DNV·GL

Certificate No:
TAD00000Y7

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
72" and 78" Sheaves

Issued to
FAREM FONDERIE ACCIAIO REMANZACCO SRL UNIPERSONALE
REMANZACCO, UD, Italy

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 2017

Application :

Drilling Line Sheaves

Issued at **Høvik** on **2018-05-04**
This Certificate is valid until **2023-05-03**.
DNV GL local station: **Venice**

Approval Engineer: **Jan H. Hansen**

for **DNV GL**

Per Esvall
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.

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Reference standards

- API Spec. 8C, Drilling and Production Hoisting Equipment, PSL 1 and 2, 5th Edition, October 2012
- F.E.M. 1.001 Rules for the Design of Hoisting Appliances, 3rd Edition, Oct.1998

Product description

72" and 78" un-welded API 8C Drilling Line Sheaves

Application/Limitation

72" Sheave NOV Item Number 16982672-001:

Max. Line Pull:	811 kN
Wire clamp arch:	180°
Nominal size (Sheave outer diameter OD)	72" (1828 mm)
Wire rope size (wire OD)	2" (52 mm)
Max. fleet angle:	1.5°
Max wire rope speed	25 m/s
API Spec 8C Product Specification Level:	PSL 2
API Spec 8C Sheave category:	Drilling line sheave
F.E.M 1.001 classification:	P1, B10, E8
Hardness value	262-312 HB
Minimum Yield Strength	680 MPa
Minimum Tensile Strength	900 MPa
Min. design temperature:	-20°C

78" Sheave DRWG R2009875, Rev.0:

Max. Line Pull:	1070 kN
Wire clamp arch:	180°
Nominal size (Sheave outer diameter OD)	78" (1981 mm)
Wire rope size (wire OD)	2.25" (58 mm)
Max. fleet angle:	1.5°
Max wire rope speed	25 m/s
API Spec 8C Product Specification Level:	PSL 2
API Spec 8C Sheave category:	Drilling line sheave
F.E.M 1.001 classification:	P1, B10, E8
Minimum Yield Strength	680 MPa
Minimum Tensile Strength	900 MPa
Min. design temperature:	-20°C

Type Approval documentation

Testsing

- NDE/NDT shall be performed in accordance with API Spec 8C, Ch. 8.4.7, 8.4.8 and 9.2.2
- For PSL2, the ductility of the sheave material shall be tested and fulfil the minimum requirements to elongation specified in API Spec 8C, Ch. 6.3.7, Table 2.

Marking of product

For tracebility the following marking shall as a minimum be carried out on each product:

- Part No.
- Serial No.
- Manufacturers Name or Mark
- Sheave outside diameter
- Sheave groove size
- PSL 2

Periodical assessment

For retention of the Type Approval, DNV GL Surveyor shall perform a survey – every second year and before the expiry date of this certificate. This is in order to verify that the conditions for the type approval are complied with, ref. DNVGL-CP-0338, DNVGL Type approval scheme.

END OF CERTIFICATE