

**THE UK OFFSHORE OIL AND GAS
FABRICATORS DIRECTORY**

2016



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Foreword

Welcome to Oil & Gas UK's *2016 Fabricators Directory*, which aims to provide potential customers both in the UK and the global oil and gas industry with the most current and comprehensive update on the services provided by a key sector of the upstream supply chain.

This is a sector, which over the last 40 years, has fabricated the majority of platforms on the UK Continental Shelf (UKCS) and built up an impressive body of skills and expertise. Despite challenging market conditions, across the industry companies are taking collective action to improve efficiency to ensure the UKCS develops the competitiveness it requires to achieve an enduring future. The directory clearly demonstrates the outstanding capability of the fabricators in the UK and showcases the considerable scale of investment made in the sector for the long term.

While adapting to becoming competitive in a low oil price world is challenging, there is evidence this year that a number of fabricators have identified opportunities for adjusting to different market needs which has led them to develop new capabilities and extend capacity.

By highlighting these capabilities and raising the visibility of the UK fabrication sector within the global market place, Oil & Gas UK and the Oil and Gas Authority support the drive to secure a sustainable long-term future for the industry's supply chain.

We believe this directory demonstrates the impressive proficiency of this sector and provides an invaluable source of information for customers assessing fabrication yards for future projects.



Deirdre Michie
Chief Executive, Oil & Gas UK



Andy Samuel
Chief Executive, the Oil and Gas Authority

Atkins Audit Statement

Atkins has been at the forefront of oil and gas design and consultancy for 50 years and provides a full range of green- and brown-field services.



These services include: offshore structural engineering, naval architecture, asset integrity management, subsea, process and safety engineering. Atkins has in-house capability to deliver projects from concept and front end engineering design, right through to life extension and decommissioning.

An Atkins representative has visited and audited each yard listed in the *UK Offshore Oil and Gas Fabricators Directory 2014*. The purpose of the audit was to verify the presence and condition of yard assets and equipment. All audits were conducted with yard agreement and with appropriate yard personnel in attendance. The 2016 update of the directory contains supplementary information to indicate the changes to the yards in the last 12 months.

To the best of Atkins' knowledge all information contained in the *UK Offshore Oil and Gas Fabricators Directory 2014* is current and accurate on the date of publication. Supplementary information in the 2016 update of the directory has been collated by Oil & Gas UK and has not yet been verified by Atkins.

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Glossary

ALQ	Additional living quarter
CD	Chart datum
DWT	Dead weight tonnage
EPC	Engineering, procurement and construction
EPCI	Engineering, procurement, construction and installation
EPIC	Engineering, procurement, installation and commissioning
FPAL	First Point Assessment
FPSO	Floating, production, storage and offloading vessel
HWOSt	High water ordinary spring tides
ISPS	International Ship and Port Facility Security Code
LAT	Lowest astronomical tide
MHWS	Mean high water springs
MLWS	Mean low water springs
MODU	Mobile offshore drilling unit
NUI	Normally unattended installation
OD	Ordnance datum
PLEM	Pipeline end manifold
PLET	Pipeline end terminal
RQSC	Register of qualified steelwork contractors
SPMT	Self-propelled modular transporter
SWL	Safe working load
UDL	Uniformly distributed load

Distribution of Fabricators in the UK



Matrix of Capabilities

Fabricator	PLATFORMS (design, build, repair and upgrade)			SUBSEA (build, repair and upgrade)			MOBILE STRUCTURES (build, repair and upgrade) *RU = repair and upgrade only		
	Topsides	Jackets	Piles	Manifolds	Subsea arches and equipment	Pipelines	Jack-ups	Semi-submersibles	FPSOs
A&P Falmouth		✓		✓	✓	✓	✓	✓ (RU)	✓ (RU)
A&P Tyne	✓	✓	✓	✓	✓		✓	✓ (RU)	✓ (RU)
Able UK Ltd (Seaton and Middlesbrough)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Babcock Marine and Technology (Appledore)	✓					✓			✓
Babcock Marine and Technology (Rosyth)	✓		✓	✓	✓	✓			✓
Burntisland Fabrications (Arnish)	✓	✓	✓	✓	✓	✓			
Burntisland Fabrications (Burntisland)	✓	✓	✓	✓	✓	✓	✓		
Burntisland Fabrications (Methil)	✓	✓	✓	✓	✓	✓	✓	✓	✓
CKT Projects Ltd.	✓						✓ (RU)	✓ (RU)	✓ (RU)
Global Energy Group (Aberdeen)	✓		✓	✓	✓	✓	✓ (RU)	✓ (RU)	✓ (RU)
Global Energy Group (Dunfermline)	✓								
Global Energy Group (Invergordon/Evanton/Muir of Ord)	✓		✓	✓	✓	✓	✓	✓	✓
Global Energy Group (Nigg Energy Park)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Harland and Wolff	✓	✓	✓	✓	✓		✓	✓	✓
Heerema Hartlepool	✓	✓	✓	✓			✓		
OGN (Lowestoft)	✓			✓	✓				
OGN (Tyneside)	✓	✓	✓	✓	✓		✓	✓ (RU)	✓ (RU)
Sembmarine SLP	✓	✓	✓	✓	✓				
Wilton Engineering Services Ltd	✓	✓	✓	✓	✓	✓		✓ (RU)	



A&P Tyne



A&P Tyne Fabrication Facility

A&P Falmouth



A&P Falmouth Fabrication Facility



General Information

Company Name	A&P Tyne Limited
Address	Wagonway Road, Hebburn, Tyne and Wear, NE31 1SP
Contact Number	+44 (0)1914 308600
Contact Details	info@ap-group.co.uk
Website	www.ap-group.co.uk
Health, Safety, Environment and Quality (HSEQ) Accreditation	ISO 9001, ISO 14001, OHSAS 18001

Employee Count

Senior Management and Business Control	6
Project and Construction Management	15
Skilled Trades and Labour	99
Total	120

Capabilities and Capacities – Facility 1

Total Area (m²)	242,811 m ²
Fabrication Area Covered (m²)	20,760 m ²
Assembly and Erection Area (m²)	6,710 m ² (covered) Port Hardstand – 6,150 m ² Starboard Hardstand – 2,500 m ² Fabrication Shed Stockyard – 3,690 m ² Central Laydown Area – 4,340 m ² Hawthorne Leslie Shed and Laydown area – 12,000 m ²



Capabilities and Capacities – Facility 1 (continued)

Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)

Portal Cranes

- 2 x 100 - 50 tonnes, hook height 52 metres
- 1 x 50 - 15 tonnes, hook height 27 metres
- 1 x 40 - 25 tonnes, hook height 41 metres
- 1 x 10 tonnes, hook height 32 metres

Gantry Cranes

- 1 x 60 tonnes, hook height 18 metres
- 2 x 50 tonnes, hook height 18.5 metres
- 4 x 15 tonnes, hook height 7.2 metres
- 3 x 10 tonnes, hook height 7.2 metres
- 1 x 5 tonnes, hook height 5.5 metres
- 2 x 2 tonnes, hook height three metres
- 1 x 2 tonnes, hook height four metres
- 1 x 10 tonnes, hook height 16.5 metres

Mobile Crane

- 1 x 18 tonne (fully retracted, blocked) mobile crane, hook height 15 metres at 4.5 metre radius, one metre at 12 metres

Load-Out Capacity (Tonnes)

- 100 metre quay – ten tonnes/m² bearing (West Quay)
- Knuckle End Quay (40 metres) can accept a 1,200 tonne crane
- A&P have four main areas for load-out comprising:
 - West Quay
 - Dock (Port Hardside or Starboard Hardside)
 - Port Knuckle
 - Starboard Knuckle

Minimum Water Depth (Metres)

- West Quay – -7.5 metres chart datum (CD)
- Knuckle End Quay – -7 metres CD
- Bede Quay – -9 metres CD

Maximum Water Depth (Metres)

- West Quay – 12.5 metres (mean high water springs (MHWS) five metres)
 - Knuckle End Quay – 12 metres (MHWS five metres)
 - Bede Quay – 14 metres (MHWS five metres)
-

Capabilities and Capacities – Facility 1

Dry-Dock Capability

Dry Dock 1

- 259.08 metres x 45.72 metres (entrance 44.2 metres)
- -5.6 metres CD (high water ordinary spring tides (HWOST) – 10.67 metres)
- Filling 1.5 hours
- Dewatering 2.5 hours
- Cranage:
 - 2 x 100 tonnes at 43 metre radius
 - 1 x 50 tonnes at 40 metre radius
- Serviced by two 100 tonne rail-mounted cranes, plus a 50 tonne rail-mounted crane
- Sonar and floating, production, storage and offloading (FPSO) vessel Spider pits

Dry Dock 7

- 151 metres x 20 metres
- 2.1 metres CD (MHWS – 7.1 metres)

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size

- Waste disposal licence
- Port security certification
- 24-hour security team onsite – full CCTV
- Onsite blasting and painting cells
- Machine shop – 1,235 m²
- Pipe workshop – 850 m²
- Onsite long-term agreement subcontractors for works such as electrical, pipework, scaffolding, insulation, etc
- 21 metres length x 21 metres width x 25 metres height blast cell
- 21 metres length x 21 metres width x 25 metres height paint cell
- Certified ISO 9001 Quality Management System
- Certified ISO 14001 Environmental Management System
- FPAL accreditation
- Painting permit – Environment Agency
- Waste disposal handled by contractors
- Air draught restriction of +76.6 metres reference CD



Projects and Markets

- Prior Experience/Projects**
- Queen Elizabeth Aircraft Carrier – 5,000 tonnes
 - Prince of Wales Aircraft Carrier – 3,000 tonnes
 - Mid Water Arches – Trelleborg – 300 tonnes
 - Mid Water Arch – Saipem – 600 tonnes

Expertise

A&P is a leading engineering services and fabrication group providing tailor-made solutions for customers in the global marine and energy sectors.

Our dedicated, highly skilled workforce is of paramount importance in all parts of the process and, accordingly, we make their health and safety our priority. Our policy towards the environment is open and proactive. We are certified to ISO Standards 9001, 14001 and 18001 and operate with careful regard to minimising the environmental impact of our activities.

Offering turnkey operations, our onsite attributes include painting and blasting, machining, electrical, scaffolding and pipework, amongst others, making A&P the yard of choice for all marine and oil and gas projects.

Fabrication Tonnage (Last Three Years)	2010 – 2,000 tonnes
	2011 – 3,500 tonnes
	2012 – 2,000 tonnes

Fabrication Revenue/ Turnover (Last Three Years)		Total Turnover	Fabrication
	2010	£26,393,000	£11,996,000
	2011	£32,155,000	£21,311,000
	2012	£22,197,000	£6,925,000

Ability To Build Large Structures Under Cover (Yes/No)	Yes
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Current Market Areas	Oil, gas, marine and renewables
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Potential Market Areas	Not provided
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Other Information	Not provided
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A&P Falmouth Limited

General Information

Company Name	A&P Falmouth Limited
Address	The Docks, Falmouth, Cornwall, TR11 4NR
Contact Number	+44 (0)1326 212100
Website	www.ap-group.co.uk
Health, Safety, Environment and Quality (HSEQ) Accreditation	BS EN ISO 9001:2008 Quality Management System BS EN ISO 14001:2004 Environmental Management System BS OHSAS 18001:2007 Occupational Health and Safety Management Systems

Employee Count

Senior Management and Business Control	42
Project and Construction Management	22
Skilled Trades and Labour	260
Total	324

Capabilities and Capacities

Total Area (m²)	184,082 m ²
Fabrication Area Covered (m²)	4,108 m ²
Assembly and Erection Area (m²)	18,211 m ²



Capabilities and Capacities (continued)

Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)

Dockside and Jetty

- Duchy crane – 25 tonnes, hook height 22.9 metres/12 tonnes, hook height 42.7 metres
- No 2 dock east – 48 tonnes, hook height 28.9 metres/15 tonnes, hook height 47.5 metres
- No 3 dock east – 12 tonnes, hook height 14 metres/3 tonnes, hook height 39 metres
- No 2 dock west – 10 tonnes, 18.9 metres/3.75 tonnes, hook height 50 metres
- 3-4 docks – 60 tonnes, hook height 18.9 metres/19 tonnes, hook height 50 metres
- No 2 dock west – 45 tonnes, hook height 31 metres/30 tonnes, hook height 40 metres

Mobile cranes

- Iron fairy – 6 tonnes, hook height 2.4 metres
- Demag AC100 – 100 tonnes, hook height 3 metres 12.5 metres jib/ 1.7 tonnes, hook height 46 metres 50.2 metres jib
- Liebherr 150 Litronic – 40 tonnes, hook height 16 metres/ 13.7 tonnes, hook height 32 metres

Workshops and overhead gantry

- Engineering workshop – 1 x 40 tonnes, 1 x 15 tonnes, 2 x 10 tonnes
- Fabrication/plumbers workshop – 3 x 8 tonnes
- Electricians shop – 1 x 10 tonnes
- Cleaning shop – 1 x 3.2 tonnes
- Maintenance garage – 1 x 2 tonnes, 1 x 3 tonnes
- Paint shop – 1 x 3 tonnes
- Compressor house – 1 x 4 tonnes
- Wharf load-out – 50 tonnes/m²
- <70 tonnes/m² selected areas wharf

Load-Out Capacity (Tonnes)

Not provided

Minimum Water Depth (Metres)

0.8 metres above chart datum (CD)

Maximum Water Depth (Metres)

5.4 metres above CD mean high water springs

Capabilities and Capacities

Wharves

- County wharf – 180 metre length x 7.5 metre draft
- Duchy wharf – 202 metre length x 7.05 metre draft
- Queens wharf – 190 metre length x 6.05 metre draft
- South of Queens wharf – 135 metre length x 6.00 metre draft

Dry-Dock Capability:

Dry Dock 2

- Length – 252.80 metres
- Breadth at entrance – 39.60 metres
- Minimum breadth inside – 39.6 - 41.45 metres
- Depth of sill below CD – 5.50 metres

Dry Dock 3

- Length – 220.98 metres
- Breadth at entrance – 26.82 metres
- Minimum breadth inside – 28.04 metres
- Depth of sill below CD – 3.0 metres
- Azimuth thruster pit – 8.0 metres x 4.0 metres x 2.0 metres

Dry Dock 4

- Length – 172.50 metres
- Breadth at entrance – 26.21 metres
- Minimum breadth inside – 26.21 metres
- Depth of sill below CD – 2.90 metres
- Azimuth thruster pit – 8.0 metres x 4.0 metres x 2.0 metres



Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

Falmouth has the capacity to accommodate vessels up to 100,000 tonnes. With workshops and resources, it offers onsite engineering, fabrication, electrical, pipework and painting. A well-developed local and national supply chain covers all other marine specialists and original equipment manufacturers (OEM), together providing the full range of services to our customers.

