UniversalPegasus International’s (UPI) subsea business expertise expands into a broader focus on Riser Solutions that takes advantage of our multi-disciplined knowledge base. Over our long history, UPI’s involvement in subsea, pipeline and riser developments has focused on specialized aspects within a variety of projects. A project management discipline team has been developed to oversee full scopes of work for customers.

Engineered riser solutions with centralized project management control allow our customers the benefit of close collaboration among disciplines within the subsea business unit. An EPCI approach to riser project management is required to ensure project success.

Riser Front End Engineering Design (FEED) combined with our client’s design basis can minimize engineering change orders and keep the project on track. UPI uses our riser specialists to assist our clients with development of the design basis, specifications, and in some cases, a cost basis analysis for supplier deliverables. With this groundwork in place, the FEED can then proceed with fewer change orders because of early involvement in supplier engineering design activities.

Our riser solutions team has full expertise for all types of risers including Steel Catenary Riser (SCR), Top Tensioned Riser (TTR), flexible, and umbilicals. The team has experience with hydro-pneumatic and buoyant tensioning devices, as well as syntactic buoyancy design that impacts the payload requirements on the floating production system. This knowledge is essential in the development of customized, hybrid riser solutions for TLP’s, SPAR’s and FPSO’s.

Our staff includes a group of seasoned design and installation discipline engineers and technicians throughout the subsea business unit. Their involvement is best employed from day one of the design basis development with a review of constructability and installation feasibility. During the fabrication and installation phases, resources are pulled together to complete the EPCI.

SERVICES INCLUDE:

Risers
- Screening studies
- Cost studies
- Third party QA / QC inspection
- Concept selection & design basis
- Dynamic riser analysis
- Riser component specifications
- Project Integration Management
- Field technical and installation support
- Certified Verification Agent (CVA) and Certified P.E.’s
- Integrity Management and Monitoring
- HP/HT riser design

Resource Disciplines
- Production Riser Specialists
- Drilling Riser Specialists
- Inspectors
- Subsea Fabrication Engineering
- Structural Engineering
- Materials Engineering
- Certified Project Managers
- Pipeline Engineering Specialists
- Installation Engineers
- Naval Architects

From Concept Selection, to FEED, to Detailed Design:
- Riser Sizing, Materials, CP & Arrangement
- Dynamic Analysis (VIV, strength, fatigue, interference, installation, time-simulation)
- Component Design, Detail FEM, Specs
- Installation Simulation & Procedure
- Procurement & installation support
- In-field riser assessment & integrity management
- Riser verification (CVA)