Innodrive 700 reel drive system

SPECIFICATION SUMMARY

Product capacity	700Te
Max reel diameter	14m OD
Min reel diameter	5m OD
Weight	75Te / 100Te*
Length	4.8m
Width	4.2m
Height	9m*
Peak pull on hub	Up to 318Te**
Peak torque	Up to 350Te x m
Worst load distribution between drive towers	70% to 30%
Max operational sea state	Sea state 4
Max transit sea state	Sea state 8
Laying speed	Up to 2600m/hour
Speed control	Fully variable
Dynamic amplification factor	1.3
Vertical lay system	Compatible
Coiled pipe	Compatible
Operating temperature range	-10°C to 40°C

*Dependent on spacers fitted for reel diameters
**Electronically controlled by PLC

IDEAL FOR

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

BENEFITS

- Small footprint, large capacity
- Simple to operate, reliable and compact
- Integratable with Sparrows Group tensioners
- Provides record of data – data logging
- Easily transportable by sea or road in standard open-top containers anywhere in the world
- Fast assembly, minimal lifts onto vessel for installation
- Customisable configuration to suit project requirements

DELIVERY ASSURED

INNODRIVE 700

Innodrive Reel Drive System (RDS) from Innovo is the largest rental powered reel drive available to the offshore oil and gas and renewable industries.

It consists of two symmetrical towers, HPU and integrated control cabin. A reel can be mounted between the two towers and is controlled from the cabin using a Programmable Logic Controller (PLC) to ensure high reliability and excellent performance.

The system is suitable for the laying, recovery or spooling of any flexible product. The Innodrive 700 RDS can be easily transported in a series of stdard 40ft open top containers and can be assembled or dismantled within a day. These key features significantly reduce mobilisation and demobilisation time and costs.

Each tower along with one track section can be lifted together once assembled to reduce installation time onto vessles, reducing vessel costs while in port.

The system is designed to be suitable for offshore lifts meaning equipment can be installed or removed while offshore.

TRACK SYSTEM

With the requirement to lay different products on the same project there is an option to hire the Innodrive 700 track system.

The track system is specifically designed for the Innodrive 700 and uses a stiff, robust structure manufactured of S355 carbon steel I-beams that can be easily installed on the support vessels deck to guide the system towers. A special wear-resistant low friction material is used to allow the towers to easily slide over the I-beams.

The longitudinal movement of the towers is controlled by two separate pairs of cylinders, one pair for each tower and track. Each pair can pull the tower in one direction from one side of the tower. For the reverse movement, the cylinder pairs can be repositioned on the opposite side of the tower. Each tower will be provided with a dedicated Hydraulic Power Unit (HPU) to feed the hydraulic jacks to displace the relevant tower.

The track system is composed of modular structures; additional structures could be inserted to extend the length of the tracking system to fit the specific task. The modular components are secured by bolts on flanges between modules.

LEVEL WINDER

The level winder guides the cable during spooling / winding, ensuring each coil on the reel drum stays perpendicular to its rotation axis.

It is electrically driven and synchronised with the reel rotation in order to have the trolley axis aligned with the coil to be spooled / unspooled.

The system consists of:

- A main frame with two rails on which the trolley runs
- A trolley with a vertical rollway to guide the product spooling during pay-in / pay-out operations
- An electrical motor the moves the trolley by means of a chain

For guiding the flexible product, it is equipped with a rolled box (i.e. horizontal and vertical rollers), which an be opened on top to easily manage the flexible product. The stroke of the level winder allows driving the pay-in / pay-out operation for all the reels that can be driven by the RDS, including when the device is installed in the closest position to the reel.

The level winder design allows handling of termination head (eventually with the rolled box in an open position) and tolerating the loads induced by product curvature due to the exit angle from the reel. The ability to assemble or dismantle the unit in less than one working day significantly reduces the mobilisation and demobilisation time and costs.

Supplied in collaboration with

INNOVO®

Sparrows Group have developed a partnership with Innovo, an engineering, manufacturing and equipment rental company based in Italy and the UK.

Innovo supports the oil and gas, renewables and marine industries. Its custom-designed and rental products include jack-up systems, modular pontoons and cable laying equipment.

Teaming our own range of electric tensioners with Innovo's electric drive 700Te multi-reel drive system means we can supply the offshore industry with the first rental fully electric-drive flexible cable and pipe lay system.

www.innovoteam.com

Please visit **www.sparrowsgroup.com/contact** to find your nearest office

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