- Environmental permit for cargo
- Environmental permit for painting
- Ministry of Defence (MOD) port security
- Ship bunkering facilities
- Ship low flash slop facilities
- Bathymetry surveys
- Jack-up vessel areas
- Cargo handling facilities
- Cruise berth
- Accommodate vessels without gas freeing
- Afloat repairs
- Stores reception facilities
- Tugs and boat fleet
- Marine Design Limited (MDL): design and construct concrete pontoons
- Construction workshop 2,250 m²
- Slip 80 metre width
- Berth 20 metre long x 4 metre draft
- 60 tonne travel hoist

Workshops other

- Joiners/Shipwrights – 1,293 m²
- Riggers loft – 1,077 m²
- Paint shop – 394 m²
- Instrumentation shop – 72 m²
- 11 warehouses – total area 7,840 m²

Air draft

- No restriction

Project and Markets

- Prior Experience/Projects**
- Jack-up vessels – blade racks manufacture; leg renewals; helideck exchange; mobilisation; main crane tests; refits; surveys; dockings; jacking-up in dry dock facilities
 - MOD refits and conversion
 - Conversion/extension to roll-on roll-off ship
 - Manufacture forecastle units type 45 and 23
 - Commercial shipping, liquefied natural gas, oil, ore, bulk, drill rigs, oil rigs
 - Concrete pontoon design and manufacture

Expertise Ship repair, conversion, renewables, energy

Fabrication Tonnage Not provided

**Fabrication Revenue/
Turnover
(Last Three Years)**

- 2011 – £45,036,000
- 2012/13 – £56,695,000
- 2013/14 – £40,227,000

**Ability To Build Large
Structures Under Cover
(Yes/No)** No

Current Market Areas Ship repair, conversion, fabrication, renewable, oil and gas, marine, concrete structures, commercial vessels, MOD vessels, energy market

Potential Market Areas Not provided

Other Information

- Ship bunkering facility
- High flash slop facility



← Able Seaton Port (Hartlepool)
← Able Middlesbrough Port



Able Seaton Port



Able Middlesbrough Port



General Information

Company Name Able UK Ltd

Address Able House, Billingham Reach Industrial Estate, Billingham,
Teesside, TS23 1PX

Contact Number +44 (0)1642 806080

Contact Name David Shepherd, Group Development Executive

Website www.ableuk.com

Employee Count

**Senior Management and
Business Control** 8

**Project and Construction
Management** 25

Skilled Trades and Labour 25

Total 58



Capabilities and Capacities – Able Seaton Port, Hartlepool

Total Area (m²)	510,000 m ² (100,000 m ² dry dock)
Fabrication Area Covered (m²)	9,000 m ²
Assembly and Erection Area (m²)	501,000 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • World’s largest mobile harbour crane LHM600SHL • Liebherr LR1300 crawler crane • Scheuerle 12 x 6 axle SPMT modular trailers • Various cranage and ancillary plant are available • Additional cranes can be provided as per client requirement
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none"> • 306 metre quays offering up to 65 tonnes m². Additional quays can be provided according to clients’ needs • Land – 10 tonnes/m² uniformly distributed load (UDL) and 50 tonnes/m² pad loading • Dry dock – 10 tonnes/m² UDL and 50 tonnes/m² pad loading <p>Two new quays are under construction at Able Seaton Port – we are now handling commercial enquiries for their use:</p> <ul style="list-style-type: none"> • Quay 6 – 120 metres 60 metres at 60 tonnes/m², 60 metres at 16 tonnes/m², heavy load pad 122 metres x 60 metres at 60 tonnes/m² to 140 tonnes/m² • Quay 1 – 125 metres at 16 tonnes/m²
Minimum Water Depth (Metres)	-11.9 metres chart datum (CD)
Maximum Water Depth (Metres)	-20.5 metres CD
Dry-Dock Capability	<ul style="list-style-type: none"> • Entrance width 121 metres • Length 376 metres, width 230 metres • -6.65 metres CD • Access via 200-metre ramp, gradient 1:15 • Base – concrete beams with granular infill • Dry dock currently sealed with cofferdam. New gates can be installed (estimated six months for construction)

Capabilities and Capacities – Able Seaton Port, Hartlepool

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Marine access for the world's largest vessels
- Licensed with permissions for fabrication and other associated activity
- 3,000 m² new office and welfare accommodation
- Site can facilitate 1,000+ employees with car parking
- Rail access is available for goods and freight
- Major projects for BP, Shell and other major operating companies have been carried out here in the past, including fabrication of facilities for Brent, Forties and Ravenspurn
- Located two nautical miles from Tees Fairway Buoy with easy access to the North Sea
- Channel – 1,270 metres in length, 142 metres wide and up to -9.5 metres CD
- Current is low at 0.13 metres per second



Capabilities and Capacities – Able Middlesbrough Port (continued)

Total Area (m²)	161,000 m ²
Fabrication Area Covered (m²)	9,900 m ²
Assembly and Erection Area (m²)	151,100 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<p>Hall 1</p> <ul style="list-style-type: none"> • 1 x 25 tonne Gantry Crane (including five tonne auxiliary hook) • 1 x 20 tonne Gantry Crane (2 x 10 tonne hooks) <p>Hall 2</p> <ul style="list-style-type: none"> • 2 x 25 tonne Gantry Crane (including five tonne auxiliary hook) • 2 x 20 tonne Gantry Crane (2 x 10 tonne hooks) <p>Hall 3</p> <ul style="list-style-type: none"> • 1 x 0.5 tonne Gantry Crane <p>Reinstatement work and recertification necessary</p>
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none"> • Quays – 460 metres, potential to increase to 1,000 metres • Quay 1 – 25 tonnes/m² load-out pad • Quays 8 and 9 – 4,000 tonnes • Quay 10 – 6,000 tonnes
Minimum Water Depth (Metres)	-7 metres CD
Maximum Water Depth (Metres)	-11.5 metres CD
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Facility currently unoccupied and would require some maintenance in order to make buildings weather-tight prior to reinstatement of services • Distance from open sea is six nautical miles • Electrical supply – 2.5 megavolt ampere (MVA) • Natural gas – 1,080 therms per day • Can facilitate up to 1,000 staff • City centre backdrop – workers access via rail • Good connectivity to motorways A19, A1(M) A1 (north and south), A66 • Full planning consents (including fabrication, 24-hour working) • Flexible leases • Channel -5.1 metres CD

Projects and Markets

Expertise

Able does not fabricate, but can provide unique sites to undertake large-scale fabrication projects. Partnership approaches to large-scale fabrication projects will be considered where our sites can be used.

Able UK is privately owned and has undertaken many commissions involving blue chip companies in the oil and gas industry, not only for the construction of rigs and platforms but also in decommissioning. In addition, the company's facilities can accommodate numerous rigs for stacking and refurbishment.

The company is a specialist in developing disused terrestrial and marine sites and facilities such as power stations and oil, gas and petrochemical installations. The company operates a number of multi-user ports facilities for the fabrication, fit-out, repair and modification of offshore and marine structures.

Ability to Build Large Structures Under Cover (Yes/No)

Yes

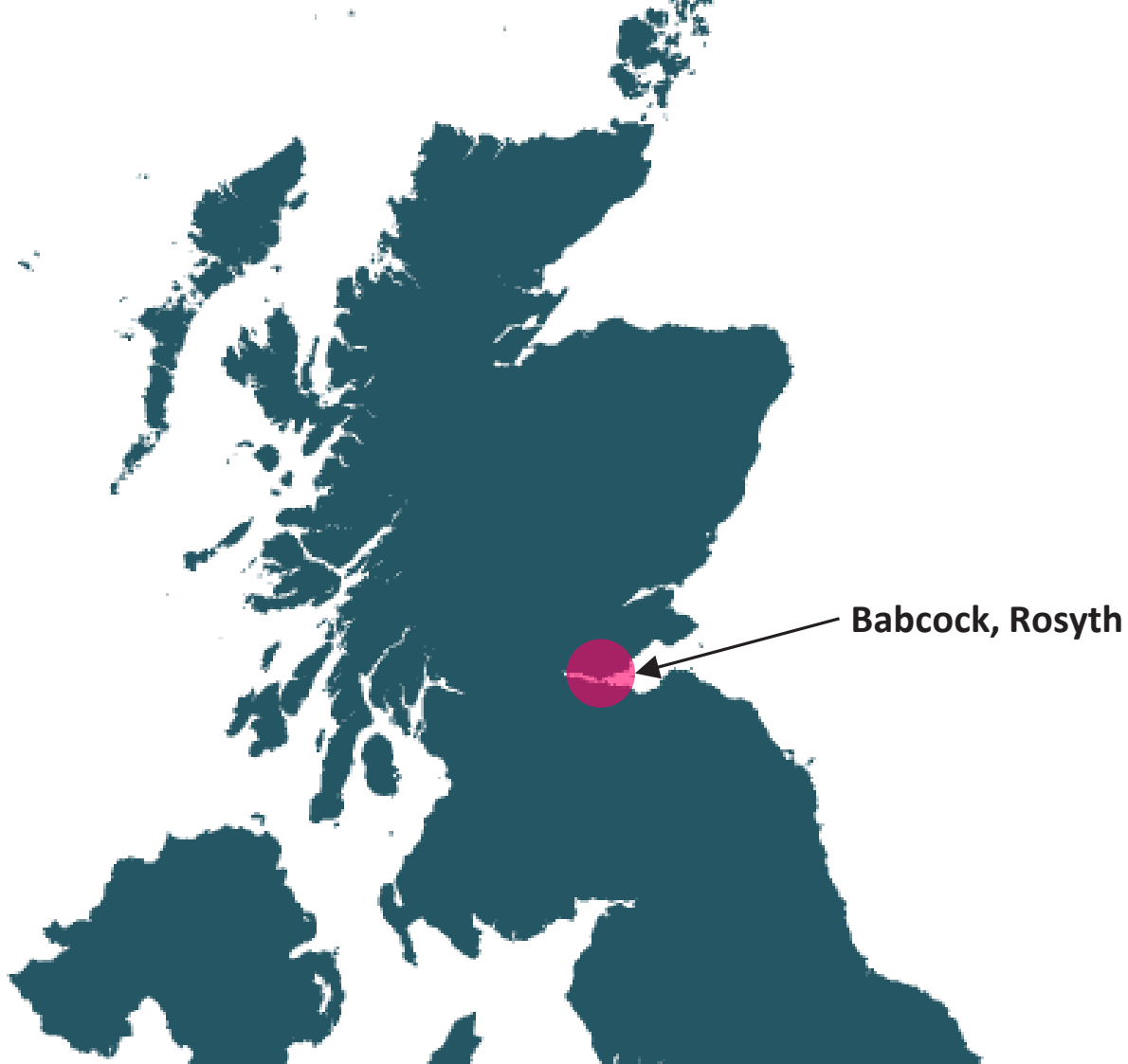
Current Market Areas

- Oil and gas
- Renewable sector
- Bespoke fabrication projects

Other Information

An ongoing investment programme of circa £80 million has revitalised the sites with a number of further potential infrastructure improvements being considered on a project by project basis.





Babcock, Rosyth



Babcock, Appledore Facility



Babcock, Rosyth Facility

Babcock, Appledore





Babcock International Group

General Information

Company Name	Babcock International Group
Address	Rosyth Business Park, Rosyth, KY11 2YD
Contact Number	+44 (0)1383 412131
Contact Name	Ian Donnelly, Managing Director, Energy & Marine Services
Website	www.babcockinternational.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	BS EN ISO 9001:2008 Quality Management System BS EN ISO 14001:2004 Environmental Management System BS OHSAS 18001:2007 Occupational Health and Safety Management Systems

Employee Count

Senior Management and Business Control	104
Project and Construction Management	1,005
Skilled Trades and Labour	935
Total	2,044



Capabilities and Capacities – Facility 1, Rosyth

Total Area (m²)	1,327,370 m ²
Fabrication Area Covered (m²)	35,087 m ²
Assembly and Erection Area (m²)	20,000+ m ² (covered)
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • 20 manufacturing bays complete with overhead crane and tandem crane capabilities: <ul style="list-style-type: none"> • Ten 25 tonne cranes with 26 metre hook heights that can be operated in tandem to allow 50 tonne loads to be lifted. • Two 35 tonne cranes with 16 metre hook heights that can be operated in tandem to allow 70 tonne loads to be lifted. • Six 30 tonne cranes with hook heights varying between 7.5 and 10 metres that can be operated in tandem to allow 60 tonne loads to be lifted. • Eight 25 tonne cranes with hook heights varying between 7.5 and 10 metres that can be operated in tandem to allow 50 tonne loads to be lifted. • Ten 20 tonne cranes with hook heights varying between 7.5 and 10 metres that can be operated in tandem to allow 40 tonne loads to be lifted. • A further 30 over head cranes with lifting capacities varying from 2 tonnes up to 25 tonnes with varying hook heights. • A number of Liebherr mobile cranes and mobile tower cranes onsite capable of lifting up to 250 tonnes. <ul style="list-style-type: none"> • 250 tonne LTM1250 mobile crane • 100 tonne LTM1100 mobile crane • Three 81 K mobile tower cranes • Two Jones Iron Fairy mobile cranes • To enhance capability we have a strong partnership agreement with Ainscough Crane Hire who has an onsite presence to support our requirements. • Two 500-tonne self-propelled modular trailers are available and can be used in tandem to handle equipment to a 1,000 tonne capacity. • This is complemented by a 1,000 tonne Goliath Crane, the largest in the UK, to undertake the most challenging handling requirements.
Load-Out Capacity (Tonnes)	Circa 10,000 tonnes, subject to transporter arrangements. 15 tonnes/m ²
Minimum Water Depth (Metres)	Nine metre maintained non-tidal basin
Maximum Water Depth (Metres)	14 metre controlled tidal basin

Dry-Dock Capability

Dry dock 1: 320.5 metres x 42.1 metres

- Level of entrance cill – 7.56 metres below chart datum (CD) (10.51 below ordinance datum (OD))
- Normal water depth over cill (range) – 11.3 metres to 12.4 metres
- Width of dock at cope level – 42.4 metres
- Depth from coping to dock bottom – 15.4 metres
- Width at dock bottom – 31.5 metres

