

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Marine Riser Equipment

with type designation(s)
Diverter II-8 FlexJoint

Issued to

Oil States Industries Inc.
ARLINGTON TX, United States

is found to comply with

DNV-OS-E101 Drilling Plant October 2013

PSA's "Regulations relating to conduct of activities in the petroleum activities" (The Activities Regulations), Last amended 16 December 2014

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2017-06-30**.

Issued at **Houston** on **2013-04-16**

for **DNV GL**

DNV GL local station: **Houston - Systems & Components**

Approval Engineer: **Mark Miser**

Brandon D Caraway
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-015351-2**
Certificate No: **TAD00000C7**

Product description

Diverter II-8 FlexJoint Assembly

Application/Limitation

- Maximum Working Pressure	: 34.47 bar	(500 psi)
- Minimum Design Temperature	: -20 °C	(-4 °F)
- Maximum Design Temperature for 7 days	: 230 °C	(446 °F)
for 300 years	: 25 °C	(77 °F)
- Service	: Sour/ H ₂ S	
- Maximum Load Condition #1	: 500 psi	
	: 10,000 lbs..± 30,000 lbs. Tension	
	: ± 15 ° Conical angle	
- Maximum Load Condition #2	: 0 psi	
	: 4,000,000 lbs. Tension	
	: ± 10 ° Conical angle	
- Hydrotest Rating	: 750 psi	
	: 0 lbs. Tension	
	: ± 0 ° Conical angle	

Type Approval documentation

Tests carried out

Factory Acceptance Test in accordance with OSI SP2F-00-002, Rev. D, 2003

Marking of product

Marking shall:

1. Be reviewed and approved by the DNV GL Local Surveyor
2. Identify and differentiate each production unit <i.e. serial number>.
3. Establish traceability to product design and fabrication documentation.
4. Be in accordance with API 16F.

Periodical assessment

For retention of this Type Approval, DNV GL's surveyor shall perform surveys in accordance with DNVGL-CP-0338.

Revision

TAD00000C7 was issued to revise TAC D-5067.



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- added a drawing (PD13910)
- revision level for PD10833 & PD2080 has been changed.

END OF CERTIFICATE