

## DESIGN & MANUFACTURE: DOWNHOLE UMBILICAL REELER



Brimmond group were approached by a multinational oil and gas service company to design and manufacture a bespoke downhole umbilical reeler for a project located in the Caspian Sea region. The details and specifications of the umbilical reeler and other equipment supplied were:

- The ability to fit a multitude of drum sizes, Brimmond created a concept design for a multiple drum-size reeler.
- Removable level wind system to allow easy and safe change over of drums
- Unit featured several safety functions, such as interlocks fitted to the access doors to automatically stop the unit if the doors are opened during operation
- Suitable for working in ATEX category 3 (zone 2) environments
- Umbilical reeler designed and built to DNV 2.7-3 standard
- Umbilical reeler suitable to accommodate maximum line pull of 2000 kg
- Electrical slinging (ATEX certified)
- Designed to provide maximum required capacity at minimum air pressure (80psi)
- Includes self-aligning level wind which allows for safe retrieval of umbilical
- Hydraulic slinging with maximum working pressure of 6000psi
- Also provided was a specifically designed and manufactured flatpack umbilical sheave built in accordance with DNV 2.22 & ISO 13628-7 and certified for use in ATEX category 2 (zone 1)
- Umbilical sheave suitable to accommodate maximum line pull of 2400 kg

**“Brimmond assisted us from the initial design phase, and provided a manufacturing deliverability schedule which was fulfilled very efficiently. The reeler was a fundamental element to our project so regular contact was conducted with the support of a dedicated Brimmond PM to ensure smooth process. Thanks to everyone at Brimmond for the full support of the project from start to finish”**  
Lee Anderson, Project Manager, Secure Drilling Services