Dry dock 2: 268.4 metres x 33.5 metres

- Level of entrance cill – 7.56 metres below CD (10.51 metres below OD)
- Normal water depth over cill (range) – 11.3 metres to 12.4 metres
- Width of dock at cope level – 42.4 metres
- Depth from coping to dock bottom – 15.4 metres
- Width at dock bottom – 31.5 metres

Dry dock 3: 268.4 metres x 28.8 metres

- Level of entrance cill – 7.56 metres below CD (10.51 metres below OD)
- Normal water depth over cill (range) – 11.3 metres to 12.4 metres
- Width of dock at cope level – 42.4 metres
- Depth from coping to dock bottom – 15.4 metres
- Width at dock bottom – 31.5 metres

Entrance lock can also be used as a dry dock – 268.4 metres x 33.5 metres

- Level of entrance cill – 10.65 metres below CD (13.6 metres below OD)
- Normal water depth over cill (range) – tidal 11.45 metres at mean low water springs to 16.45 metres at mean high water springs
- Width of dock at cope level – 36.3 metres
- Depth from coping to dock bottom – 19.2 metres
- Width at dock bottom – 30.8 metres

Build Hall – five bays, each 73 metres x 15 metres x 30 metres



Capabilities and Capacities – Facility 1, Rosyth (continued)

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- 2,100 metres of tidal and non-tidal berthing
- Sheltered non-tidal basin measuring 512 metres x 457 metres
- Two coating workshops of 525 m² each
- Storage – 35,000 m² (mixed covered and uncovered)
- Electrical connection up to 11 kilovolts at 50 or 60 Hertz
- Easy direct access to sea to the North Sea
- Waterway shipyard – open sea 10.5 metres x 42.1 metres (direct entrance width) x 45.7 metres (forth bridges navigable headway).
- Five metre horizontal milling machine
- Six metre vertical turning centre

Capabilities and Capacities – Facility 2, Appledore

Total Area (m²)	81,000 m ²
Fabrication Area Covered (m²)	16,640 m ²
Assembly and Erection Area (m²)	8,036 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Main hall – overhead 2 x 60 tonnes • Unit assembly area – Semi-Goliath 4 x 10 tonnes • 28 overhead travelling Gantry Cranes (maximum lift of 60 tonnes safe work load)
Load-Out Capacity (Tonnes)	750 tonnes
Minimum Water Depth (Metres)	Not provided
Maximum Water Depth (Metres)	4.6 metres (building dock sill)
Dry-Dock Capability	Dock – 118 metres x 33.54 metres, (16.4 tonnes/m ² uniformly distributed load)

Capabilities and Capacities – Facility 2, Appledore (continued)

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- The site is a fully integrated, covered facility with capacity to design, construct and commission vessels of up to 110 metres in length and 10,500 dead weight tonnage
- Stockyard 4,000 m² serviced by a ten tonne crane
- Main building dock has supporting prefabrication facilities/capabilities as listed below:
 - Steel material prep shop
 - Structure prefabrication facilities
 - Pipe manufacturing shop
 - Machine shop
 - Secure stores areas
 - Float work is completed at an adjacent site with 200 metres of quayside available
 - Tribon Modelling System
 - Profile cutting machines (three plasma and one oxy-propane)
 - Brake press
 - Plate rollers
 - Frame bender
 - Pipe benders (maximum 152 millimetres diameter, with two D bends)
 - Machine shop equipment (lathes, mills, etc)



Prior Experience/Projects

Subsea structures for BP Quad 204:

Delivered 73 fabricated subsea structures for the BP Quad redevelopment project on the UK Continental Shelf:

- 30 control distribution modules (assemblies and umbilical terminations)
- 43 fluid handling structures (manifolds, flowline and riser terminations, subsea isolation valve structures)

Walk to Work for Total E&P:

Delivered a turnkey project management solution:

- Chartered specialist vessel and access equipment
- Managed installation and logistics ensuring DNV Class approval and best safety practice
- Enabled mobilisation and demobilisation from Rosyth
- Babcock offshore and onshore management fully supported the on board team during the project

Total Ellon Grant subsea module project

Delivered a 160 tonne manifold for Total's North Sea Ellon Grant development:

- Subsea protection structure
- Inner control modules
- Foundation piles

Cavendish Nuclear – delivering complex shielding doors for use in nuclear decommissioning

E.ON, Rampion – delivering engineering, procurement and construction for the offshore substation and jacket

Offshore Patrol Vessels (OPV) – designed, built and delivered two OPV's for the Irish Government, with the third vessel in the final delivery phase

ConocoPhillips – Britannia Satellites

Axsia Serck Baker – manufacture of five topsides process units with titanium pipework

Sonsub International AS – subsea structures and tie-ins for the Norne and Heidrun project for Statoil

Projects and Markets

Expertise

Babcock International Group is the UK's leading engineering support services company, delivering complex and critical asset support both in the UK and overseas.

With revenue of circa £4.5 billion in 2015 and an order book of circa £20 billion, we manage vital assets within a number of industry sectors including energy, defence, emergency services, transport, telecommunications and education.

The unparalleled expertise of our 29,000 global employees means that whether designing, building, operating, managing, or maintaining vital assets, Babcock is a partner that can be trusted to deliver.

We partner with our customers to:

- Design and deliver complex infrastructure
- Provide specialist systems and technical expertise
- Manage critical assets

We understand and regularly apply industry specific regulations and requirements.

Fabrication Tonnage (Last three years)

Approximately 22,000 tonnes

Fabrication Revenue/Turnover (Last Three Years)

Rosyth

To March 2013 – £251.588 million

To March 2014 – £294.644 million

To March 2015 – £408.965 million

Ability to Build Large Structures Under Cover (Yes/No)

Yes

Current Market Areas

- Oil and gas
- Commercial marine refit/repair
- Offshore support base
- Offshore renewables (substation build)
- Engineering consultancy
- Training
- Support services
- Defence
- Government contracts
- Networks
- All UK and International

Projects and Markets (continued)

Potential Market Areas

- Oil and gas, topsides and floating, production, storage and offloading vessels
- Commercial marine refit and maintenance (asset management)
- Renewables operations and maintenance
- Decommissioning

Other Information

Currently using the skills, facilities and experience needed for one of the largest modular build projects in the UK – the Royal Navy’s Queen Elizabeth Class aircraft carriers. Includes fabrication of units in excess of 600 tonnes.

Onsite design house with circa 300 engineers and designers.





Burntisland Fabrications, Arnish Facility



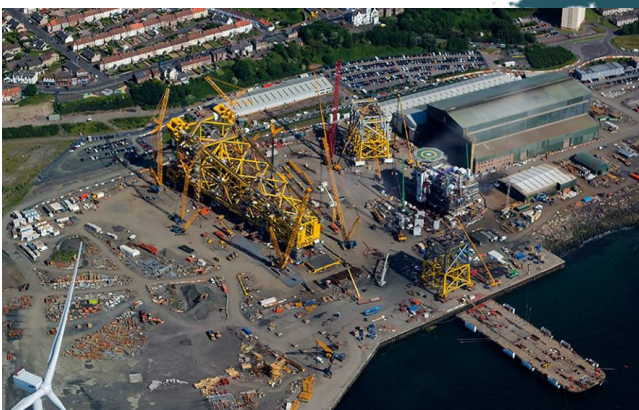
Burntisland Fabrications, Methil Facility

Burntisland Fabrications, Arnish



Burntisland Fabrications, Methil

Burntisland Fabrications, Burntisland



Burntisland Fabrications, Methil Facility



Burntisland Fabrications, Burntisland Facility



Burntisland Fabrications Ltd

General Information

Company Name Burntisland Fabrications Ltd

Address Seaforth Place, West Shore, Burntisland, KY3 9AU

Contact Number +44 (0)1592 222000

Contact Name John Robertson, Managing Director
Martin Adam, Operations Director
Iain Scrimger, Business Development Manager

Website www.bifab.co.uk



General Information (continued)

Health, Safety, Environment and Quality (HSEQ) Accreditation

Burntisland Fabrications Ltd (BiFab) considers that its continued success is dependent on providing consistent quality and remaining fully committed to legal requirements, statutory/regulatory requirements and the requirements of its customers in respect of quality, health, safety and environmental hazards, and meeting or exceeding its customers' expectations and needs. This is achieved by implementing and continuously improving on the methods and practices of its management systems, which are documented and maintained in accordance with the following international standards:

- BS EN ISO 9001:2008
- BS EN ISO 14001:2004
- BS OHSAS 18001:2007
- BS EN ISO 3834-2:2005
- BS EN 1090-2:2008+A1:2011

The company actively promotes continual improvement in occupational health and safety and environmental performance through setting and reviewing objectives, communication with employees and effective application of its policy, procedures and its management systems.

Burntisland Fabrications Ltd will ensure that all management and personnel are fully conversant with the objectives of the management systems through ongoing training and education.

'No activity is so important that we will not take the time or make the effort to do it safely'

Employee Count

Senior Management and Business Control	20
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Project and Construction Management	158
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Skilled Trades and Labour	1,372
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Total	1,550
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Capabilities and Capacities – Facility 1, Methil Yard

Total Area (m²)	540,000 m ²
Fabrication Area Covered (m²)	14,300 m ² (fabrication and assembly areas are interchangeable)
Assembly and Erection Area (m²)	277,000 m ² (open)
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Shop 1 – 2 x 30 tonnes • Shop 2 – 2 x 60 tonnes, hook height 12 metres • Shop 3 – 2 x 80 tonnes, hook height 30.99 metres • Annex – 2 x 15 tonnes • Stockyard – 1 x 16 tonnes
Load-Out Capacity (Tonnes)	20,000 tonnes (based on previous skid load-out) 350 tonnes/m ² (both quaysides)
Minimum Water Depth (Metres)	Quay 1 – 4.9 metres (mean) Quay 2 – nine metres (mean)
Maximum Water Depth (Metres)	Quay 1 – nine metres (mean) Quay 2 – nine metres (mean)
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Covered storage – 6,800 m² • Material stockyard – 18,600 m² • Paint shop – 1,650 m²



Capabilities and Capacities – Facility 2, Burntisland Yard

Total Area (m²)	133,550 m ²
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Exotic fabrication – 1,455 m² • General fabrication – 2 x 1,490 m² • Main fabrication shop – 2 x 2,735 m²
Assembly and Erection Area (m²)	60,000 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Main fabrication shop bay 1 – 2 x 50 tonnes • Main fabrication shop bay 2 – 2 x 50 tonnes • Exotic fabrication – 3 x 5 tonnes • General fabrication bay 1 – 2 x 5 tonnes • General fabrication bay 2 – 2 x 5 tonnes
Load-Out Capacity (Tonnes)	More than 3,000 tonnes
Minimum Water Depth (Metres)	5.79 metres (non-tidal dock)
Maximum Water Depth (Metres)	5.79 metres (non-tidal dock)
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Paint shop – 2,500 m² • Stores and material stockyard – 3,600 m²

Capabilities and Capacities – Facility 3, Arnish Yard

Total Area (m²)	21,000 m ²
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Fabrication bay 1 – 3,000 m² • Fabrication bay 2 – 3,000 m² • Main fabrication hall – 4,294 m²
Assembly and Erection Area (m²)	10,000 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Fabrication bay 1 – 3 x 20 tonnes, hook height 7.7 metres • Fabrication bay 2 – 1 x 20 tonnes; 2 x 30 tonnes, hook height 7.5 metres • Main fabrication hall – 1 x 60 tonnes; 2 x 80 tonnes, hook height 18 metres
Load-Out Capacity (Tonnes)	3,000 tonnes
Minimum Water Depth (Metres)	6.5 metres
Maximum Water Depth (Metres)	Nine metres
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Covered storage – 640 m² • Material storage – 10,000 m² • Blast and paint shop – 1,200 m² • Rollings – four-metre cans up to 150 millimetres wall thickness • Electrical capacity – five mega watts + three mega watts back-up • Further space available for storage/assembly as required • Material storage is used interchangeably as assembly and erection area • Crane capacity can be supplemented using rental mobile/crawler cranes, two multi-wheeled trailers onsite provide 2 x 175 tonne site move capacity



Prior Experience/Projects

- Topsides modules of up to 4,500 tonnes, including both process and accommodation modules for engineering, procurement and construction (EPC) projects
- Jackets of up to 9,000 tonnes, excluding piles
- Subsea manifolds
- Over 40 jackets for offshore wind EPC projects
- Wave and tidal generation projects

BiFab was very proud to be selected to fabricate the substructure assemblies and associated components required for the Beatrice Wind Farm Demonstrator Project involving Talisman Energy (UK) Ltd and Scottish and Southern Energy (SSE). Based on our experience from previous projects, this was an extremely fast track and challenging project and was successful due to the good relationships, team effort and excellent working environment created by the management team of Talisman and SSE. This was the first time two jacket structures on this scale had been completely fabricated in a workshop environment. The delivery schedule would have been significantly more difficult if weather factors had to be considered.

Following the Beatrice project, we have now completed projects for the supply of a further 41 jacket substructures for offshore wind.

31 for Ormonde Field Development UK – Vattenfall
6 for Alpha Ventus German Offshore Project – DOTI
2 for Greater Gabbard – Fluor/SSE/RWE
2 for Gwynt Y Mor – RWE Npower

Prior Experience/Projects (continued)

In addition, BiFab is a partner within an alliance formed by SSE to facilitate early stage engineering and fabrication collaborations between developer, fabricator, installer and designer. The alliance comprises SSE; Siemens; Subsea 7; Atkins and BiFab and is charged with delivering offshore wind farms for SSE, initially at the Beatrice site in the Moray Firth, Scotland. Due to the complexity and variable seabed conditions and difficult environmental conditions, the alliance is focused on risk and cost reduction and meeting expected returns by combining cross-discipline knowledge and innovative solutions throughout each phase of delivery.

