

Cable and pipe lay solutions

Rental equipment and engineering services



Ensuring
reliability,
safety and
compliance



DELIVERY ASSURED

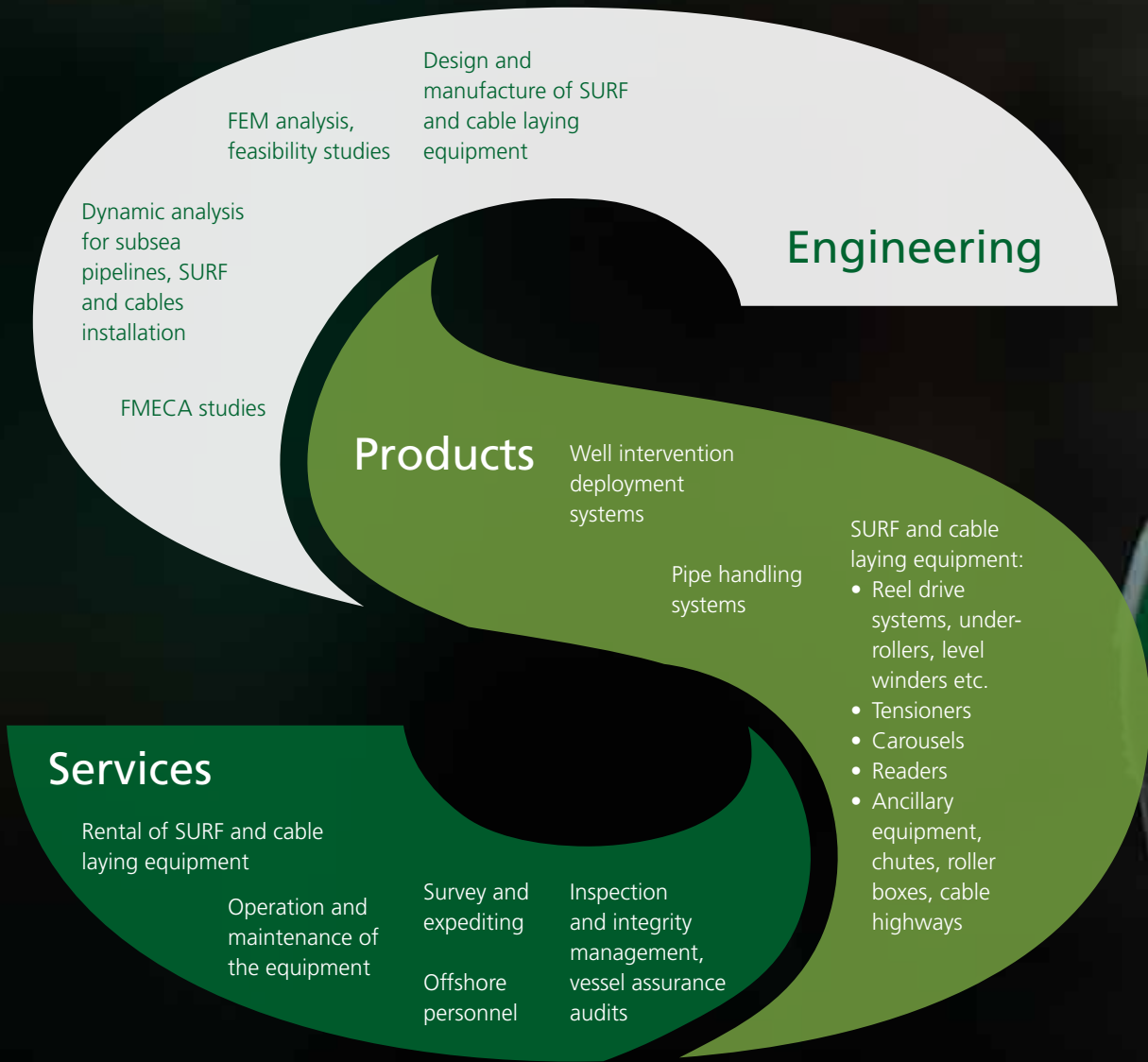
Sparrows Group’s Cable and Pipe Lay Solutions (CPLS) division offers both new-build and rental services to the global subsea pipe and cable laying industries

Over the past 25 years, our CPLS division has become a trusted supplier of hydraulic and electric cable and pipe lay equipment to the energy industry. Our range of products covers all Subsea Umbilicals, Risers and Flowlines (SURF), as well as other cable and pipe forms.

