



Certificate No:
TAD00001GS

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
Sheave P/N 3687266

Issued to

The Crosby Group LLC
Tulsa, OK, USA

is found to comply with

DNV-OS-E101 – Drilling facilities, Edition July 2021

DNV statutory interpretations DNV-SI-0166 – Verification for compliance with Norwegian shelf regulations, Edition July 2021

Application :

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

Issued at **Houston** on **2022-08-30**

This Certificate is valid until **2027-08-29**.

for **DNV**

DNV 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 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.



Form code: TA 251

Revision: 2021-03

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Page 1 of 2

Design codes/standards used as references

API Specification 8C, fifth edition

Product description

SHEAVE P/N 3687266; SHEAVE OD 42 IN; HUB ID 10.873 IN; HUB THICKNESS 3.50 IN; 1.25 IN WIRE LINE

Application/Limitation

Design Parameter	Value
Design temperature	-20°C
Design single line pull	80,000 lbf
Design factor (API 8C)	3.0
Design wire rope wrap angle	180 degree
Design wire rope fleet angle	3.0 degree
Applied wire rope diameter	1.25 in
Service	General drilling plant

Type Approval documentation

Tests carried out

Procedures related to testing, welding, NDE etc. are to be reviewed/approved by DNV's surveyor

Marking of product

For traceability to this Type Approval Certificate the products are as a minimum to be marked as follows:

- Part Number
- Serial Number
- Load Rating
- Sheave Groove Size
- Sheave Outside Diameter
- Manufacturer's name and trademark

Periodical assessment

For retention of the Type Approval, DNV's surveyor shall perform periodical assessment after 2 years (+/- 90 days) and after 3.5 years (+/- 90 days) in accordance with DNV's Class Program DNV-CP-0338, Section 4.

END OF CERTIFICATE