

APPROVAL CERTIFICATE

DNV ID no.: **N14336DV** Date of issue: **2025-02-27**

THIS IS TO CERTIFY:

That the (undernoted components / product(s) has/have been manufactured, inspected and tested in accordance with the relevant requirements of NORSOK M650 Edition 4 with Type designation(s)

Fasteners – ASTM A276 / ASTM A1082 UNS Gr. S32760

Issued to,

TRIPLEFAST MIDDLE EAST LIMITED, BLDG 47, OILFILEDS SUPPLY CENTER LIMITED, B50 & B51 P.O.BOX No. 18664, JABEL ALI FREE ZONE, DUBAI, UAE.

Has been reviewed and found to comply with,

- NORSOK M630:2020 EDITION 07 MDS-D59/D59L REV.03
 - ASTM A276/ASTM A1082 UNS Gr. S32760 STRAIN HARDENED BOLTING'S.
- NORSOK M630:2020 EDITION 07 MDS-D60/D60L REV.03
 - ASTM A182/ASTM A276/ASTM A479/ASTM A1082 SOLUTION ANNEALED BOLTING'S

Product description:

Fasteners

Studs: (Strain hardened condition in compliance with NORSOK M630 MDS D59/D59L)

3/4" – 10UNC Stud Bolts ASTM A276/ASTM A1082 UNS S32760

1-1/2" - 8UN Stud Bolts ASTM A276/ASTM A1082 UNS S32760

Studs: (Solution Annealed condition in compliance with NORSOK M630 MDS D60/D60L)

- 5/8" 11UNC Stud Bolts ASTM A1082 UNS S32760
- 2-1/2" 8UN Stud Bolts ASTM A1082 UNS S32760

Heavy Hex. Headed Bolts: (Strain hardened condition in compliance with NORSOK M630 MDS D59/D59L)

- 1/2" 13UNC Heavy Hex Headed Bolts ASTM A276/ASTM A1082 UNS S32760
- 3/4" 10UNC Heavy Hex Headed Bolts ASTM A276/ASTM A1082 UNS S32760

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.



Heavy Hex. Headed Bolts: (Solution Annealed condition in compliance with NORSOK M630 MDS D60/D60L)

5/8" - 11UNC Heavy Hex Headed Bolts ASTM A1082 UNS S32760

1-3/8" – 8UN Heavy Hex Headed Bolts ASTM A1082 UNS S32760

Heavy Hex. Nuts: (Solution Annealed condition in compliance with NORSOK M630 MDS D60/D60L)

5/8" - 11UNC Heavy Hex Nuts ASTM A1082 UNS S32760

1-3/8" – 8UN Heavy Hex Nuts ASTM A1082 UNS S32760

Application / Limitation: For Various Assemblies / Material procured in compliance with NORSOK MDS

Approval documentation: Qualification Test Record (QTR's) as per NORSOK M650 Edition 04, ISO 17782 Edition 2018.

Tests Carried out:

In accordance with NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03 / ISO 17781 EDITION 2017 requirements.

- Chemical Composition with Pitting Resistance Equivalent Number (PREN) in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Tensile Testing in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Charpy V Notch Impact testing in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Microstructure testing in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Pitting Corrosion in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Delta Ferrite content testing in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Proof Load testing on Hex Nuts in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Hardness testing on Bolts and Nuts in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- Surface discontinuity testing on Bolts and nuts in compliance with relevant ASTM standards; NORSOK M630 MDS D59/D59L Rev.03 and MDS D60/D60L Rev.03
- NDE test compliance in accordance with relevant ASTM standards and NORSOK compliance.

Marking of product:

For traceability to this certificate, each bolts and nuts shall be provided with a following data with hard stamped / engraved on finished products

- Manufacturer's Identification symbol or name (ID)
- Alloy designation UNS No with underscore or the letter "S" for MDS D59/D59L
- Alloy Designation UNS No for MDS D60/D60L
- Impact test temperature or MDS No. (add letter "L")
- Lot number or traceability code (LOT)



This Certificate is not valid for systems / installations which are subjected to classification by DNV.

Issued at Dubai on 2025-02-27 Validity : 2030-02-26



for **DNV** Digitally Signed By: Vasu, Chaganti

Location:DNV AS, Abu Dhabi Vasu Chaganti

Project Sponsor/Head of Section