Formerly known as Baricon Systems, we utilise the extensive engineering expertise we have in-house at Sparrows to supply a comprehensive service.

Our innovative and bespoke back deck equipment and product handling systems are designed for onshore product spooling and offshore lay or recovery operations and can be rapidly mobilised around the world.

25+
years knowledge
and experience





Engineering and services

DESIGN SERVICES

- Finite Element Analysis (FEA) structural, mechanical, hydraulic design of:
 - Any handling equipment such as: carousels, loading towers, deployment systems, roller high ways, chutes etc.
 - Hydraulic / electrical powered machinery
 - Mechanical clamps
- Sea fastening and underdeck strengthening
- Deck layout studies
- Orcaflex analysis
- Failure Mode, Effects And Criticality Analysis (FMECA)
- Late life analysis, life extension studies
- Lay procedures development
- Lifting studies, mechanical handling
- Front End Engineering Design (FEED) and conceptual studies.

OFFSHORE PERSONNEL SUPPORT AND OPERATIONS

Personnel available

- Cable lay equipment operators and supervisors:
 - All trade disciplined technicians
 - Hydraulic
 - Mechanical
 - Electrical
 - Automation and control engineers.

Activities

- Equipment operation
- Equipment mobilisation and assembly
- Maintenance activities
- Fault finding.

We also provide global on-site support with personnel seconded to your project.

PROJECT MANAGEMENT SERVICES

Personnel available

- SURF equipment construction managers:
 - Third party consultancy for equipment design
 - Equipment build expediting
- Project engineers:
 - Offshore activities
 - Vessel mobilisations
 - SURF equipment maintenance plans.

Sparrows personnel have the breadth and depth of experience to quickly and effectively provide the best way forward in the specification, build and mobilisation of your new equipment. We can also provide global on-site support with personnel seconded to your project.

VESSEL ASSURANCE AUDITS

When hiring a vessel and equipment, it can be difficult to know how it will perform, what condition the equipment is in and mitigate against downtime. We offer vessel assurance audits to provide an independent, third party evaluation on the condition, reliability and performance capability of lay systems to assess any shortfalls in compliance of equipment prior to major lay projects.

As an Original Equipment Manufacturer (OEM) for lay equipment, we can deliver:

- Expert insight into the operational condition of the equipment
- Review of all required certification
- Operational review of the system for the planned project
- Witness of sea trials (where applicable)
- Fully documented report of equipment current state of readiness and recommendations to ensure performance.

EQUIPMENT LIST

Page no.

