



The power to connect

SUPPLEMENT

Subsea cables,
umbilicals and IWOCs
for the global offshore
energy industry



The TFKable Group consists of:

- Five companies responsible for cable and wire distribution in key sales areas (one domestic and four globally)
- six production plants (four in Poland, one in the Ukraine and one in Serbia)
- a Waste Cable Recycling Facility
- JDR Cable Systems (Holdings) – a company consisting of two manufacturing plants in the United Kingdom and four service and commercial units globally.



Driven by its strategic growth strategy, on August 29, 2017 TFKable Group acquired British company JDR Cable Systems – a global leader in manufacturing cables and umbilical solutions for the offshore wind energy industry as well as oil and gas industry.

Experience and competence of the TFKable Group

global relations



- 01. Littleport, UK (JDR)**
Manufacturing, product services, sales, management, engineering, R&D
- 02. Hartlepool, UK (JDR)**
Manufacturing, engineering
- 03. Newcastle, UK (JDR)**
Sales, engineering
- 04. Aberdeen, UK (JDR)**
Sales
- 05. Hamburg, DE (JDR)**
Sales
- 06. Houston, TX US (JDR)**
Sales, product services, management, engineering
- 07. Bolingbrook, USA (TFKable)**
Sales
- 08. Myślenice, PL (TFKable)**
Plant, sales
- 09. Hilden, DE (TFKable)**
Sales
- 10. Kaunas, LT (TFKable)**
Sales
- 11. Dubai, UAE (TFKable)**
Sales
- 12. Leicestershire, UK (TFKable)**
Sales
- 13. Zajecar, SRB (TFKable)**
Plant
- 14. Bydgoszcz, PL (TFKable)**
Plant, sales
- 15. Kraków-Bieżanów, PL (TFKable)**
Plant
- 16. Kraków-Wielicka, PL (TFKable)**
Plant, sales
- 17. Bukowno, PL (TFKable)**
Cable Wastes Recycling Plant
- 18. Czernihov, UA (TFKable)**
Plant

Supporting the international offshore energy industry

JDR Cable Systems – As a result of acquiring JDR Cable Systems Limited, TFKable has expanded its assets with two UK production Facilities. JDR manufactures submarine power cables as well as subsea umbilical cables consisting of components for power distribution, data transfer, monitoring and remote control, of offshore facilities. Additionally, our sales portfolio has been extended by offshore installation and maintenance services, located in JDR's service centres in the United States, UK, ensuring constant support for our business partners.

Spotlight on Hartlepool

JDR's base at Hartlepool dock is a 28,000 square metre, state-of-the-art facility for manufacturing and engineering subsea power cables and umbilicals. Hartlepool's deep-water quay and its easy access to North Sea shipping lanes mean we can spool cables directly from the factory to offshore cable lay vessels moored in the quay. The Hartlepool facility houses four 2,200 tonne and

two 4,000 tonne covered carousels, one of the world's largest vertical lay-up machines (VLM), a high capacity, high specification horizontal lay-up machine (HLM), armouring lines and a range of other world-class machinery utilised for the reliable manufacture of subsea umbilicals and power cables for both the oil and gas and renewable markets.

JDR's Hartlepool facility is a Centre of Excellence for cable and umbilical manufacture and umbilical solutions for the offshore wind energy and oil and gas industries.

Spotlight on Littleport

Our 10,000 square metre Littleport facility houses our IWOC Centre of Excellence as well as our design, engineering, small parts manufacturing, qualification testing, and R&D. It's also the centre of our worldwide supply of critical components for subsea power cables, umbilicals, specialised hoses and integrated packages for the oil and gas industry.

