Distributed Buoyancy Module

In floating production scenarios, pipelines such as flexible risers, cables and umbilicals are often required to be held subsea in specific geometric configurations designed to prevent damage of the system. Although numerous configurations have been developed and implemented over the years, one favoured method is to attach discrete Distributed Buoyancy Modules to the outside of the pipeline. The buoyant load must not migrate or degrade over the design life of the product.

Distributed Buoyancy Modules are typically used between a subsea structure and a surface vessel or platform. The clamping solution allows the Distributed Buoyancy Modules to be fitted at any point along the length of the pipeline.

The two main functions of the Distributed Buoyancy Modules are to provide uplift and maintain location along the riser. The uplift is generated by a two part buoyancy component. A clamp securely attaches the assembly to the desired location on the riser. The buoyancy segments are assembled to mechanically lock around the clamp and are secured with circumferential straps.

To provide the required project performance, the buoyancy system can be adjusted to operate in seawater depths from surface to 6,000m and beyond.
Benefits

- Reduces top tension loads
- Maintain project specific riser configuration
- Fast, efficient and safe offshore installation procedure
- Compliant systems aimed at encapsulating large flowline tolerances and expansions/contractions
- Extensive subsea track record
- Industry qualified materials and geometry
- Comprehensive document and drawing package

Applications

- Deep water buoyancy systems
- Insulated risers
- Dynamic applications
- Wind farm cables