- Y Yes
- U Upgradable
- P Possible
- N Not available

TENSIONERS

	Model No.	Drive Type	No. of Tracks	Track Orientation	Track	Total Max. Grip	Max. Speed (m/hr)		Render Mode	Haul Mode	Constant Tension	Series Mode	HPU / EPU	Control Cabin	Data Logging	Re-mote Dis-	Mounting	
5	3Te	BS056	Hydraulic	2	Vertical	1.2	16.67	900	Y	Y	Y	U	U	HPU	P	P	N	Horizontal & inclined 45°
6	5Te	BS184	Hydraulic	2	Vertical	1.4	15 or 30	1200	Y	Y	Y	U	U	HPU	P	Y	P	Horizontal & inclined 45°
7	10Te	BS216	Hydraulic	2	Vertical	1.8	40	1450	Y	Y	Y	U	Y	HPU	P	Y	Y	Horizontal & inclined 45°
7	10Te	BS216	Hydraulic	2	Vertical	1.8	80	1450	Y	Y	Y	U	Y	HPU	P	Y	Y	Horizontal & inclined 45°
7	10Te	BS219	Hydraulic	2	Vertical	1.8	84	1450	Y	Y	Y	U	Y	HPU	6ft	Y	Y	Horizontal & inclined 45°
8	15Te	BS199	Hydraulic	2	Horizontal	2.4	80	1100	Y	Y	Y	Y	Y	HPU	6ft	Y	P	Horizontal & inclined 45°
9	15Te	BS214	Electric	2	Horizontal	2.4	80	900	Y	Y	Y	U	U	EPU / CC 15ft	Integrated into EPU	Y	Y	Horizontal & inclined 45°
10	36Te	BS177	Hydraulic	4	4-track	2.4	400	1000	Y	U	U	U	U	HPU	6ft	Y	Y	Horizontal, vertical & inclined
10	36Te	BS179S	Hydraulic	4	4-track	2.4	400	1000	Y	Y	Y	U	Y	HPU	6ft	Y	Y	Horiz., vert. with mod & inclined
10	36Te	BS179M	Hydraulic	4	4-track	2.4	400	1000	Y	Y	Y	U	Y	HPU	6ft	Y	Y	Horiz., vert. with mod & inclined
11	62.5Te (50Te verti-	BS215	Electric	4	4-track	4.1	696	900	Y	Y	Y	U	U	EPU 20ft	6ft	Y	Y	Horizontal, vertical & inclined

REEL DRIVE SYSTEM

	Model	Drive Type	Lifting	Skidding	Track System	Modular				HPU / EPU	Control Cabin	Data Logging	Remote Display
13	700Te	Innodrive 700	Electric	Hydraulic	Hydraulic	Any length	Y	140	Y	Y	Both	10ft EPU/CC	Y
14	800Te	Innodrive 800	Electric	Hydraulic	Hydraulic	Any length	Y	140	Y	Y	Both	10ft EPU/CC	Y
15	Level Winder	Innowind	Electric										
	7.5m Track System	TRSYS 7.5m	n/a		7.5m x 2m	Y							
	11.7m Track System	TRSYS 11.7m	n/a		11.7m x 2m	Y							
	10m Track System	TRSYS 10m			10m x 4m	Y							

Ancillary equipment is available on request including chutes, roller boxes and cable highways

3Te hydraulic tensioner

Model number: BS056



IDEAL FOR

- Wire rope spooling
- Cable and umbilical spooling / lay
- Carousel loading towers / level winders

FEATURE

BENEFIT

2-track vertical type	Entry and exit guidance level remains the same with varying product diameters
Small footprint	Less deck space required
Hydraulic drive complete with Hydraulic Power Unit (HPU) and control station	Simple system to control and operate, reliable and compact providing excellent low tension control for delicate products
Fail safe grip application	Power failure results in grip being maintained
Removable tilt down guide rollers and outer grip cylinders	Allows easier side loading of product into tensioner if required
Easily fits inside a shipping container	Cost effective shipment worldwide



HPU

5Te hydraulic tensioner

Model number: BS184



IDEAL FOR

- Wire rope spooling
- Cable and umbilical spooling / lay
- Carousel loading towers / level winders

FEATURE

BENEFIT

2-track vertical type	Entry and exit guidance level remains the same with varying product diameters
Small footprint	Less deck space required
Hydraulic drive complete with Hydraulic Power Unit (HPU) and remote control unit	Simple system to control and operate, reliable and compact providing excellent low tension control for delicate products
Fail safe grip application	Power failure results in grip being maintained
Removable tilt down guide rollers and outer grip cylinders	Allows easier side loading of product into tensioner if required
Easily fits inside a shipping container	Cost effective shipment worldwide
Accepts variance in product diameter through pivoting top track	Differing diameters can pass through in continued operations saving time
Data logging available	Allows analysis of data for verification post operations