Kraków-Wielicka plant _ it produces cables and wires with voltage ranging from 1kV to 30kV, including rubber insulation, used in the extractive industry and wind farms; halogen-free cables and conductors (installed inside buildings); and signaling and control cables for special applications

Kraków-Bieżanów plant _ production of overhead lines from alloyed aluminum, silver plated copperconductors for railway traction networks, made on robotic technology lines

Bydgoszcz plant _ the largest production center for medium, high and extra high voltage cables in Europe

Myślenice plant _ production of copper and fiber optic telecommunication cables, computer cables and car cables

Zajecar plant (Serbia) _ production of low and medium voltage cables, signaling and control cables, telecommunication cables, as well as halogen-free cables and wires

Czernihiv plant (Ukraine) _ production of non- flammable (N)HXH and N2XH cables, self-supporting AsXSn overhead cables, aluminum and copper wires up to 1kV, including assembly wires

Bukowno-Poland plant (recycling of cable waste) _ it has the recycling capacity of approx. 10 thousand tons of cable waste per year. This allows for the recovery of fractions from individual materials with purity of over 99.5%

Fire Test Laboratory in the Krakow-Wielicka production plant _ it is equipped with apparatus that enables to conduct research ranging from basic tests of flame spreading on individual samples to flame spreading tests on bundles. Furthermore, it is equipped for testing density of emitted fumes and emission of corrosive gases

Laboratory of High and Extreme Voltages in the production plant in Bydgoszcz _ equipped with 4 Faraday cages (three for routine testing and one for cables and cable systems testing) along with a stroke generator and its own research field for qualification tests with 500kV testing systems and 5000A heating transformer sets



TFKable Group

The TELE-FONIKA Kable Group has been present on the domestic and international cable industry market for more than 25 years. A stable development strategy based on full diversification of outlets enabled the strengthening of the position of our company among world's leading cable companies with significant development potential.

Services and products provided by TF Kable have numerous applications in the most important industry sectors – they include more than 25,000 proven standard constructions. Furthermore, they include specialist assortment tailored to the individual needs of business partners.

Additionally, our production facilities (in Poland, Serbia and Ukraine), the Bukowno-Poland recycling plant and commercial companies (responsible for the geo-regional distribution of products) demonstrate a significant development potential. This is also true in the case of our modern fire test laboratory in Krakow-Wielicka plant, which performs several hundred flammability pre-tests annually, and a laboratory of high and extra high voltages in Bydgoszcz.

As a result of implementation of our growth strategy, in August 2017 TFKable Group acquired JDR Cable Systems Ltd, the leading manufacturer of submarine umbilicals and power cables to the global offshore energy industry.

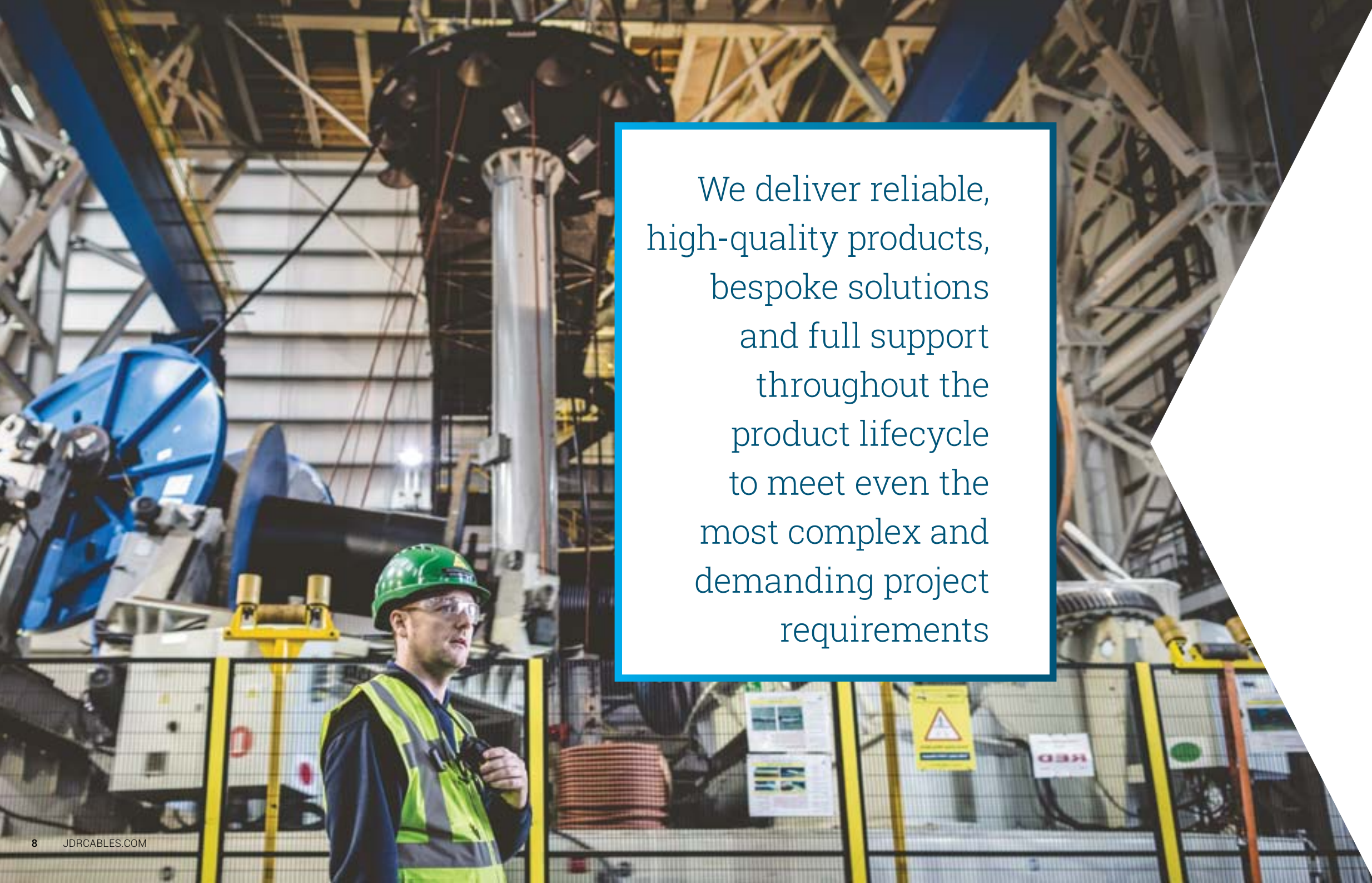
In the world's harshest environments and ever-increasing water depths, JDR's world-leading products and services bring power and control to offshore oil, gas and renewable energy systems.