Within the oil and gas sector, we have recently (2013/2015) delivered the fabrication and supply of the following large scale projects being fabricated within a workshop environment:

Project: Solan field development project

Client: Premier Oil

Scope:

1. Fabrication and supply of an 8,400 tonne jacket
2. EPC of a 4,500 tonne topside

Project: Cygnus field development

Client: GDF Suez E&P UK Ltd

Scope:

1. EPC of 4 x 1,100 – 2,500 tonnes jackets
2. EPC of a 4,500 tonne topside



Expertise

- Complete topsides delivered on EPC basis, including process/utility/accommodation modules. The existing facilities can cope with up to 20,000 tonnes
- Jackets for oil, gas and offshore wind projects, including piles

Mass Manufacturing

BiFab, in collaboration with universities and education institutes, commissioned a detailed study, during the construction of the two jacket substructures for the Beatrice project, on the various manufacturing processes involved. Its aim was to maximise the total number of substructures that could be built in a year. The study is now complete and we are aware of the cost of the proposed new buildings at our Methil, Fife facility. This proposal would take BiFab's current production capacity at Methil from 60 structures to between 100 and 150 structures per year. The company intends to have this new facility in operation by the end of 2016.

BiFab believes that Scotland's proximity to the North Sea and Baltic Sea, together with the experience gained from the above projects, including expertise available at the University of Strathclyde and other educational institutions, places it in a unique position to develop the world's first mass manufacturing facility to produce large offshore substructures cost effectively. BiFab recognises that this is an expanding market and is very keen to see this kind of technique used more widely throughout the offshore wind industry.

Innovation – New Jacket Design BiFab/Atkins

Based on experience gained from recently completed offshore wind farm projects, BiFab and Atkins have developed their own jacket substructure to support offshore wind turbine generators. This design is jointly (50:50) patented and capable of supporting a range of turbines from three to eight megawatts in water depths 15 metres down to 80 metres. It is a lightweight structure, with potential savings in both weight and manufacturing costs, along with the potential to load-out more structures per barge due to the reduced footprint at the base of the jacket.

Projects and Markets

Fabrication Tonnage (Last Three Years)	2012 – 6,500 tonnes
	2013 – 11,500 tonnes
	2014 – 18,500 tonnes

Fabrication Revenue/Turnover (Last Three Years)	2012 – £73,515,889
	2013 – £141,081,958
	2014 – £208,093,742

Ability To Build Large Structures Under Cover (Yes/No)	Yes
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Current Market Areas	UK/Europe
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Potential Market Areas	Not provided
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Other Information

The management team at BiFab has operated the Burntisland facility since 1990, covering a wide range of products for the oil and gas sector. From its fabrication facilities in Burntisland, Methil and Stornoway, Scotland, each with their own load-out/quayside facilities, BiFab is the largest independent specialist fabricator operating in Scotland for decks; modules; jackets; subsea; accommodation; platforms; piles, drilling and exotics/pipework to the oil and gas, petrochemical and alternative energy industries.

BiFab operates two construction facilities in Fife, Scotland; the Methil facility, with a capacity to load-out structures weighing 20,000 tonnes; and the Burntisland facility, with the capacity to load-out structures weighing 5,000 tonnes. The Burntisland and Methil facilities are situated on the north bank of the nine-mile wide Firth of Forth estuary, both with unrestricted direct access to the sea. Each facility is able to accept large ocean-going vessels.



Other Information (continued)

The BiFab Arnish facility in Stornoway, Outer Hebrides allows it to produce monopiles and manufacture wave and tidal devices. This facility is equipped with heavy rolling equipment, with the capacity to roll materials up to 150 millimetres thick, and has a load-out capacity up to 3,000 tonnes.

While continuing to service the needs of oil companies, engineering companies and offshore suppliers associated with the oil and gas and petrochemical sector, BiFab is now adapting its expertise to cover fabrication solutions that are required for the alternative energy sector (covering wind, wave and tidal energy), while simultaneously achieving the highest standards currently applicable.

BiFab is increasingly becoming involved, at the front end, in innovative projects where it can apply its expertise to provide practical and cost effective solutions to the development team. BiFab prides itself on the fact that its clients in these projects perceive the company as a proactive contributor to the overall achievement of project goals, rather than just the fabricator.

BiFab aims to provide a flexible approach to the fabrication industry with the skills, expertise and competence gained from over 30 years in the oil and gas sector. BiFab hopes to be a major contributor to the development of a new and sustainable industry and, at the same time, contribute to creating a secure future for its employees and the design and fabrication industry in the UK and Europe.





CKT Projects Ltd.



General Information

Company Name	CKT Projects Ltd.
Address	Unit 7D, Bowes Road, Riverside Park Industrial Estate, Middlesbrough, TS2 1LU
Contact Number	+44 (0)1642 246065
Contact Name	Steven Kranendonk, Manager of Sales
Website	www.cktprojects.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	CKT is accredited to the following HSEQ standards: ISO 29001, ISO 9001, ISO 14001, OHS 18001. It is also FPAL verified.

Employee Count

Senior Management and Business Control	2 in senior management
Project and Construction Management	10 including senior technical and business support personnel
Skilled Trades and Labour	Various
Total	12+

Capabilities and Capacities

Fabrication facilities will be rented on a project-by-project basis for the specific requirements.



Prior Experience/Projects

Shell Gabon

Design, engineering and construction of five single level modules and supervised installation at the onshore facility in Gabon, Africa. The modules included offices and mess facilities.

CNR International Maintenance and Refurbishment

Framework contract for several maintenance jobs throughout the last six years for CNR International. Several multidisciplinary works done on Ninian South, North and Central and Tiffany.

Centrica Energy Maintenance and Refurbishment

Framework contract for several maintenance jobs throughout the last four years for Centrica Energy. Several multidisciplinary works done on AP1, DP3 and DP4 platforms.

Nexen Buzzard Additional Living Quarter

Design, engineering and construction of a 60-man additional living quarter (ALQ). It was constructed as 18 separate modules fully commissioned and installed offshore to reduce the need for heavy lifting barges.

Talisman Montrose Additional Living Quarter

Design, engineering and construction of a 30-man ALQ, constructed as 16 mini modules each weighing a maximum of 200 tonnes to meet the lifting capacity of the platform's crane.

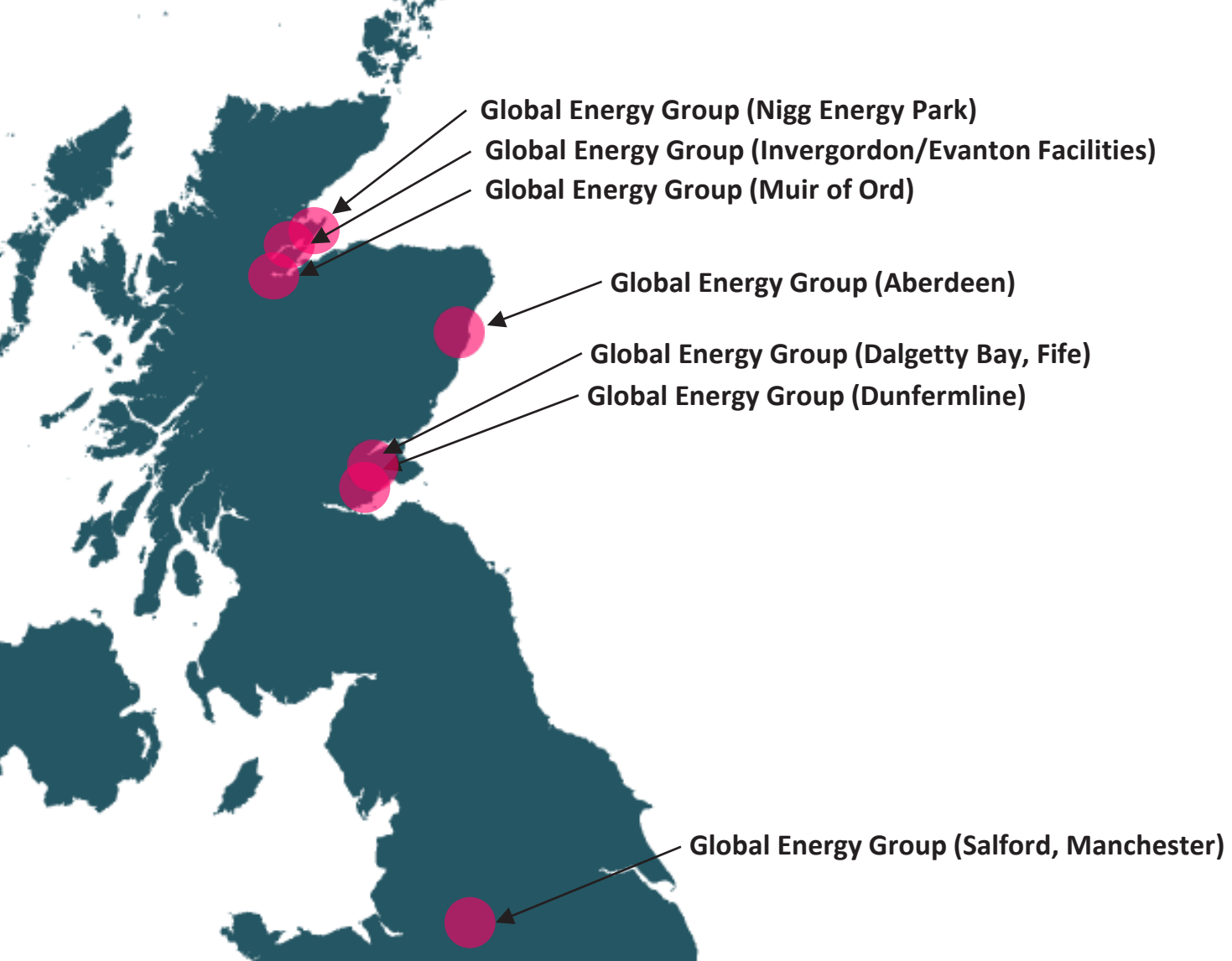
Everest Additional Living Quarter

Design, engineering and construction of a 24-man ALQ. The project was completed from design to installation within 12 months.

Projects and Markets (continued)

Expertise	CKT specialises in the design, engineering, construction, maintenance and refurbishment of offshore living quarters (LQs) and ALQs that can be constructed as a series of modules or one complete monolithic structure.
Fabrication Tonnage (Last Three Years)	Not provided
Fabrication Revenue/Turnover (Last Three Years)	Not provided
Ability to Build Large Structures Under Cover (Yes/No)	Yes
Current Market Areas	Current operations centre on the UK Continental Shelf
Potential Market Areas	Work can be carried out worldwide
Other Information	CKT Projects Ltd. is an accredited company with over 40 years' experience of providing offshore structures. All of its construction and outfitting works can be carried out undercover, safe from the elements, reducing the risk of disrupting the schedule.





Invergordon Assembly Facility and Load-Out



NEP Shop 6 Indoor Fabrication Facility



Invergordon Inland Fabrication Facility



NEP Fabrication, Assembly and Load-Out



Global Energy Group

General Information

Company Name	Global Energy Group
Address	Corporate Headquarters, 13 Henderson Road, Inverness, IV1 1SN
Contact Number	+44 (0)1463 725460
Contact Name	Ian Cobban, Executive Vice President
Website	www.gegroup.com , www.isleburn.com , www.cpsaberdeen.co.uk , www.ross-eng.com , www.psilimited.co.uk and www.langfields.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	ISO 9001, 14001, 18001 and BS EN ISO 3834

Employee Count

Senior Management and Business Control	211
Project and Construction Management	371
Skilled Trades and Labour	1,197
Total	1,779



Capabilities and Capacities – Nigg Energy Park (Global Energy Group & Isleburn)

Total Area (m²)	243,200 m ² (960,000 m ² including oil terminal)
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Shops 1, 2 and 3 – 6,158 m² • Shops 4, 5 and 6 – 18,823 m² • Shop 7 – 9,080 m² • Total covered fabrication area – 34,000 m²
Assembly and Erection Area (m²)	129,000 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Shops 1, 2 and 3 – 2 x 50 tonnes per shop, hook height 25 metres • Shops 4 and 5 – 2 x 50 tonnes, 2 x 20 tonnes per shop, hook height 25 metres • Shop 6 – 1 x 120 tonnes, hook height 35 metres • Shop 7 – 3 x 50 tonne overhead Gantry Cranes (currently non-operational) • Up to 600 tonne crawler cranes contracted and self-propelled modular transporter onsite at all times • 50 to 1,250 mobile cranes as and when required • Storage area outside • Balst and paint shop complete with 50 tonne crane. SEPA compliant. • CNC plate and tubular cutting facilities • Dock quay – 270 metres length complete with 200 tonne rig mooring bollards • South quay – 370 metres length complete with 300 tonne rig and 200 tonne plus 50 tonne shipping mooring bollards • East side of finger quay – 130 metres length complete with 300 tonne and 50 tonne mooring bollards • South side of finger quay – 40 metre length (stern working only) • West side of finger quay – 125 metre length complete with 300 tonne and 50 tonne mooring bollards
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none"> • 50,000 tonnes for large structures (historical) • 4,000 tonnes for topside skid packages and subsea hardware
Minimum Water Depth (Metres)	9.3 metres lowest astronomical tide (LAT)
Maximum Water Depth (Metres)	16.3 metres mean high water springs (MHWS)
Dry-Dock Capability	<ul style="list-style-type: none"> • 315 metres long x 180 metres wide • Gate entrance – 120 metres wide

Capabilities and Capacities (continued)

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Environmentally controlled warehouse – 2,631 m²
- Additional storage/fabrication/assembly shop – 6,000 m²
- Mechanical workshop – 4,031 m²
- Two helipad access areas onsite
- Project/client offices
- 100-man onsite accommodation
- Onsite training academy
- Blast and paint shop complete with 50 tonne overhead crane. SEPA compliant
- CNC plate and tubular cutting facilities



Capabilities and Capacities – Invergordon Facilities (Isleburn)

Total Area (m²)	182,108 m ²
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Service base – 6,100 m² • Inland facility – 3,530 m²
Assembly and Erection Area (m²)	<ul style="list-style-type: none"> • Service base – 12,550 m² • Inland facility – 16,000 m²
Crane – Lifting Capacity and Hook Height (Tonnes and Metres)	<p>Service base</p> <ul style="list-style-type: none"> • Main assembly – 4 x 20 tonnes • Piping shops (carbon and segregated exotic) – 3 x 10 tonnes • Fabrication shops – 1 x 8.5 tonnes, 3 x 10 tonnes and 2 x 5 tonnes <p>Inland facility</p> <ul style="list-style-type: none"> • 3 x 10 tonnes, hook height 7.1 metres; 1 x 5 tonnes, hook height 7.1 metres • External crane capacity of 1,000 tonnes plus a pool of heavy lift cranes and modular trailers available as required
Load-Out Capacity (Tonnes)	Crane lift up to 1,000 tonnes
Minimum Water Depth (Metres)	Eight metres LAT
Maximum Water Depth (Metres)	14 metres MHWS
Dry-Dock Capability	Wet dock – Queens Dock at Invergordon Harbour available (10.9 metres LAT)
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Quay 1 – 50 metres long with 50 tonne mooring bollards • Quay 2 – 150 metres long with 50 tonne and 200 tonne mooring bollards • Quay 3 – 87 metres long with heavy lift pad (1,000 tonne capacity) • Quay 4 (deep water berth) – 200 tonne mooring bollards • Queens Dock – 150 metres long with 50 tonne and 200 tonne mooring bollards • 1,393.5 m² paint shop at the inland facility, which is SEPA compliant • Dedicated hydrotest bunker at the inland facility • CNC plate cutting at both facilities • Indoor and outdoor storage at both facilities

