit controller. The procedure has been successfully implemented and it has received client acclaim for its promotion of the efficient use of resources. On the back of this success demand for this service is growing.

# HVAC Services



## Overview

Shepley HVAC Services are dedicated to providing the highest levels of quality and customer service to our clients. Over the last two decades our highly experienced teams have successfully delivered a large number of prestige projects and have established a reputation for being proactive in providing bespoke solutions for the most exacting of HVAC design and installation requirements.

Our HVAC team operate a flexible and collaborative delivery method. We are able to support end to end management of works from the identification of a business requirement through early engagement scoping, sanctioning, design support and completion and testing of an installed system.

We have in house capability with industry recognised and SQEP key personnel who have delivered a number of projects and tasks for the last twenty years.

In support of our service offering we have a strong and successful relationship with our supply chain partners who have supported our organisation with resource as well as supplying materials and equipment for the various projects and tasks that we have completed.

## Installation Resource Capability

At the centre of our HVAC Services capability is our experienced HVAC installation team, this is fully supported by our in house CE&I, Mechanical & Decommissioning Engineering departments to provide a seamless fully integrated approach to promote right first time delivery. Each individual team member is highly skilled in their core discipline but also carries forward the experience and knowledge gained from delivering as part of a multi-discipline team across a wide range of HVAC projects. All of the Shepley HVAC resource capability possesses either SC or DV security clearance.

## Fabrication Capability

West Cumberland Engineering (WCEL) are a well established and experienced fabrication company specialising in the manufacture and testing of high quality welded fabrications mainly for the nuclear and petrochemical industry sectors. The fabrication facilities are supported by their fully equipped machine shop to provide a comprehensive manufacturing capability and their extensive facilities at their Lillyhall works are also used for final assembly, mock-ups, testing & familiarisation training prior to the installation. WCEL have manufactured a wide array of ductwork sections, in various materials and also ventilation stacks



## Example Project - Red Extract Replacement

The Red Extract system is critical to the operation of the Active Handling Facility and is the primary source of ventilation for the in-cell caves. The existing system has been in service for over three decades and was fast approaching the end of its intended design life. The project brief was to design and install a bespoke solution that would support the plant for the remaining duration of its operational life.

### Key Services Provided

- Provision of technical support throughout the project design phases to ensure constructability considered in final design.
- Development of installation strategy to minimise disruption to plant operations during the installation phase.
- Manufacture & supply of high integrity ductwork and replacement extract fan units.
- Manufacture & supply of CE&I control equipment.
- Integrated works testing at supply chain facility to reduce onsite commissioning requirements and eliminate potential issues prior to installation.
- Multi-discipline installation team.
- Comprehensive Life Time Quality Record.



## Summary of our HVAC Offering

We firmly believe that the Shepley group of companies and their supply chain partners can provide a fully integrated solution for any HVAC project or task utilising our effective and efficient end to end delivery model.

- Fit for purpose design solutions supported by early engagement of key stakeholders.
- Cost efficient, sustainable delivery model that supports portfolio scalability.
- Optimum bespoke solutions utilising previously gained LFE.
- Focussed scope definition and forward planning (resource optimisation, parallel task delivery)
- Efficiencies gained by utilisation of streamlined approach to local SME's.
- Reduced design costs due to early vendor/ installer integration (Constructability).
- Extensive In-house manufacturing and fabrication capability (ME&I and HVAC).
- Risk and Stakeholder Management.
- Integrated Works Co-ordination.
- Offsite Testing Facilities (FAT / Integrated Works Testing).
- Multi-discipline SQEP Installation Teams.

Part of the Shepley Group



**Shepley** Engineers Ltd

Shepley Engineers Ltd  
Old Town Hall  
Duke Street  
Whitehaven  
Cumbria  
CA28 7NU

engineers@shepley.vhe.co.uk  
www.shepleyengineers.co.uk

01946 599022

 **@ShepleysUK**

 **Shepley Engineers Ltd**



**renew**

A wholly owned subsidiary of Renew Holdings Plc



Updated September 2021