

# Umbilical & Power Cable Lay Systems

## Umbilical & Power Cable Lay Systems

AmClyde Norson Engineering provide lay systems for tube & hose umbilicals, power cables and other offshore and subsea products. Each system is designed to suit the product handling requirements or the lay vessel deck area.

Lay systems can be J-lay utilising a tower or S-lay with a stern sheave or overboarding chute. The product can be stored on a horizontal reel, in a carousel or on a number of smaller vertical reels used in conjunction with standard reel drive systems.

To the right is a Power Cable & Umbilical Lay System with horizontal reel, fleeting spooling tower, compensator and deck tensioner.

The fleeting spooling tower allows accurate loading / unloading of product to and from the reel.

The compensator allows automatic speed matching between the reel and tensioner without the danger of system or product overload.

The full equipment spread is modular and can be mobbed / de-mobbed to / from the vessel within 24/48 hours.



20Te Capacity Lay System with 2200Te Reel

To the right is the 20Te Tensioner mounted behind the Compensator Unit and positioned to lay product over the starboard side of the vessel.

Mounted to the vessel is a plain steel structure chute fabricated as a bellmouth with an operating radius greater than the product MBR.

Steel chutes are only suitable for deployment of products under low tension.



20Te Deck Mounted 3 Track Tensioner

### Main Features

The lay system can be designed to handle standard offshore products or special one off materials. Capacity of the system can be tailored to the vessel size or the installation requirements. Systems can be provided as modular for vessels of convenience or as permanent equipment installations. Regenerated power can be supplied back into the vessels' power system to reduce operating costs.

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Typical 4Te Tensioner used within spooling towers or factories.

Tensioner can have horizontal or vertical track layout depending on the application and requirements.



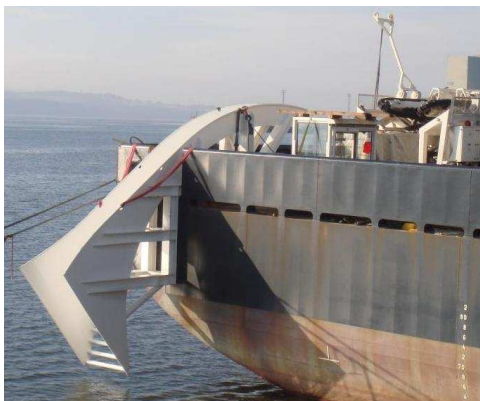
Above shows a 40Te 4 track Tensioner gripping a test pipe with pulling head. This unit is suitable for handling power cables and umbilicals as the 4 track design minimises the grip force per metre per track which is important to prevent product crushing.



Compensator mounted between the reel and Tensioner to provide speed matching between units. Speed matching is critical to ensure the product is not overloaded during starting or stopping the lay equipment.



Simple spooling tower with inlet and outlet guide chutes



Fabricated deployment chute for laying product in shallow water depths.

Whatever your lay requirements, AmClyde Norson can provide the right solution for you. With many years experience in large turnkey projects we have the engineering expertise and project management skills to ensure you get the right equipment on schedule and within budget. This supported by our extensive service and after sales network ensures that you have total confidence in your equipment.

We have successfully supplied equipment and systems into the cable lay market since 1989. All our equipment continues to work to this day proving its design and reliability.

## Contacts:

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