Capabilities and Capacities – Evanton Facilities (Isleburn)

Total Area (m²)	18,100 m ²
Fabrication Area Covered (m²)	3,212 m ²
Assembly and Erection Area (m²)	5,063 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<p>Evanton Topshop</p> <ul style="list-style-type: none"> • Shop 1 – 6 tonne crane, 4.4 metres hook height • Shop 2 – 6 tonne, 4.4 metres hook height • Machine shop – 2 x 3 tonnes, 3.1 metres hook height <p>Deephaven Piping (Carbon and segregated exotic)</p> <ul style="list-style-type: none"> • Bay 1 – 2 x 10 tonnes, hook height seven metres • Bay 2 – 2 x 10 tonnes, hook height seven metres
Assembly and Erection Area (m²)	4,500 m ²
Load-Out Capacity (Tonnes)	Crane lift up to 1,000 tonnes
Minimum Water Depth (Metres)	Not applicable
Maximum Water Depth (Metres)	Not applicable
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size	<ul style="list-style-type: none"> • Piping facility – 1,670 m² • Piping assembly/erection area – 3,300 m² • Deephaven facility radiography bunker • Indoor and outdoor storage areas • Head office



Capabilities and Capacities – Muir of Ord (Ross-shire Engineering)

Total Area (m²)	7,700 m ²
Fabrication Area Covered (m²)	4,700 m ²
Assembly and Erection Area (m²)	4,500 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • 4 x 20 tonne overhead cranes, 8 metre hook height • 2 x 15 tonne overhead cranes, 4.8 metre hook height • 1 x 2 tonne crane, 3 metre hook height • 1 x 5 tonne crane, 3.6 metre hook height • 2 x 5 tonne crane, 4.8 metre hook height
Load-Out Capacity (Tonnes)	Not applicable
Minimum Water Depth (Metres)	Not applicable
Maximum Water Depth (Metres)	Not applicable
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size	<ul style="list-style-type: none"> • Office to seat 150 personnel • 500 m² covered stores area • Machining, 3D design and build, hydraulics, mechanical and electrical capability

Capabilities and Capacities – Aberdeen Cluster (Isleburn & Caledonian Petroleum Services)

Total Area (m²)	<ul style="list-style-type: none"> • Bucksburn – 1,165 m² • Altens – 4,490 m² • Nord Centre – 4,000 m² • Dyce – 12,313 m² • Bridge of Don – 3,086 m² • Tullos – 5,310 m²
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Bucksburn – 564 m² • Altens – 1,944 m² • Nord Centre – 2,290 m² • Dyce – 5,244 m² • Bridge of Don – 1,840 m² • Tullos – 2,300 m²
Assembly and Erection Area (m²)	<ul style="list-style-type: none"> • Bucksburn – 350 m² • Altens – 1,296 m² • Nord Centre – 1,600 m², further 1,650 m² available • Dyce – 3,770 m² • Bridge of Don – 400 m² • Tullos – 510 m²

Capabilities and Capacities – Aberdeen Cluster (continued)

Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)

Bucksburn

- Top workshop – 1 x 4 tonnes, 1 x 2 tonnes, hook height 4.4 metres

Altens

- Bay 1 – 1 x 5 tonnes, hook height six metres; 1 x 6.3 tonnes, hook height six metres
- Bay 2 – 2 x 20 tonnes, hook height 5.4 metres
- Bay 3 – 1 x 10 tonnes, hook height seven metres; 1 x 20 tonnes, hook height seven metres

Nord Centre

- Unit D – 1 x 10 tonnes, hook height 6.5 metres
- Unit E – 1 x 20 tonnes, hook height 6.5 metres
- Unit F – 1 x 20 tonnes, 1 x 10 tonnes, hook height 6.5 metres
- Unit M – 2 x 10 tonnes, hook height 6.5 metres

Dyce

- Structural shop middle shop – 1 x 15 tonnes, 1 x 10 tonnes, 2 x 3.2 tonnes
- Structural shop east wing – 3 x 1 tonne davit arms
- Structural shop west wing – 2 x 10 tonnes
- Carbon steel piping shop – 1 x 5 tonnes, 1 x 3 tonnes
- Exotic piping shop – 1 x 15 tonnes

Bridge of Don

- Shop 1 – 2 x 5 tonnes
- Shop 2 – 1 x 4 tonnes
- Shop 4 – 1 x 1 tonne swing job, 1 x 0.5 tonne swing job

Tullos

- Structural workshop – 1 x 5 tonnes, hook height 3.2 metres
- Piping workshop – 1.5 tonnes, hook height 3.2 metres and 1 x 5 tonnes, hook height 3 metres

Load-Out Capacity (Tonnes)

Nord Centre – 1,000 tonnes (14 metres x 20 metres heavy lift platform)

Minimum Water Depth (Metres)

9.6 metres LAT

Maximum Water Depth (Metres)

13.3 metres MHWS

Dry-Dock Capability

Not applicable



Capabilities and Capacities – Aberdeen Cluster (continued)

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Altens – 600 m² offices
- Nord Centre – fabrication for smaller modules. Additional storage and erection area available from Aberdeen Harbour
- Dyce – 1,700 m² offices
- Bridge of Don – 250 m² offices
- Tullos – 245 m² storage/warehouse 1,000 m² yard

Capabilities and Capacities – Dunfermline (Caledonian Petroleum Services)

Total Area (m²)	4,750 m ²
Fabrication Area Covered (m²)	2,739 m ²
Assembly and Erection Area (m²)	1,663 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • Shop 1 – 2 x 5 tonnes, maximum hook height 5.3 metres • Shop 2 – 2 x 5 tonnes, maximum hook height 5.5 metres • Shop 3 – 1 x 15 tonnes, hook height 7.65 metres; 1 x 20 tonnes, hook height 7.65 metres • Shop 4 – 2 x 10 tonnes, maximum hook height 4.6 metres • Shop 5 – 2 x 5 tonnes, maximum hook height 4.9 metres
Load-Out Capacity (Tonnes)	Not applicable
Minimum Water Depth (Metres)	Not applicable
Maximum Water Depth (Metres)	Not applicable
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Facility includes a 400 m² office and yard capacity of 1,500 m² • Site also includes exotic fabrication, structural fabrication, carbon steel piping fabrication and pressure test bay

Capabilities and Capacities – Dalgetty Bay, Fife (PSI Limited)

Total Area (m²)	2,500 m ²
Fabrication Area Covered (m²)	350 m ²
Assembly and Erection Area (m²)	350 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	Not applicable
Load-Out Capacity (Tonnes)	Not applicable
Minimum Water Depth (Metres)	Not applicable
Maximum Water Depth (Metres)	Not applicable
Dry-Dock Capability	Not applicable

Capabilities and Capacities – Salford, Manchester (Langfields)

Total Area (m²)	4,632 m ²
Fabrication Area Covered (m²)	2,050 m ²
Assembly and Erection Area (m²)	500 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none">• 2 x 5 tonnes• 3 x 5 tonnes• 2 x 2 tonnes• Hook height – 5.7 metres
Load-Out Capacity (Tonnes)	Not applicable
Minimum Water Depth (Metres)	Not applicable
Maximum Water Depth (Metres)	Not applicable
Dry-Dock Capability	Not applicable



Prior Experience/Projects

Recognised as the leading manufacturer of integrated and complex subsea and topside equipment, with a proven track record in the oil and gas sector, as well as bespoke equipment for the nuclear and marine renewables sectors. Global also supports oil and gas operators and engineering companies with fast turnaround solutions to the maintenance of pipework and structural steel on offshore production platforms, as well as onshore facilities.

Projects

Global's group of well-known specialist fabrication businesses, including Isleburn, Ross-shire Engineering, Caledonian Petroleum Services, PSI Limited and Langfields are at the forefront of the sectors they serve, delivering structural fabrications, pre-assembled units, skid packages and piping for the offshore and onshore oil and gas, renewable, nuclear and water industry. Our work is fully compliant with common industry construction and welding specifications such as EEMUA 158, NORSOK M101, AWS D1.1 and ASME IX.

Examples of the Groups recent projects include:

- Technip: Chevron Alder (manifolds, subsea isolation valves, tie-in spools etc.)
- Wood Group PSN: Shell Brent Alpha (caisson and clamps)
- Technip Norway: Total Edradour Project
- Aquaterra Energy: Premier Oil Drill Catcher Project
- Bibby Offshore: Maersk Tyra E (caisson and clamps)
- Subsea 7: Talisman Montrose (tie-in spools)
- Subsea 7: TAQA/Dana DSVi (tie-in spools)
- Technip: EnQuest Kraken Phase II (16 PLETs)
- Shell: Pierce A12 (tie-in spools)
- Subsea 7: BP Clair Ridge (tie-in spools)
- Technip: Quad 204 Jumper Campaign
- Heerema: Total Kaombo Project
- BP Foinaven F48P Project
- MeyGen Phase 1a (Tidal Energy Project)
- Apache Beryls and Forties
- Total Elgin
- Talisman Claymore
- Shell Brent Charlie
- Nexen Buzzard
- EnQuest Heather and Thistle

Projects and Markets (continued)

Expertise

- Global Energy Group is widely regarded as a world-leader in the manufacture of bespoke equipment for subsea oil and gas projects. We also have a strong track record in the topside, power and process sectors, as well as providing the full spectrum of engineering and fabrication disciplines.
- The Group has expanded significantly, through organic growth and strategic acquisitions, to become one of the UK's largest specialist fabricators for the energy sector, consistently delivering value and reducing risks for clients.
- Global Energy Group boasts proven safety and quality standards coupled with excellent client relationships. The Group is at the forefront of the most pioneering subsea projects in the North Sea and around the world, becoming a market leader in the manufacture of subsea equipment for the UK and a leading exporter of subsea hardware to the Gulf of Mexico and West Africa.
- The extensively covered fabrication capacity of Global Energy Group is unrivalled in Europe and notably incorporates Nigg Energy Park, which complements its unparalleled reputation in supporting clients in the fabrication of subsea hardware, delivering exact standards and schedules. This fabrication expertise is founded upon the role the Highlands of Scotland has historically played at the heart of the UK oil and gas industry.

Fabrication Tonnage (Last Three Years)	37,100 tonnes
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Fabrication Revenue/Turnover (Last Three Years)	Circa £490 million
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Ability to Build Large Structures Under Cover (Yes/No)	Yes
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Projects and Markets (continued)

Current Market Areas

- Oil and gas – subsea
- Oil and gas – drilling rig modifications and maintenance
- Oil and gas – topsides and jackets
- Oil and gas – brownfield modifications, nuclear, utilities
- Nuclear – modular fabrication
- Marine renewables – construction, assembly and load-out

Other Information

The completion of the South Quay project in early 2015, which involved re-facing the entire length of the front quayside and developing a new West Finger quay (itself 180 metres in length), plays a critical role in attracting major projects to the area where customers benefit from over 900 metres of unrivalled quayside access – longer than any facility in the area. With 12 metres of water and direct access to large laydown areas, the Port of Nigg is the perfect facility to support oil and gas projects, including the emerging renewables industry, benefitting also from the onsite fabrication facilities.

In Nigg's landmark fabrication shops, subsea and other specialist steel fabrication projects are carried out for customers around the world and the site is advantageously located to support the construction, assembly and logistics of larger offshore wind, wave and tidal projects.





Aerial View of the Facility



Harland and Wolff



Borgny Dolphin and Byford Dolphin Moored at Ship Repair Quay



Blackford Dolphin Dry Docked for a Renewal Survey and Upgrade



Pile Sleeve Clusters Fabricated for Kvaerner Verdal AS



SeaRose FPSO Preparing to Leave Harland and Wolff Following Refurbishment



Harland and Wolff Heavy Industries Limited

General Information

Company Name	Harland and Wolff Heavy Industries Limited
Address	Queens Island, Belfast, BT3 9DU
Contact Number	+44 (0)2890 548456
Contact Name	David McVeigh, Sales Manager
Website	www.harland-wolff.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	ISO 9001:2008, BS-OHSAS 18001:2007, ISO 14001:2004, ISO 3834 [part 2]

Employee Count

Senior Management and Business Control	Core: 37
Project and Construction Management	Core: 52
Skilled Trades and Labour	Core: 81 Agency: As required
Total	Core: 170 Agency: As required



Capabilities and Capacities – Facility 1, Main Yard

Total Area (m²)	330,000 m ²
Fabrication Area Covered (m²)	Over 30,000 m ²
Assembly and Erection Area (m²)	150,000 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none">• Dockside and quayside cranage• 2 x 840 tonne x 70/80 metre ‘Goliath’ Gantry Cranes (combined lift of 1,600 tonnes)• 2 x 60 tonne at 25 metre Tower Cranes• 1 x 9 tonne at 40 metre Tower Crane
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none">• Up to 30,000 tonnes via skidding on quayside• Multi-wheel transporters capable of handling up to 780 tonnes. Additional transporters hired as necessary
Minimum Water Depth (Metres)	Main building dock – 6.4 metres (sill = 4.9 metres)
Maximum Water Depth (Metres)	Main building dock – 9.9 metres (sill = 8.4 metres)
Dry-Dock Capability	<ul style="list-style-type: none">• 556 metres x 93 metres x 11.7 metres (main building dock)• 500 tonnes per metre or 200 tonnes/m² load capacity• Dock can be separated by installation of intermediate dock gate to give a part wet/part dry configuration

