

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Hoisting, Rotation and Pipehandling Equipment**

with type designation(s)

Load Pin, P/N LPE-1.4M-ED466-01D

Issued to

National Oilwell DHT L.P.**Cedar Park, TX, USA**

is found to comply with

DNVGL-OS-E101 – Drilling facilities, Edition January 2018**DNVGL-SI-0166 – Verification for compliance with Norwegian shelf regulations, Edition July 2018****Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****The TAC is used to replace TAD000006S**Issued at **Houston** on **2020-12-04**This Certificate is valid until **2025-12-03**.for **DNV GL**DNV GL local station: **Certification & Inspection Services**Approval Engineer: **Bo Cui****Mark Miser**
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **262.1-020637-2**
Certificate No: **TAD00001CA**

Product description

Load pin assembly, LPE-1.4M-ED466-01D, 4-20 ma, Rdnt. bridge , Rcal, L2307; for use in NOV Travelling Block HTB-1400.

Application/Limitation

Design Parameter	Value	(Equivalent)
Maximum Rated Load (y)	: 6227.5 kN	(1,400,000 lbf)
Minimum Operating Temperature	: -20 °C	(-4 °F)
Maximum Operating Temperature	: 60 °C	(140 °F)
Temperature Class	: T4	
Specification Level	: PSL 1	

For use in Zone 0, Gas Group IIB (Class 1 Division 1, Gas Group C & D), Protection method Ex ia.

Type Approval documentation

Tests carried out

- NOV MD Totco Generic Factory Acceptance Test Rev. B, Cage Code 38589 – P/N LPE-1.4M-ED466-01A/01D, S/N 1432434 and 1432436.
- DNV Survey Report No. 2015-01-15-C Rev. 1, by Loew Scott dated 2015-01-19.

Marking of product

For traceability, the following marking is to be carried out on each product:

- Serial number
- Manufacturer's name or trademark
- Additional marking at the manufacturer's discretion
- Be in accordance with API Specification 8C

Periodical assessment

In order to maintain the validity of the type approval certificate, periodical assessments should be carried out according to DNVGL-CP-0338. Periodical assessments will, when possible, be harmonised with other surveys and audits carried out.

Other Conditions / Comments

- 1) The instructions listed in the "Conditions of Certification", IECEx certificate UL 10.0024X and in "Specific Conditions of Use", EC-TE Certificate DEMKO 03 ATEX 0305995X Rev 4, shall be taken into consideration when installing and operating the device.
- 2) This design verification does not cover the approval of the controls and automation for the equipment. These shall be approved separately as part of the drilling equipment control system and tested onboard by the site surveyor to verify compliance with DNVGL-OS-E101 Ch.2 Sec.4.
- 3) Procedures related to testing, welding, NDE and other quality control requirements are to be reviewed/approved by DNV-GL's local surveyor in accordance with API specification 8C.

END OF CERTIFICATE