

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Work over Equipment**

with type designation(s)
Winch Drum WDR-70

Issued to

SCHLUMBERGER VECTOR SAS
Abbeville Cedex, France

is found to comply with
DNVGL-OS-E101 – Drilling plant, Edition July 2015

Application :

See next page.

Issued at **Høvik** on **2019-01-02**

This Certificate is valid until **2024-01-01**.

DNV GL local station: **Paris Verification**

for **DNV GL**

Approval Engineer: **Axel Janson**

.....
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.



Job Id: **262.1-018356-2**
Certificate No: **TAD000011T**

Reference Standards

- DNVGL-ST-0378, Standard for offshore and platform lifting appliances, May 2016

Product Description

WDR-70 is a high-strength winch drum designed to store and convey wireline cable used for wireline data acquisition. The drums are manufactured by casting from manganese steel, and may contain up to 45,000 feet of hepta cable type 7-52 (43 layers).

Application/Limitation

<u>Design Parameter</u>	<u>Value</u>	<u>Equivalent</u>
Minimum Design Temperature:	-30 °C	-22 °F
Maximum Cable Tension:	33.4 kN	7 500 lbf
Cable Diameter:	13.2 mm	0.52 in

Type Approval Documentation

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Fabrication and Testing Procedures

Testing:

1. Charpy testing shall be performed in accordance with Ch.2 Sec.2 of DNVGL-OS-E101 Drilling Plant.

NDE Procedures:

2. NDE/NDT shall be performed in accordance with DNVGL-OS-E101 Ch.2 Sec.6.

Welding Procedures:

3. Qualification of welding procedures and qualification of welders shall be in accordance with DNVGL-OS-E101 Ch.2 Sec.6.

Test Carried Out

Tests were carried out and documented in Test- and Inspection Sheet for WDR-70 dated 2011-08-02.

Marking of Product

Each component shall be marked according to DNVGL-ST-0378 §14.5, including at least:

- Part No.
- Serial No.
- Manufacturers Name or Mark

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Other Conditions and Comments

- Materials shall be delivered with 3.1 certificates according to EN 10204.
- The distance between the top layer of the wire rope on the drum and the outer edge of the drum flanges is to be at least 2.5 times the diameter of the wire rope.
- Each product are to be surveyed during fabrication in accordance with the requirements for equipment of Category I as defined in DNV GL Offshore Standard DNVGL-OS-E101 Drilling Plant, followed by issuance of a DNV GL certificate.
- Load testing of the final wireline winch assembly shall be carried out in accordance with DNVGL-OS-E101 Ch.2 Sec.6 §4.3.
- This Type Approval Certificate replaces the previously issued certificate S-8426.

Certificate Retention Survey

For retention of this Type Approval Certificate, DNV GL AS's representative shall carry out surveys every second year in accordance with DNV GL Type Approval Scheme DNVGL-CP-0338.

END OF CERTIFICATE