Capabilities and Capacities – Facility 1, Main Yard

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Quay facilities – 1,432 metres overall
- Access is via the Victoria Channel:
 - Minimum water depth 7.8 metres chart datum (CD)
 - Width = 152.4 metres
 - No height restrictions on route to open water
- International Ship and Port Facility Security (ISPS) accredited
- Design engineering department in-house
- Covered stores available of over 5,100 m², including a climatically controlled area for storing sensitive equipment
- Separate project stores of 1,000 m² and 1,600 m² (door size 4.5 metres high x 4.1 metres wide) are available for clients
- Circa 150,000 m² of external storage
- Two permanent paint halls, 17 metres x 45 metres each
- Two semi-permanent paint/shot blast halls, 35 metres x 30 metres each
- Over 30,000 m² of covered fabrication halls
- Waste Management Licence for ship and offshore structure decommissioning
- Registered qualified steelwork contractors (RQSC) for bridgeworks
- FPAL verified



Capabilities and Capacities – Facility 2, Ship Repair

Total Area (m²) 81,000 m²

Fabrication Area Covered (m²) 1,200 m²

Assembly and Erection Area (m²) 25,000 m²

Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)

Workshop

- 25 tonne Gantry Crane

Dry Dock

- 1 x 80 tonne at 38 metre Tower Crane
- 1 x 40 tonne at 25 metre Tower Crane
- 1 x 40 tonne at 25 metre Tower Crane

Quayside

- 1 x 40 tonne at 30 metre Tower Crane

Load-Out Capacity (Tonnes)

- Up to 30,000 tonnes via skidding on quayside
- Multi-wheel transporters capable of handling up to 780 tonnes. Additional transporters hired as necessary

Minimum Water Depth (Metres) 8.6 metres

Maximum Water Depth (Metres) 11.6 metres

Dry-Dock Capability

- 335 metres x 50 metres x 14.75 metres (Belfast Dock)
- 333 tonnes/metre or 10.94 tonnes/m² load capacity

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Quay facilities – 432 metres
- Access is via the Victoria Channel:
 - Minimum water depth 7.8 metres CD
 - Width = 152.4 metres
 - No height restrictions on route to open water
- Licensed for slops reception (1,500 tonnes)
- Licensed for open grit blasting
- ISPS accredited
- Design engineering department in-house
- Structure decommissioning
- FPAL Verified

N.B: Both yards are 0.5 miles apart and are connected by a harbour authority road. Therefore, all workshops and services within each are shared and can be used regardless of where the project is located.

Prior Experience/Projects

Harland and Wolff has a long track record of successfully completed projects, a strong order book and robust finances. We enjoy the support of a wide range of repeat customers.

Fabricate and renew a bulbous bow for the AL ORAIQ LNG tanker

In December H&W saw the on-schedule departure of the Al Oraiq liquefied natural gas tanker from the building dock, complete with a new bulbous bow, having arrived on 17 October for an emergency docking.

Al Oraiq measures 315 metres x 50 metres, which the building dock at 556 metres x 93 metres, was more than capable of holding. The 136,685 gross tonnage vessel, built in 2008, is managed by “K” Line LNG Shipping (UK) Ltd and is currently sailing under the flag of the Marshall Islands. It is the biggest cargo ship to have docked in the city for almost 30 years.

In six weeks, H&W fabricated, installed and painted a new bulbous bow, internal steel repairs and side shell repairs, totalling circa 80 tonnes.



Byford Dolphin SPS renewal and upgrades

H&W successfully completed the dry docking and class renewal survey of the Byford Dolphin Mobile Offshore Drilling Unit (MODU) during the summer.

The rig left Belfast in July following a six-month dry docking in the shipyard's main building dock, during which time circa 1.5 million man-hours were expended.

H&W and Dolphin Drilling implemented an integrated project organisation dedicated solely to the successful execution of the project, covering the many disciplines, aspects and subcontractors of the scope.

Last in Belfast during 2004/2005, this Aker-H3 design semi-submersible drilling rig will have its SPS renewal survey and several major modifications and upgrades, including fabricating and adding two new columns and four buoyancy boxes for stability and deck load improvements; fitting a new larger blowout preventer (BOP) requiring underdeck stiffening; and fabricating and installing a new BOP control house and installing new drill string handling equipment. An intense three month period of pre-fabrication preceded the arrival of the rig, during which new steel sections were constructed.

Over the years H&W and Dolphin Drilling have collaborated on several occasions, having fabricated pontoons, column extensions, power generation and accommodation modules for other vessels in the Dolphin fleet.

Blackford Dolphin mobile offshore drilling unit renewal survey

Client: Dolphin Drilling Ltd

Period: Quarter 4 2013 to Quarter 2 2014

During the pre-arrival phase Harland and Wolff invested in site facilities in preparation for the rig arrival, creating an additional large pipe fabrication workshop and a mechanical outfitting shop. A purpose-built two-storey project office, large enough to accommodate 140 engineers and management and local to the dry-dock, was also erected.

The main work scope for the rig was a special periodic survey (SPS) that was required prior to commencing its next contract in the North Sea area. The survey included replacing over 3,000 metres of pipe, of which 700 metres was in the ballast tanks, and fabricating/installing over 300 tonnes of structural steel throughout the rig. It also involved fabricating and installing a new deck in one of the columns to support a new rig air compressor and dryer, complete with the electrical, mechanical, piping and HVAC (heating, ventilation and air conditioning) installation and integration with the rig system.

The project expended circa 1.4 million man-hours with upward of 1,000 personnel on site at the peak working 24/7 shift pattern, including over the Christmas holiday period.

Edvard Grieg and Martin Linge jacket clusters and buoyancy tanks

Client: Kvaerner Verdal AS

Period: Quarter 3 2012 to Quarter 3 2013

Kvaerner Verdal AS awarded the contracts to fabricate pile sleeve clusters and flotation tanks for Lundin's Edvard Grieg jacket and Total's Martin Linge jacket to Harland and Wolff Heavy Industries Limited.

Harland and Wolff's scope of work comprised the fabrication and delivery of four pile sleeve clusters for each jacket. The clusters each weigh approximately between 400 and 500 tonnes and are vital elements of the overall jackets. Harland and Wolff also supplied flotation tanks for both jackets.



Dry-docking and upgrade of the SeaRose floating, production, storage and offloading vessel

Client: Husky Energy
Period: June to July 2012

Harland and Wolff successfully completed the refurbishment of the SeaRose floating, production, storage and offloading (FPSO) vessel in July 2012. Owned and operated by Canada-based Husky energy, the SeaRose FPSO measures 272 metres x 46 metres and was docked in Harland and Wolff's Belfast repair dry dock for 28 days. The project was completed four days ahead of schedule, on budget and with no lost-time injuries.

Work on the SeaRose included maintenance of the vessel's propulsion system and turret, painting of the hull and regulatory inspections and upgrades to accommodate present and future operating capacity.

Design and build two high voltage AC substations

Client: Siemens Transmission and Distribution Ltd
Period: Quarter 1 2010 to Quarter 2 2012

Siemens awarded Harland and Wolff Heavy Industries Limited the design and build contract for two 1,500 tonne offshore substation platforms for the Gwynt y Môr offshore wind farm, which is situated 13 kilometres off the coast of North Wales.

Blackford Dolphin accommodation and power generation modules

Client: Blackford Dolphin Pte Ltd
Period: Quarter 1 to Quarter 3 2006 (Blackford Dolphin Accommodation) and Quarter 1 to Quarter 4 2006 (Blackford Power Generation Modules)

Harland and Wolff tendered and won the contract for both the accommodation and power generation modules. Starting with a basic specification and a footprint of the unit, Harland and Wolff was responsible for the design, approval, procurement, manufacture, assembly, outfitting and mechanical completion. The work was carried out in the controlled environment of the company's manufacturing halls, prior to being lifted onto the delivery barge using Goliath Gantry Cranes.

Expertise

Initially established in 1861, Harland and Wolff has 150 years of marine manufacturing experience. The company offers a unique combination of vast facilities and technical capability. From initial consultancy through to detailed engineering, fabrication and through life support, Harland and Wolff is perfectly positioned to support the needs of the maritime and offshore oil, gas and renewable energy sectors.

The company's engineering experience has resulted in contract awards for the following:

- Design, build, repair and upgrade vessels/offshore units, including FPSOs, shuttle tankers, mobile offshore drilling units (MODUs), etc
- Design and build offshore modules for the oil, gas and renewables sectors, including accommodation modules, power generation modules, substations, minimum facility platforms, etc
- Design and build offshore foundations for the oil, gas and renewables sectors, including monopile/transition pieces, jackets and tripods. In conjunction with sister company Universal Foundation AS, Harland and Wolff also designs and builds suction bucket foundations mainly for offshore turbines and met masts

Fabrication Tonnage (Last Three Years)

Circa 15,500 tonnes

Fabrication Revenue/Turnover (Last Three Years)

2011 – £24,608,000
2012 – £42,162,000
2013 – £32,023,000

Ability To Build Large Structures Under Cover (Yes/No)

- Yes – the 30,000 m² fabrication halls have vast capacity with doors 40 metres wide by 18 metres tall, meaning that most oil and gas and marine structures can be completed and outfitted under cover.
- In addition, there are four painting and blasting cells located alongside the main building dock. The largest of which is 70 metres x 30 metres x 19 metres (apex height) served by the Gantry Crane. The roof is removable to allow products to be placed in position and the height to be increased.



Current Market Areas

Oil and gas

- Design and build topside platforms and modules
- Design and build jackets up to 10,000 tonnes, pile clusters, conductor guides, buoyancy tanks, and secondary and tertiary steelwork
- Repair and conversion of FPSOs, FSOs, semi-sub units, shuttle tankers, etc
- Fabrication of subsea modules, pipeline end manifolds (PLEMs), pipeline end terminals (PLETs), arches, buoyancy tanks, etc

Renewables

- Design and build topside modules including substation and accommodation platforms
- Design and build jackets, tripods, quadrapods and gravity bases
- Fabrication of Universal Foundation suction bucket foundations for met-mast and turbines
- Fabrication of wave and tidal devices
- Logistics base port

Heavy marine steel fabrications

Marine engineering and consultancy

Potential Market Areas

- Decommissioning vessels, topsides and jackets
- Exotic material fabrications
- Serial production of Universal Foundation suction bucket
- Serial production of wave and tidal devices and floating turbine support structures

Other Information

Engineering capability

- From concept to detail design, Harland and Wolff has a proven track record in designing marine vessels and offshore units.
 - Structural, outfit, mechanical, electrical and systems disciplines are covered, with almost 750 years of combined experience within the core team.
 - Extensive knowledge of marine and offshore rules, regulations and related standards.
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Hereema Hartlepool



Cygnus Project



Heerema North Gate Facility



Heerema Greenland Road Facility



Cygnus Project



Heerema Hartlepool Ltd

General Information

Company Name	Heerema Hartlepool Ltd (an operating company of Heerema Fabrication Group)
Address	Greenland Road, Hartlepool, Cleveland, TS24 0RQ
Contact Number	+44 (0)1642 340200
Contact Name	Matthew Camp, Commercial Manager
Website	www.heerema.com

Health, Safety, Environment and Quality (HSEQ) Accreditation

Heerema strives to excel and exceed its clients' expectations, and to attain the ultimate of an accident-free workplace. Heerema conforms to the following DNV international standards:

- BSENISO 9001:2000 Quality Management Systems Requirements
- BSENISO 14001:2004 Environmental Management Systems
- BSENOHSAS 18001:1999 Occupational Health and Safety Management Systems
- ISO 3834

Benchmarking and improvement of the management system is achieved using the CHEQSERT (Combined Heerema Environmental Quality Safety Evaluation Rating Tool) system. CHEQSERT is Heerema Fabrication Group's customised assessment protocol, which covers a framework of controls that together drive HSEQ performance and continual improvement at Heerema Fabrication Group.

Employee Count

Senior Management and Business Control	19
Project and Construction Management	106
Skilled Trades and Labour	1,091
Total	1,216



Capabilities and Capacities – Greenland Road

Total Area (m²)	48,311 m ²
Fabrication Area Covered (m²)	<ul style="list-style-type: none">• Fabrication area – 3,700 m²• Pre-fabrication area – 3,700 m²
Assembly and Erection Area (m²)	6,500 m ²
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none">• 2 x (40 tonne + 40 tonne), hook height 30 metres• 2 x (20 tonne + 20 tonne), hook height 30 metres• 4 x 10 tonnes, hook height 8.1 metres• Additional lifting capacity available by using strand jacks
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none">• 15,000 tonnes• 15 tonnes/m²
Minimum Water Depth (Metres)	9.5 metres lowest astronomical tide
Maximum Water Depth (Metres)	14.55 metres (mean high water springs 5.05 metres)
Dry-Dock Capability	No
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none">• Apprentice Training School• Paint shop with MAINE H&V System – 25 metres x 10.5 metres x 4.3 metres• Shot blast shop – 25 metres length x 19.7 metres width x 7.5 metres height• SES 6 Wheel Blast Machine• Two covered storage yards:<ul style="list-style-type: none">- 60 metres length x 18 metres width x 5 metres height- 23 metres length x 8 metres width x 5 metres height

Capabilities and Capacities – North Gate

Total Area (m²) 28,090 m²

Fabrication Area Covered (m²) 3,700 m²

Assembly and Erection Area (m²) 3,500 m²

Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)

- 2 x 30 tonnes, hook height 19 metres
- 1 x (20 tonne + 20 tonne), hook height 19 metres
- 3 x 10 tonnes, hook height 7.4 metres

Load-Out Capacity (Tonnes)

- 6,000 tonnes
- 30 tonnes/m²

Minimum Water Depth (Metres) Four metres

Maximum Water Depth (Metres) 9.05 metres

Dry-Dock Capability No

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- Prefabrication hall – 60 metres length x 32 metres width x 6 metres height
- Store Yard 1 – 23 metres length x 8 metres width x 5 metres height



Projects and Markets

Prior Experience/Projects

A selection of the type of projects the company has engaged within the last five years are detailed below. Further details are available upon request.

