

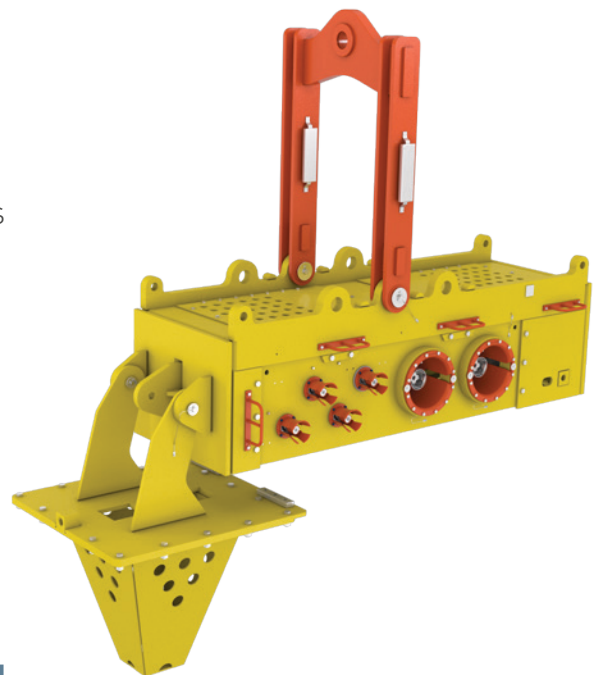
Umbilical Termination Assembly

Using standard parts to deliver customized solutions

Our Umbilical Termination Assemblies (UTAs) are configured based on customer requirements and provide subsea connection solutions.

The modular designs rely on a standard parts catalog developed based on past project requirements and are equipped to meet the majority of our customers' requirements.

The standardization of parts fully supports configurability of the UTA to meet even the most challenging of installation and operational requirements.



FEATURES

Standard parts catalog

Expedited manufacturing

Modular design approach

Umbilical Termination Assembly

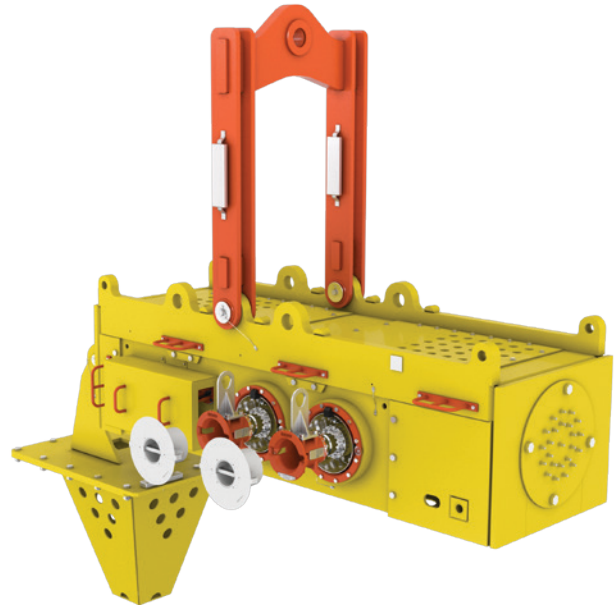
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The modular UTA approach allows the Oceaneering team and clients alike to immediately apply lessons learned and benefit from the repeatability of designs.

Modular designs offer an improved schedule as parallel manufacturing occurs, producing the body tube weldment and internal subassembly simultaneously.

Improved access for completion of welding and assembly via bolted panels further demonstrates Oceaneering's commitment to designing for safety.

The modular approach supports the early completion of load and pressure testing, further condensing the project schedule.



Parameters	
Sizes	Three standard body tube weldment sizes available.
Interfaces supported	Configurable panels support integration of junction plates, electrical and fiber optic connectors and valves (quantities included to suit project requirements)
Installation method	Yoke installation, four-point lift UTA installable integrated with mudmat or independent of mudmat
Flange interface size	Typically 16 in, but can vary based on client needs Dependent on umbilical diameter and components
Termination of umbilical to UTA	Terminated at umbilical manufacturing facility Termination of Oceaneering umbilical to modular UTA may result in a shorter overall UTA length due to elimination of the spool piece
Coating and cathodic protection	Coated per Oceaneering or client subsea specification Cathodic protection per DNV RP B401, typically 25 years
Mudmat interface	Naturally aligning pyramid stab and hinge design
Standard design inclusions	ROV grab bars in welded or bolted configuration Inclinometer Cathodic protection inspection point Marking per Oceaneering or client specification

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