JDR

JDR Cable Systems is a global expert in umbilical and cable connectivity to the energy industry. Our dynamic and flexible approach delivers the most effective solutions, building long-term partnerships and delivering highly innovated products and services for subsea and land infrastructure connections.

We are a leader in subsea production umbilicals, subsea power cables and Intervention Workover Control Systems for the offshore oil and gas industry. In addition, JDR is a global pioneer in the development of inter-array power cables for offshore wind, wave and tidal energy projects. JDR provides market leading services to support customers from project concept design/selection, installation, commissioning and full field lifecycle services. Our products and services are an essential element of the energy market infrastructure which enables the worlds energy to reach end-users in a cost-effective, safe and environmentally responsible way.

We have developed technologies to maximize the efficient delivery of power, control and communications through umbilicals and power cables. Using our state-of-the-art engineering and manufacturing capabilities, we develop and deliver custom built systems for subsea installations at ever increasing water depths as well as economical land energy solutions with the highest reliability.



We deliver reliable,
high-quality products,
bespoke solutions
and full support
throughout the
product lifecycle
to meet even the
most complex and
demanding project
requirements

We are sector specialists

We design, manufacture, deliver, terminate, test and support subsea cables, umbilicals and IWOCs to the offshore energy industry – and we know your business and its demands as well as we know our own. Our knowledge and experience enable us to develop solutions that address the challenges of any project and precisely meet our customers' needs.

We are technical experts

Technical excellence is in our DNA. Our engineers and designers are committed to creating products and solutions of the highest quality for our customers. Backed by our state-of-the-art manufacturing facilities and product lifecycle support teams, they ensure our customers benefit from innovation without compromise.

We are global professionals

Wherever our customers are located, they can be assured of a superior service at all times. JDR is internationally equipped in strategic locations and our global network of highly experienced, fully qualified technicians deliver 24/7 installation and maintenance support as well as full engineering services worldwide.

We are problem solvers

We work on some of the most complex technical projects and some of the world's largest installations – as well as some of the smallest. Every project presents new challenges and we have the flexibility, agility and dynamism to respond with innovative solutions. Whatever our customers need, JDR is committed to delivering the right solution.

We are trusted partners

Our customers trust us to deliver on time, every time. In the harsh environment of subsea cabling and umbilicals, quality and reliability are essential. That's why we collaborate with our customers and end users throughout the supply chain to make sure we exceed Customer expectations at every stage.