Culzean Development

Client:	Maersk Oil North Sea UK Ltd
Contract:	Procurement and construction
Completion Date:	Ongoing – 2016
Structure:	Wellhead platform access deck and ways

Weight

Access Deck:	450 tonnes
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Size (Length x Width x Height)

Access Deck:	13 x 13 x 11 metres
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Cygnus Project

Client:	GDF Suez E&P UK Ltd
Contract:	Fabrication contract
Completion Date:	2015
Structure:	<ul style="list-style-type: none">• 2 x wellhead platforms (1,400 tonnes and 2,600 tonnes)• 1 x process and utilities platform (4,000 tonnes)• 1 x compression module (2,000 tonnes)• 2 x bridges (350 tonnes)• 1 x flare tower (100 tonnes)

York Platform

Client:	Centrica Resources Ltd
Contract:	Engineering, procurement, construction and installation (EPCI)
Completion Date:	2012
Structure:	Production platform

Weight

Topside:	1,300 tonnes
Jacket:	1,450 tonnes
Piles:	1 x 59.9 tonnes, 1 x 62.4 tonnes, 3 x 169.4 tonnes, 3 x 169.6 tonnes and 1 x 218.1 tonnes

Size (Length x Width x Height)

Topside:	20 x 15 x 16 metres
Jacket:	30 x 20 x 69 metres
Piles:	1 x 34.8 metres, 1 x 36.3 metres, 3 x 51.1 metres, 1 x 66.1 metres

Andrew Process Platform

Client:	BP Exploration Operating Co. Ltd
Contract:	Fabrication contract
Completion Date:	2012
Structure:	Wellhead platform and jacket

Weight

Topside:	750 tonnes
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Size (Length x Width x Height)

Topside:	18 x 13 x 28 metres
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Ensign Platform

Client:	Centrica Energy
Contract:	Engineering, procurement and construction (EPC)
Completion Date:	2011
Structure:	Wellhead platform and jacket

Weight

Topside:	500 tonnes
Jacket:	500 tonnes

Size (Length x Width x Height)

Topside:	16 x 12 x 8.5 metres
Jacket:	20 x 20 x 48 metres

Buzzard Platform

Client:	Nexen Petroleum UK Ltd
Contract:	Fabrication contract (topside and bridges)
Completion Date:	2010
Structure:	Production sweetening topsides and bridge (Heerema Hartlepool)

Weight

Topside:	6,000 tonnes
Bridge:	500 tonnes

Size (Length x Width x Height)

Topside:	60 x 36 x 42 metres
Bridge:	50 metres

Sheringham Shoal Substation Topsides

Client:	AREVA T&D Ltd
Contract:	Engineering, procurement and construction (EPC)
Completion Date:	2010
Structure:	Two offshore wind substation topsides

Weight

Topsides:	806 tonnes and 803 tonnes
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Size (Length x Width x Height)

Topside:	30.5 x 17.7 x 16 metres
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Fabrication Tonnage (Last Three Years)	14,000 tonnes
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Fabrication Revenue/Turnover (Last Three Years)	Not provided
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Ability To Build Large Structures Under Cover (Yes/No)	Yes
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Current Market Areas	Oil, gas and renewable energy-related industries
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Potential Market Areas	Not provided
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Other Information

Heerema Hartlepool Ltd, a subsidiary of Heerema Fabrication Group (HFG), builds structures for the offshore oil, gas and renewable energy-related industries, including subsea installations, fixed platforms and floating production facilities.

Heerema offers two purpose-built construction facilities located around the sheltered Victoria Harbour in Hartlepool. This prime north east England location affords ready access by sea, air, road and rail and is nestled between Teesside and Tyneside, two of the industry's major sources of fabrication skills and expertise.

The construction site consists of two fabrication halls and covers 76,401 m², with a 355-metre, 15,000-tonne capacity quayside for large load-outs.

The facilities include:

- Covered large assembly halls
- Fully equipped prefabrication facilities
- Covered material stores
- Covered blasting and painting facilities

Workshops

The temperature-controlled blasting and painting workshop is supported by two additional covered shelters for blasting and coating larger structures.

Storage and Equipment

Heerema Hartlepool has three large, covered and heated storage areas onsite for storing equipment and materials. Some 16,100 m² of open storage and quarantine space within the covered facilities provide significant onsite capacity.

An extensive array of equipment is available, including permanent lifting capacity of up to 400 tonnes inside the main fabrication hall, which is fully maintained in accordance with UK legislation and manufacturers' recommendations. We hire specialised cranes for major lifts outside the fabrication halls of up to approximately 800 tonnes.





OGN Tyneside



OGN Tyneside Facility Aerial View



OGN Lowestoft



OGN Tyneside Facility



OGN Lowestoft Facility



Offshore Group Newcastle Limited (OGN Group)

General Information

Company Name	Offshore Group Newcastle Limited (OGN Group)
Address	Hadrian Way, Wallsend, Tyne & Wear, NE28 6HL
Contact Number	+44 (0)1912 958700
Contact Name	Graham Kennedy, Chief Technical Officer
Website	www.ogn-group.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	ISO 9001:2008 ISO 14001:2004 OHSAS 18001:2007 EN1090 Part one and two EN3834 Part two

Employee Count

Senior Management and Business Control	34
Project and Construction Management	35
Skilled Trades and Labour	1,800 yard, of which approximately 800 skilled
Total	1,869



Capabilities and Capacities – Tyneside

Total Area (m²)	325,000 m ²
Fabrication Area Covered (m²)	16,500 m ²
Assembly and Erection Area (m²)	104,000 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<p>Internal Cranage Capability</p> <p>A Shop Bay 1 – 1 x 50 tonne Apollo, 12.8 metres</p> <p>A Shop Bay 2 – 3 x 40 tonne Morris, 12.8 metres</p> <p>A Shop Bay 3 – 1 x 25 tonne Morris, 9 metres</p> <p>2 x 15 tonne Morris</p> <p>3 x 25 tonne Street</p> <p>1 x 20 tonne Street</p> <p>B Shop Bay 1 – 4 x 25 tonne Street, 9.9 metres</p> <p>B Shop Bay 2 – 6 x 25 tonne NEI, 9 metres</p> <p>B Shop Bay 3 – 1 x 50 tonne Demag, 11 metres</p> <p>B Shop Bay 4 – 1 x 5 tonne Street, 11 metres</p> <p>B Shop Bay 5 – 1 x Felco</p> <p>B Shop Bay 6</p> <p>B Shop Bay 7</p>
Load-Out Capacity (Tonnes)	Up to 13,000 tonnes self-propelled modular transporter trailer load-out
Minimum Water Depth (Metres)	-5 metres lowest astronomical tide (LAT) at quay 1 -6.5 metres LAT at quay 2
Maximum Water Depth (Metres)	11.5 metres (mean high water spring)
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Quay wall – 1,000 metres • Warehousing and covered storage – 7,300 m² • Office area – 10,000 m² • Two fully equipped canteens • No fixed limit load-out capacity; structures up to 13,000 tonne have been loaded out • Maintenance dredging licence, LAT -7 metres • Main navigation channel of River Tyne at Hadrian Yard, LAT -6 metres

Capabilities and Capacities – Lowestoft

Total Area (m²)	52,469 m ²
Fabrication Area Covered (m²)	650 m ²
Assembly and Erection Area (m²)	13,200 m ²
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	Internal Cranage Capability 2 x 6 tonne gantry cranes
Load-Out Capacity (Tonnes)	1,000 tonnes
Minimum Water Depth (Metres)	4.7 metres lowest astronomical tide, based on dredged channel
Maximum Water Depth (Metres)	Channel 7.14 metres (mean high water springs)
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • Quay wall – 300 metres • Warehousing and storage – 4,694 m² • Office area – 4,285 m² • Fully equipped canteen



Prior Experience/Projects Experience over the previous three years:

Forties Alpha Satellite Platform (FASP) Project

Client:	Apache North Sea Limited
Project Scope:	<p>The FASP project awarded to OGN from Apache included front end engineering design (FEED) and engineering, procurement and construction (EPC) of the platform jacket structure, the topside deck and the bridge linking FASP to the existing Forties Alpha Platform.</p> <p>The integrated wellhead production platform included a well bay drilling area, separation, compression and power generation. Meanwhile the four-leg jacket comprised 6 x 3 conductor guides, three-pile cluster assemblies and mud-mat structures at each corner.</p> <p>The FASP project has increased capacity of the Forties Alpha facility by 18 drilling slots, capable of processing 110,000 barrels of total fluids and producing 25,000 barrels of oil per day.</p>

Weight

Topside:	5,300 tonnes
Jacket:	5,200 tonnes
Link Bridge:	400 tonnes
Piles:	4,000 tonnes

Load-Out Date	<ul style="list-style-type: none"> Jacket – August 2012 Topside – May 2013
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Dimensions

Topside:	70 metres length x 45 metres width x 30 metres height
Jacket:	126 metres
Bridge:	94 metres

Montrose Area Redevelopment (MAR) Project

Client:	Talisman Sinopec Energy UK Limited
Project Scope:	The project awarded to OGN from Talisman Sinopec Energy UK Limited was for the EPC of the platform jacket structure, which will form part of a new bridge-linked platform within the Montrose Area Redevelopment Project.

Weight

Jacket:	5,745 tonnes
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Dimensions

Jacket:	119 metres
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Load-out date	June 2014
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EnQuest Producer FPSO Project

Client:	EnQuest Plc
Project Scope:	The project awarded to OGN was for the provision of specialist fabrication services to undertake finishing and commissioning works on the floating, production, storage and offloading (FPSO) vessel.

Vessel Weight:	53,176 tonnes (gross tonnage), 99,800 tonnes (dead weight tonnage)
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Dimensions

Vessel Length:	249 metres
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Sailaway Date:	April 2015
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Process Module Project

Client:	Confidential
Project Scope:	The OGN scope of works comprised the fabrication, including design of temporary works and drafting; assembly; mechanical completion; testing; pre-commissioning; load-out; and sea-fastening of the topside module.
Weight:	Circa 800 tonnes
Dimensions:	19 metres x 10 metres x 25 metres
Load-out Date:	June 2015

Nyhamna Expansion Project

Client:	Kvaerner
Project Scope:	<p>OGN will fabricate a series of 18 pre-assembled units (PAUs) for the Shell-operated onshore plant. The project will increase the capacity of the facility allowing it to export to the UK via the pipeline to Easington, UK.</p> <p>The plant is today connected to the Ormen Lange gas field 120 kilometres off the west coast of Norway. Ormen Lange was developed as a subsea tieback to the Nyhamna Gas Plant where the gas is dehydrated, hydrocarbon de-pointed and compressed. Gas is exported through the Langeled Pipeline to gas markets in the UK.</p>
Weight:	Approx 4,300 tonnes, with individual units weighing up to 886 tonnes

Projects and Markets

Expertise

OGN Group is a main contractor to the oil and gas and renewable energy sectors, providing EPC contracting services.

The OGN Group Hadrian Yard facility based in Tyneside extends to 32 hectares. Within this area are 11 hectares of external construction area; 17,000 m² fabrication halls; 7,800 m² warehousing and covered storage; and 10,000 m² offices.

Hadrian Yard has a long and proven history as a major topside module and jacket fabrication site for the offshore oil and gas industry.

Load-out points have the capability of transferring completed structures of up to 13,000 tonnes onto transportation barges with direct access to the North Sea. OGN's capability and EPC services also extend to the renewable energy industry.

Fabrication Tonnage (Last Three Years)	2011/12 – 5,000 tonnes 2012/13 – 5,000 tonnes 2013/14 – 5,000 tonnes
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Fabrication Revenue/ Turnover (Last Three Years)	2011/2012 – £150,502,256 2012/2013 – £99,133,967 2013/2014 – £115,629,723
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Ability to Build Large Structures Under Cover (Yes/No)	Yes – please see information relating to covered fabrication facilities above.
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Current Market Areas	<ul style="list-style-type: none">• Oil and gas – EPC• Offshore renewables – EPC
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Potential Market Areas	Not applicable
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Other Information	Not applicable
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Sembmarine SLP's Lowestoft Yard



Sembmarine SLP



Hamilton Dock North



Hamilton Dock South



Sembmarine SLP

General Information

Company Name	Sembmarine SLP
Address	Hamilton Dock, Lowestoft, Suffolk, NR32 1XF
Contact Number	+44 (0)1502 548000
Contact Name	Paul Thomson, Managing Director
Website	www.sebmarineslp.com
Health, Safety, Environment and Quality (HSEQ) Accreditation	ISO 9001:2008 – Quality Management Systems ISO 14001:2004 – Environmental Management Systems OHSAS 18001:2007 – Occupational Health and Safety Management System Pressurised Equipment Regulations (PED) Module H1

Employee Count

Senior Management and Business Control	46
Project and Construction Management	94 – including engineering
Skilled Trades and Labour	210
Total	350



Capabilities and Capacities – Lowestoft

Total Area (m²)	55,000 m ² – Hamilton Dock 12,350 m ² – Belvedere Road, South Quay
Fabrication Area Covered (m²)	<ul style="list-style-type: none"> • Fabrication area – 2,640 m² • Paint shop – 1,539 m² • Two pipe workshops, plate cutting shop, saw shop
Assembly and Erection Area (m²)	25,300 m ² – Hamilton Dock 12,350 m ² – Belvedere Road, South Quay
Craneage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none"> • 1 x 350 tonnes (mobile) • 2 x 150 tonnes (mobile) • 1 x 45 tonnes (mobile) • 4 x 10 tonnes (Gantry Cranes)
Load-Out Capacity (Tonnes)	<ul style="list-style-type: none"> • 2 x 6,000 tonnes capacity load-out quays (largest recent load-out 4,300 tonnes) • Nominal ground bearing pressure – 10 tonnes/m² to 35 tonnes/m²
Minimum Water Depth (Metres)	4.5 metres lowest astronomical tide
Maximum Water Depth (Metres)	6.95 metres mean high water springs
Dry-Dock Capability	Not applicable
Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.	<ul style="list-style-type: none"> • 5,659 m² of covered storage • Harbour entrance 44.7 metres x 6 metres deep • Offices available for clients site personnel • Fabrication tonnage for last five years – 13,600 tonnes • Type of fabrication offered (standards or specifications available): <ul style="list-style-type: none"> - Structural – EEMUA 158/DNV OS-C401 - Pipework – American National Standards Institute ANSI-B-31.3 (piping for refinery)/Pressure Equipment Directive PED 97.23ec – Si 1999;2001 - Other – Electrical Installation, IEE Regulations 17th Edition/ATEX (Atmosphères Explosibles) Directive • FPAL registered and verify assessed • Achilles JQS registered • Achilles UVDB registered and verify assessed

Prior Experience/Projects

The company has designed and fabricated jackets and topsides for numerous platforms both on the UK Continental Shelf (UKCS) and in international markets such as Norway, Holland, Denmark, Mexico, Qatar and Libya. SLP has also diversified and is well established in the offshore renewable energy sector.

