Certificate No:
TAD00001EK

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
14" Clamp Type Elevator (7.5 Ton) 2005013628, 2012029022

Issued to
Frank's International, LLC
Lafayette, LA, 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.

Issued at **Houston** on **2021-07-13**
This Certificate is valid until **2026-07-12**.
DNV local station: **Houston, Approval CMC**

Approval Engineer: **Bo Cui**

for **DNV**

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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.

Reference Standard
API Spec 8C, Specification for Drilling and Production Hoisting Equipment (PSL 1 and PSL 2), Fifth Edition, April 2012

Product description
14" Clamp Type Elevator - 7.5 Ton (Bolt-On Version) (2005013628)
14" Clamp Type Elevator - 7.5 Ton (CRT Model) (2012029022)

Application/Limitation

Design Parameter	Value	(equivalent)
Minimum Design Temperature	-4 °F	(-20 °C)
Safe Working Load (Vertical)	7.5 Ton	(6,804 kg)
Safe Working Load (Horizontal)	3.75 Ton	(3,402 kg)
Design Safety Factor (API 8C)	3	

Type Approval documentation

Tests carried out
Type test was carried out on 2013-05-30 and 2013-06-18 with reference to project PP066997.

Test procedures:

1. Each product is to be tested according to DNV's Offshore Standard DNVGL-OS-E101 "Drilling Facilities", January 2018, Ch.2, Sec.8, 4.1, including proof load test according to API Spec 8C, Ch 8.6.
2. Charpy impact testing shall be performed in accordance with DNVGL-OS-E101 “Drilling Facilities” Ch.2, Sec.2, 2.6.
3. Qualification of welders, welding- and heat treatment procedures shall be in accordance with DNVGL-OS-E101 “Drilling Facilities” Ch.2, Sec.8, 2.3 to 2.5.
4. PSL 2 units shall meet the stricter demands for materials, welding, quality control (NDE) and as described in Chapters 6, 7 and 8 respectively in API Spec 8C.

Marking of product
For the traceability to this Type Approval Certificate, the products marking shall:
1. Be reviewed and approved by the DNV local surveyor.
2. Identify and differentiate each production unit.
3. Be in accordance with DNVGL-OS-E101, January 2018.

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.

End of Certificate