HPU

10Te hydraulic tensioner

Model numbers: BS216 / BS219



IDEAL FOR

Cable and umbilical spooling / lay

Offshore wind

Carousel loading towers / level winders

FEATURE

BENEFIT

2-track vertical type	Entry and exit guidance level remains the same
Small footprint	Less deck space required
Hydraulic drive complete with Hydraulic Power Unit (HPU) and remote control unit	Simple to operate, reliable and compact with Human Machine Interface (HMI)
Control cabin with Heating Ventilation and Air Conditioning (HVAC) and internal domestic supply	Comfortable working conditions and excellent visibility for operators
Fail safe grip application	Power failure results in grip being maintained
Removable tilt down guide rollers and outer grip cylinders	Allows easier side loading of product into tensioner if required
Accepts variance in product diameter through pivoting top track	Differing diameters can pass through in continued operations saving time
Data logging available	Allows analysis of data for verification post operations
External communications	Control system can be tied into other equipment for synchronisation
Remote display option	Improves safety of operations
Suitable for offshore lifts (DNV GL 2.7.3)	Time saving offshore



HMI interface

15Te hydraulic tensioner

Model numbers: BS199



IDEAL FOR
 Flexible / rigid lay and spooling
 Offshore wind
 Oil and gas
 Decommissioning

FEATURE	BENEFIT
2-track horizontal type	Both tracks move to maintain centre line
Hydraulic drive complete with Hydraulic Power Unit (HPU) and remote control unit	Simple to operate, reliable and compact
Control cabin with Heating Ventilation and Air Conditioning (HVAC) and internal domestic supply	Comfortable working conditions and excellent visibility for operators
Fail safe grip application	Power failure results in grip being maintained
Removable end guide rollers and outer grip cylinders	Top loading of product into tensioner and cross hauling of product umbilical termination assemblies
Accepts variance in product diameter through pivoting top track	Differing diameters can pass through in continued operations saving time
Data logging available	Allows analysis of data for verification post operations
External communications	Control system can be tied into other equipment for synchronisation
Remote display option	Improves safety of operations
Series mode in constant tension	Machines can be used together in constant tension mode



HPU

15Te electric tensioner

Model number: BS214



IDEAL FOR

- Flexible / rigid lay and spooling
- Offshore wind
- Oil and gas
- Decommissioning

FEATURE

BENEFIT

2-track horizontal type	Both tracks move to maintain centre line with differing product diameters
Electrical drive complete with mini Hydraulic Power Unit (HPU) and remote control unit	Very accurate speed and tension control throughout full speed range
Control cabin with Heating Ventilation and Air Conditioning (HVAC) and internal domestic supply built into Electrical Power Unit (EPU)	Comfortable working conditions and excellent visibility for operators
Fail safe grip application	Power failure results in grip being maintained
Removable end guide rollers and outer grip cylinders	Allows top loading of product into tensioner and cross hauling of product umbilical termination assemblies
Accepts variance in product diameter through pivoting top track	Differing diameters can pass through in continued operations saving time
Data logging	Allows analysis of data for verification post operations
External communications	Control system can be tied into other equipment for synchronisation
Remote display option	Improves safety of operations



Inside the control cabin

36 / 40Te hydraulic tensioner

Model numbers: BS177 / BS179M / BS179S



IDEAL FOR

Flexible / rigid lay and spooling, pipe in pipe

Deepwater

Oil and gas

Decommissioning

FEATURE

BENEFIT

4-track top track pivots open	Allows top loading of product into tensioner and cross hauling of product umbilical termination assemblies
Hydraulic drive complete with Hydraulic Power Unit (HPU) and remote control unit	Simple to operate, reliable and compact providing easy to use interface. Twin pump set provides redundancy
Control cabin with Heating Ventilation and Air Conditioning (HVAC) and internal domestic supply built into Electrical Power Unit (EPU)	Comfortable working conditions and excellent visibility for operators
Fail safe grip application	Power failure results in grip being maintained
Data logging	Allows analysis of data for verification post operations
External communications	Control system can be tied into other equipment for synchronisation
Remote display option	Improves safety of operations
Vertical Lay System (VLS) compatible (BS177 model)	Allows vertical mounting of tensioner
Series mode (BS179 models)	Can be used in series for increased capacity