Cooperation between TFKable and JDR Cables began in 2008. Since then, together we have successfully collaborated on over 60 projects in the field of offshore renewable energy and subsea oil and gas extraction. These projects include the delivery of cabling to the largest offshore wind farms in the world, with Greater Gabbard (2009), London Array (2011) and Hornsea One (2017).

Hornsea 2 project

JDR will deliver inter array cables together with electrical & mechanical accessories and testing & termination works for the South West Cluster of the Hornsea Two Wind Farm. The wind farm is located approximately 89 km off the Yorkshire coast in water depths of between 30-40 m. The South West Cluster consist of 55 wind turbines and 1 Offshore Substation (OSS) and will have an installed capacity of up to 440 MW.

JDR signed the contract in August 2018, with the power cables planned for manufacture in during 2020 and 2021. In total, JDR will manufacture and supply 110 km of 150mm², 400 mm² and 630 mm² cables, 66 kV T-Connectors, Fibre Optic Boxes and Hang-offs. JDR will also provide the offshore terminations and testing work through 30 Offshore Technicians for the South West Cluster. This work will involve fitting the terminations accessories and testing of the installed array cable strings.

Hornsea 1 project

JDR will deliver inter array cables together with electrical & mechanical accessories and testing & termination works for the Eastern and Western Cluster of the Hornsea One Wind Farm. The windfarm is located approximately 120km off the Yorkshire coast in a water depth of between 20-40m. The Eastern and Western Clusters consist of 58 wind turbines and 1 Offshore Substation (OSS) and will have an installed capacity of 406MW per Cluster

JDR signed the contract in November 2016, with the power cores and fibre optic cables commencing manufacture in August 2017. In Total, JDR will manufacture and supply 245km of 150mm², 500mm² and 630mm² 33Kv inter array cables together with electrical and mechanical accessories including T-Connectors, Fibre Optic Boxes and Hang-off's. JDR will also provide the offshore terminations and testing work through approx 60 Offshore Technicians to both Eastern and Western Clusters.

Beatrice project

JDR have delivered 33kV inter-array cables and accessories to the largest offshore wind farm in Scotland which will serve to transmit power all the way from the wind turbine array up to the local substation. Power core production commenced in Q1 2017, with power core and fibre optics being delivered to the UK, where they were twisted to make the composite array cable. In total 180km of inter-array cables have been delivered, in two distinct sizes. A range of electrical and mechanical accessories have also been supplied including t-connectors and hang offs. The inter-array cables were manufactured within JDR's state-of-the-art facility in Hartlepool, UK, before being shipped to Scotland for installation. In addition JDR have provided cable installation support, cable accessory fitment and post installation testing, through up to 48 offshore technicians on the wind turbine platforms, and 6 onshore support staff at location.

Aberdeen Bay (EOWDC) project

JDR delivered the inter-array and export cables to the first commercial 66kV offshore wind project in Scotland. In total 21km of cable was delivered along with a range of mechanical and electrical accessories including t-connectors, hang-offs and beach armour clamps. These will serve to transmit power from the wind turbine array up to the local substation onshore. The 66kV power cables were manufactured at JDR's state-of-the-art facility in Hartlepool, UK, before being shipped to Scotland for installation.

FORMOSA 1 project

JDR will deliver inter-array, export and land cables to the first commercial scale offshore wind project in Taiwan, with all cables transmitting power from the wind turbines to the onshore inland substation. Power core production will begin in Q4 2018, with all power cores and fibre optics being delivered to one of JDR's state of the art manufacturing facility based in Hartlepool, UK. In total 21km of inter-array cable, 13km of export cable and 16km of land cable will be delivered but in addition JDR will supply mechanical and electrical accessories including cable protection systems, t-connectors and hang offs. JDR will also provide cable installation, accessory fitment and post installation support through 26 technicians on the offshore turbine platforms in Taiwan.

The product offer from TFKable Group represents the whole spectrum of technologically advanced submarine systems and maintenance and installation services that provide ongoing support for global trading partners. Today, we deliver to offshore wind farms both subsea cables and umbilicals which contain both power cables and fluid conduits to transfer data for monitoring and remote control applicable in offshore structures"

Find out more


What can JDR do for you?

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What can TFKable do for you?

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