RISER & DRILLING SYSTEMS Managed Pressure Drilling

Managed Pressure Drilling (MPD)

Integration Joint for MPD Systems

Working alongside drilling contractors and operators, Oil States has gained a full understanding of their requirements and developed a product that addresses Todays market needs.

The Oil States designed Integration Joint is lighter, more compact, easier to handle and simpler to run and maintain than any other existing systems that is available. It offers a unique retrievable stripper sealing system in place of the large spherical strippers used on current MPD systems. The stripper packers can be retrieved to the surface through the telescopic joint without the need to pull the full integration joint. This offers significant time and cost savings. The stripper packer elements have been designed using Oil States' vast experience of designing, manufacturing and testing of elastomeric products.

The Rotating Control Device (RCD) bearing assembly can be retrieved independently or collectively with the stripper packers. This reduces non-productive time and unnecessary trips. The RCD bearing assembly offers enhanced bearing and seal life and has been developed using established industry experts.

This Integration Joint allows the auxiliary lines to be simplified and reduces the need for crossovers. Oil States also has a range of riser coupling designs rated to meet the needs of deepwater drilling risers and existing riser systems.

Another unique feature, the 'Hands Free Pull in Bridle', offers a simplified and effective solution for remote make-up of flow lines. This can be adapted to existing vessels without the need for complex structures in the moon pool.

Design Features

- · Retrievable RCD Bearing Assembly
- Retrievable Stripper Packers
- Hands Free Pull In Bridle for Flow Line make-up
- · Bleed and Equalisation lines.
- Pressure/Temp sensors
- Tension rating from 3500kips and beyond
- Full integration to existing riser string
- 40ft long, 15,000kg



- 2000psi rated bore pressure
- Max envelope dia 57"
- Full 18¾" through bore with RCD & Stripper Packers removed
- No crossovers required. The integration Joint offers a range of Oil States' riser connections which are integral to the joint.



Managed Pressure Drilling

Benefits

- RCD and Stripper Packers can be retrieved without pulling the joint. This allows ease of replacement/ maintenance.
- RCD offers a step change in design and performance.
 The RCD utilises a new sealing technology and tighter control of run-out to enhance performance and life of the bearing assembly.
- Dual Stripper Packers can be replaced independently offering operational time saving and flexibility of use when stripping drill pipe.
- Integration Joint outside diameter is substantially reduced due to Packer design.
- Flow Lines can be connected/disconnected completely hands free removing the need for man riding operations.
- Flow lines can be shorter due to the compact nature of the Integration Joint and higher position of the Flow Spool.
- Riser Aux Lines are unaffected. The Integration Joint provides a direct interface to existing riser connections and aux line configurations which simplifies interfaces and make-up time
- Substantially lighter and shorter than current designs on the market. Ease of handling and all round safer operations.

Testing

- RCD qualification testing exceeds API 16RCD.
- Stripper Packer testing includes a range of static and dynamic stripping tests.
- Seal Temp qualification in accordance with API 6A.

Standards

- API 16RCD
- API 16F
- API 16C

OIL STATES INDUSTRIESRISER & DRILLING SYSTEMS

Sales, Engineering & Manufacturing EUROPE & EURASIA 2 Heartlands Terrace Heartlands Business Park Whitburn, West Lothian EH47 OSF Scotland, UK Tel +44 1506 896 000

ASIA 42-H Penjuru Road Singapore 609158 Tel +65 6773 7555 Regional Sales EUROPE & EURASIA Moss Road Gateway Business Park Nigg, Aberdeen AB12 3GQ Scotland, UK

5 Allée des Mésanges 13012 Marseille, France Tel +33 491 95 60 51

Tel +44 1224 290 000

Vagif Mustafazade Street 6/10 1st Floor, Sahibtac Business Centre Old City, Baku AZ1010 Azerbaijan Tel +994 12 598 1125 riser.connectors@oilstates.com

UTH AMERICA MIDDLE EAST

SOUTH AMERICA
02 Corporate & Offices
Ed. Evolution III
Bloco 2, Sala 105
Av. Paisagista José Silva de Azevedo
Neto, 200
Barra da Tijuca, RJ Brazil
CEP 22775-056
Tel +55 21 3503 2400

HDS Tower, Unit 2209, Cluster F Jumeirah Lakes Towers Dubai, United Arab Emirates Tel +971 4 452 8482