Tensioner in VLS

62.5Te electric tensioner

Model number: BS215



IDEAL FOR

- Flexible / rigid lay and spooling, pipe in pipe
- Deepwater
- Oil and gas
- Decommissioning

FEATURE

BENEFIT

4-track top track pivots open	Allows top loading of product into tensioner and cross hauling of product umbilical termination assemblies
Electrical drive complete with mini Hydraulic Power Unit (HPU) and remote control unit	Simple to operate, reliable and compact with Human Machine Interface (HMI). Very accurate speed and tension control throughout full speed range
Control cabin with Heating Ventilation and Air Conditioning (HVAC) and internal domestic supply built into Electrical Power Unit (EPU)	Comfortable working conditions and excellent visibility for operators
Fail safe grip application	Power failure results in grip being maintained
Data logging	Allows analysis of data for verification post operations
External communications	Control system can be tied into other equipment for synchronisation
Remote display option	Improves safety of operations
Vertical Lay System (VLS) compatible (@50Te)	Allows vertical mounting of tensioner



Electrical power unit and control cabin

Electrical Drive Lay Spread System (EDLS)

Sparrows and Innovo have formed a partnership to deliver the largest capacity fully electric-drive flexible cable and pipe lay system to the rental market



PRODUCTS

Innodrive RDS from Innovo, up to 800Te gross product capacity with reel size up to 14m overall diameter

Tensioners from Sparrows Group, up to 62.5Te, 2/4 track

Combines EPU and control cabins

Tracking system for multiple reels

Level winder

Overboarding chute

Winches

FEATURES

- A safe, fast and economical installation
- Suitable for a number of vessels
- Automatic control system between Reel Drive System (RDS) and tensioner
- Product lay or recovery
- One control station for all equipment
- Robust, reliable and technically advanced

BENEFITS

- Usable with varying sizes of reels on same firing line
- Remote access and remote screen share allows best surveillance of operations
- Sophisticated system allows for very accurate speed and tension control
- Drive failure does not pose risk of contamination or system failure
- Two people required to operate complete system per shift
- Faster, safer spooling of multiple reels

Supplied in collaboration with

INNOVO®

Innodrive 700 700Te Reel Drive System (RDS) and track system



IDEAL FOR

- Flexible lay and spooling
- Offshore wind
- Oil and gas
- Decommissioning

FEATURE

BENEFIT

Outside diameter of reels from 5m to 14m	Suitable for many project large or small reels
Electrical drive complete with Electrical Power Unit (EPU) / control cabin and Hydraulic Power Unit (HPU) for lifting	Simple to operate, reliable and compact with Human Machine Interface (HMI). Very accurate speed and tension control throughout full speed range
External communications	Integration with Sparrows Group tensioners. Control system can be tied into other equipment for synchronisation
Data logging	Allows analysis of data for verification post operations
Track system any length	Allows multi-reel spooling offshore
High capacity with 70/30 load share	Allows spooling of out-of-balance reels
Modular for shipping in 40ft containers	Reduces shipping costs
Lloyd's Register approved	Provides assurance of design for client requirements
Reel lay up to 15Te tensioner (reel dependant)	Reduces equipment required saving costs

Supplied in collaboration with



Innodrive 800 800Te Reel Drive System (RDS) and track system



IDEAL FOR

Flexible / rigid lay and spooling, pipe in pipe

Offshore wind

Oil and gas

Decommissioning

FEATURE

BENEFIT

Outside diameter of reels from 5m to 14m	Suitable for many project large or small reels
Electrical drive complete with Electrical Power Unit (EPU) / control cabin and Hydraulic Power Unit (HPU) for lifting	Simple to operate, reliable and compact with Human Machine Interface (HMI). Very accurate speed and tension control throughout full speed range
External communications	Integration with Sparrows Group tensioners. Control system can be tied into other equipment for synchronisation
Data logging	Allows analysis of data for verification post operations
Track system any length	Allows multi-reel spooling offshore
High capacity with 70/30 load share	Allows spooling of out-of-balance reels
Modular for shipping in 40ft containers	Reduces shipping costs
Lloyd's Register approved	Provides assurance of design for client requirements
Reel lay up to 15Te tensioner (reel dependant)	Reduces equipment required saving costs