Sembmarine SLP's vast engineering, procurement and construction experience in normally unmanned installations (NUIs), minimum facilities platforms (MFPs) and accommodation platforms provides a distinctive edge in optimising equipment, reducing operating expenditure, weight reduction methods and working to tight schedules.

Jacket substructure experience ranges from minimum facilities to production and accommodation platforms, with sizes from 200 tonnes to 6,000 tonnes. Sembmarine SLP's integrated deck construction capability ranges from 100 to 6,000 tonnes.

Examples of projects delivered include: BP Norway, Valhall, 180 person accommodation module (4,288 tonnes), three local equipment room (LER) modules (905 tonnes) a power from shore module (1,226 tonnes); ConocoPhillips UK, Katy MFP (472 tonne jacket, 373 tonne topsides), which established shore communications within hours of installation; Nexen Petroleum Golden Eagle Area development project, which included a 140 person living quarters (LQ) module (2,000 tonnes), a 550 tonne bridge and 220 tonne flare module.

SLP directly employs tradesmen such as welders, platers, pipefitters, mechanical fitters and electrical and instrumentation technicians. With a core team of experienced designers, engineers and project managers, it remains one of the few long standing EPIC companies in the UK. The Sembmarine SLP Offshore Services Group also provides hook-up, commissioning and decommissioning services.



Dudgeon – Offshore Wind Substation Topsides and Jacket

Client:	Statoil UK
Period:	2015 to 2016 (under construction)
Contract:	Engineering, procurement and construction (EPC)
Structure:	1,800 tonne high voltage electrical substation topsides. 1,500 tonne jacket substructure with suction piles

Golden Eagle – Living Quarters, Bridge and Flare Modules

Client:	Nexen Petroleum UK Ltd
Period:	2011 to 2014
Contract:	Engineering, procurement and construction (EPC)
Structure:	140-man, 2,000 tonne living quarters, 550 tonne bridge, 220 tonne flare

Katy – Minimal Facilities Platform

Client:	ConocoPhillips UK
Period:	2012
Contract:	EPC
Structure:	Jacket substructure, piles and topside

Thorton Bank – Offshore Wind Substation Jacket

Client:	Smulders - Belgium
Period:	2011
Contract:	Build only and deliver
Structure:	900 tonne offshore substation jacket substructure

Valhall – Living Quarters

Client: BP - Norway

Period: 2010

Contract: EPC

Structure: 180-man, 4,300 tonne living quarters

Thanet – Offshore HV AC Substation

Client: Siemens - UK

Period: 2010

Contract: EPC

Structure: 1,200 tonne HV AC substation topside

Valhall – LER Power from Shore Modules

Client: BP - Norway

Period: 2009

Contract: EPC

Structure: Three LER modules and a power from shore module (2,131 tonnes total)

Babbage Wellhead and Production Platform

Client: E.ON Ruhrgas - UK

Period: 2009

Contract: EPC

Structure: 1,600 tonne jacket, 1,000 tonne piles and 1,600 tonne topside



Projects and Markets (continued)

Expertise

- Extensive experience with EPC contracts for minimal facility platforms and NUI's (normally unattended installations)
- EPC – offshore accommodation facilities, process modules, offshore hook-up and brownfield modifications and CAP 437 upgrades
- Offshore renewable energy, including HV AC substations

Fabrication Tonnage (Last Three Years)

6,142 tonnes

Fabrication Revenue/Turnover (Last Three Years)

Not provided

Ability to Build Large Structures Under Cover (Yes/No)

Yes

Other Information

Sembmarine SLP has been in business under various owners for over 40 years. During this time it has provided many major offshore structures to the UKCS, to virtually all of the major operators, and a great many of the smaller independents.

Now jointly owned by a subsidiary of Sembmarine (SMOE Pte Ltd, of Singapore) and members of the local management team, SLP is in a strong financial position to meet the challenges of today's offshore energy industries. The organisation has the capability and capacity to design and fabricate large structures for use within the offshore oil and gas industry worldwide.

The Lowestoft Hamilton Yard's geographical location allows direct access to the North Sea, whilst the harbour benefits from a low tidal range that significantly assists load-out operations. The Belvedere Road South Quay yard is equipped with a roll-on-roll-off (RoRo) load-out facility and is also suited for decommissioning activity.

SLP has a long established track record in the successful completion of EPIC contracts, a clear understanding and management control of key project drivers, including safety, schedule, cost and quality, as well as a demonstrable record of successful partnering, alliances and joint ventures.

SLP's design group has expertise in the following areas: conceptual design, structural analysis, FEED, detailed design and dynamic response. The group also provides strengthening, repair and upgrades to existing structures, as well as re-analysis of aging structures and life of field assessment.

Sembmarine SLP holds independent approvals and validations for quality, health, safety and environmental management systems, and is a supporter of the industry's Supply Chain Code of Practice and Verify programmes. Our safety record is excellent. BP advised that the company had achieved "world class safety performance" on their Valhall project for the Norwegian North Sea.





Wilton Engineering Services



Wilton Engineering Port Clarence Base



Wilton Engineering Services Ltd

General Information

Company Name	Wilton Engineering Services Ltd
Address	Port Clarence Offshore Base, Port Clarence Road, Middlesbrough, TS2 1RZ
Contact Number	+44 (0)1642 546611
Contact Name	Steven Pearson, Managing Director
Website	www.wiltonengineering.co.uk
Health, Safety, Environment and Quality (HSEQ) Accreditation	BS EN ISO 9001: 2008 BS EN ISO 3834 Part 2 Comprehensive Welding Management TUV – CE 1090 Execution Class 4 for Nuclear OHSAS 18001:2007

Employee Count

Senior Management and Business Control	11
Project and Construction Management	46
Skilled Trades and Labour	165
Total	222



Capabilities and Capacities – Facility 1

Total Area (m²)	210,000 m ²
Fabrication Area Covered (m²)	<ul style="list-style-type: none">• 8,580 m² consisting of four main halls• Additional fabrication area of 1,800 m² available for preparation and cutting workshop, assembly workshop, pipe fabrication workshop and stainless steel fabrication workshop• Specific clean workshop for super duplex projects
Assembly and Erection Area (m²)	<ul style="list-style-type: none">• 22,300 m²• Additional 14,000 m² available if necessary
Cranage – Lifting Capacity and Hook Height (Tonnes and Metres)	<ul style="list-style-type: none">• Workshops 1 to 4 – 2 x 30 tonnes (including five tonne auxiliary) per workshop, hook height 21 metres• Paint workshop – 2 x 10 tonnes• Preparation and cutting workshop – 2 x 10 tonnes• Assembly workshop – 1 x 16 tonnes• Pipe fabrication workshop – 1 x 10 tonnes• Stainless steel fabrication workshop – 1 x 5 tonnes• 12 tonne mobile crane and various forklifts• 126 tonne transporter• Additional cranes, self-propelled modular transporters etc, hired to suit project requirements as necessary
Load-Out Capacity (Tonnes)	14,000 tonnes, 27.5 tonnes/m ²
Minimum Water Depth (Metres)	<ul style="list-style-type: none">• 200 metre quay – 3.9 metres lowest astronomical tide (LAT)• Angle load-out quay – 4.5 metres LAT
Maximum Water Depth (Metres)	<ul style="list-style-type: none">• 200 metre quay – 9.5 metres mean high water springs (MHWS)• Angle load-out quay – ten metres MHWS
Dry-Dock Capability	Not applicable

Capabilities and Capacities – Facility 1

Other e.g. Licences, Permissions, Warehouse and Storage Size, Engineering, Electrical and Joiners Workshop Size, etc.

- 7,000 m² of undercover blast and coating workshops. The largest of which has a 40 metre x 18 metre blast pen capable of handling complete structures and decks
- Length 50 metre x width 30 metre x height 18 metre paint workshop
- Port facility, security plan and dedicated officer
- Certified for ISO 9001:2008 Quality Management Systems
- Environmental permit for coating of metal and plastic
- Certification for BS EN ISO 3834 'Quality Requirements for Welding'
- Certified for OHSAS 18001:2007 for Health and Safety
- CE Marking to TUV 1090 Execution Class 4 for Nuclear

Projects and Markets

Prior Experience/Projects

Wilton Engineering Services Limited (WESL) has over three decades of experience in the offshore construction business and a proven track record in providing bespoke fabrications and associated services for the subsea, marine, offshore and renewable energy industries.

The company has over the years worked with a large number of clients including: BP, Kongsberg Oil & Gas Technologies, TOTAL, Phillips, EnQuest, British Gas, Chevron, Conoco Phillips, Subsea 7, Saipem and Technip. This list is by no means exhaustive and further details of clients and activities are available.

In addition to full topside modules, WESL has a significant reference list of subsea structures, manifolds, pipeline end terminals (PLETs) and pipeline end manifolds (PLEMs), vertical jumpers, deck structures, vessel equipment (including lay towers), flare towers, jacket structures, mid-water arches, towheads and bridge links.

In addition, the yard and members of its core team have significant legacy experience in the construction of prestigious platform projects such as:

- Conoco Britannia Integrated Deck
- BP Andrew Integrated Deck
- Shell Nelson Integrated Deck
- Shell Gannet Integrated Deck
- Elgin Franklin Wellhead Platforms
- BP Bruce Integrated Deck



Projects and Markets (continued)

Expertise

- Platform structures
- Topside accommodation units
- Offshore wind bases
- Platform jackets
- Offshore power modules
- Manifolds, PLET's and PLEM's
- Subsea structures
- Subsea tie-in spools
- Subsea jumper spools
- Subsea protection structures
- Barge sea fastening services
- J-Lay towers
- Offshore handling and pipe lay
- Pipeline clamps
- Subsea arches
- Flexible pipe/umbilical carousels
- Detail design, drafting
- Modification, assembly and testing
- Commissioning and offshore support
- Complete skid packages
- Process and high pressure pipework
- Flow control solutions
- Launcher and receiver pigging systems

Fabrication Tonnage (Last Three Years)	6,000 tonnes
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Fabrication Revenue/ Turnover (Last Three Years)	£30 million per annum
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Ability To Build Large Structures Under Cover (Yes/No)	Yes
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Projects and Markets

Current Market Areas

WESL organises its portfolio into five specific business streams comprising:

- Subsea hardware
- Equipment
- Decommissioning
- Topsides
- Renewables

These business streams deliver specialist scopes such as subsea structures, manifolds, towheads and mid-water arch systems; onshore and offshore umbilical and pipe handling equipment; decommissioning heavy lift and transportation frames and topside equipment ranging from modules, deck sub-assemblies, flare booms, link bridges, helideck structures, module extension support structures and load-out grillages, all of which are supported by its highly experienced technical, operational, project management and QHSE teams.

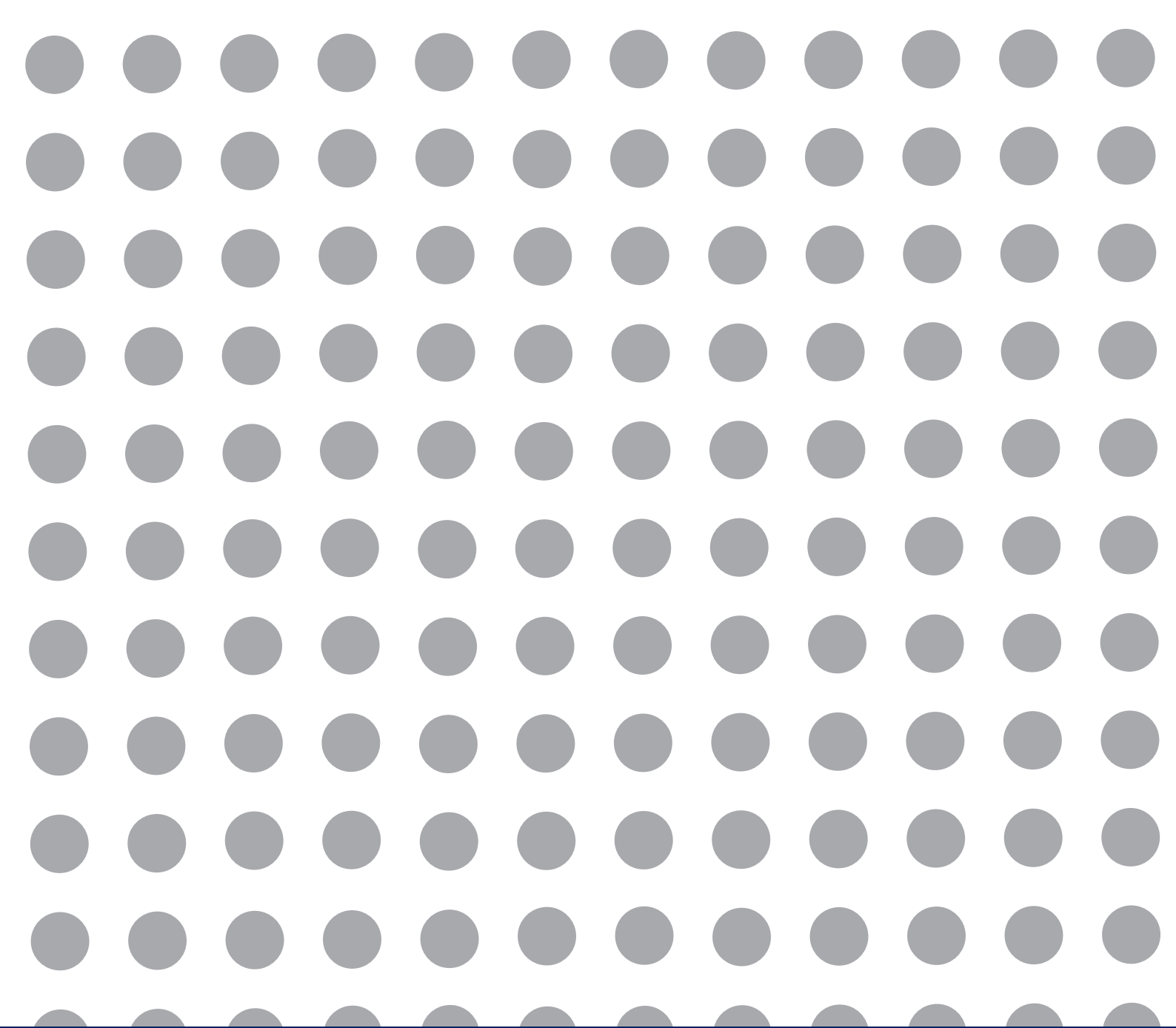
Potential Market Areas

Nuclear

Other Information

Not applicable





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