Supplied in collaboration with



Level winder



IDEAL FOR

- Flexible lay and spooling
- Offshore wind
- Oil and gas
- Decommissioning

FEATURES

- Product range 50-330mm
- Electrical drive
- Max speed 0.5m/min (laying)
- Max trolley stroke 8m
- Controlled by Reel Drive System (RDS) Programmable Logic Controller (PLC)

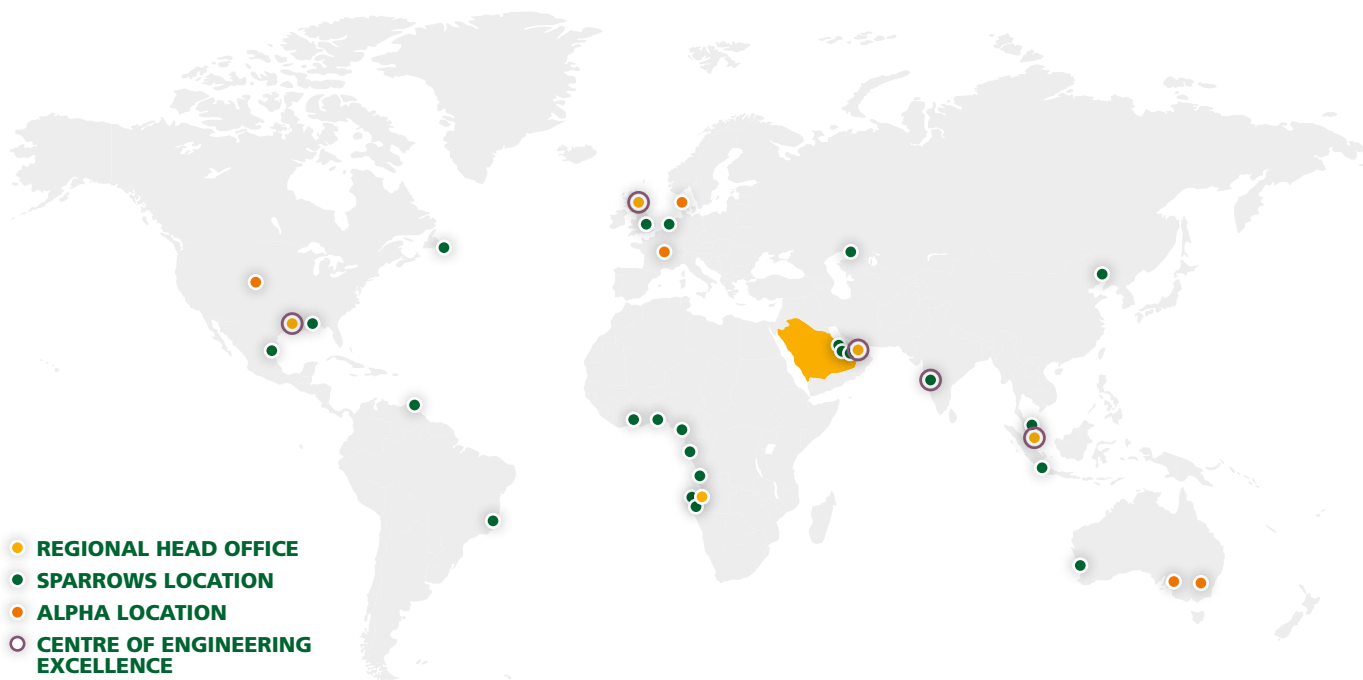
BENEFITS

- Suitable for use with Innodrive RDS series
- Auto-spooling mode
- Suitable for shipping by container

Supplied in collaboration with

INNOVO®

Local knowledge, global network



Sparrows Group
MIDDLE EAST

