DNV·GL

Certificate No:
TAS0000121

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Portable Offshore Units

with type designation(s)
Drop in Drums - DID Reel 192'', DID Reel 180'', DID Reel 168''

Issued to
Dwellop AS
Sandnes, Norway

is found to comply with
DNV Standard for Certification No. 2.7-3 Portable Offshore Units (2011)

Application :

DNV 2.7-3 Type C R30
Max. significant wave height during offshore lift: 3.0 m
Only certified lifting equipment shall be used.

Type	Max. gross mass (kg)	Max. payload (kg)	Max. sling leg angle
DID Reel 192''	**73.000**	**68.000**	**3°**
DID Reel 180''	**73.000**	**68.000**	**3°**
DID Reel 168''	**73.000**	**68.000**	**4°**

Issued at **Høvik** on **2017-05-19**
This Certificate is valid until **2019-12-31**.
DNV GL local station: **Station Houston**

Approval Engineer: **Steinar Hernes**

for **DNV GL**

Stig Johannes Johannesen
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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Job Id: **262.1-026097-1**
Certificate No: **TAS0000121**

Holder of certificate
Dwellop AS, Koppholen 25 4313 SANDNES, Norway

Manufactured by
Spooltech, 9325 Hwy 6 N, Houston, TX. 77095, USA

Responsability
The Holder of the Certificate takes responsability that both design and production are in compliance with the Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.

Product description
POU TYPE / CLASS	:	DNV 2.7-3 Type C R30
TARE WEIGHT	:	5000 kg (DID Reel 192”)
POU external dimensions (LxWxH)	:	DID Reel 192” 4877x3338x4877 [mm]
		DID Reel 180” 4572x3338x4572 [mm]
		DID Reel 168” 4267x3338x4267 [mm]

Application/Limitation
Maximum Gross Weigth (MGW)	:	73 000	kg	
Max H_s during offshore lift	:	3.0	m	
Min. temperature	:	-20	°C	
Max. sling angle with vertical	:	3	°	(from vertical – DID Reel 192” and 180”)
Max. sling angle with vertical	:	4	°	(from vertical – DID Reel 168”)
Shackles (WLL)	:	55.0	mT	($Ø_{pin}$=57 mm)
Spreader Bar for DID 192” (WLL)	:	73.0	mT	(Excluding the self-weigh and rig set.)
Spreader Bar for DID 180” (WLL)	:	73.0	mT	(Excluding the self-weigh and rig set.)
Spreader Bar for DID 168” (WLL)	:	73.0	mT	(Excluding the self-weigh and rig set.)

Lifting of these units shall be carried out as planned operations. Specific lifting procedures shall be available. The procedure shall include all relevant information required to ensure safe handling of the unit. Reference to the procedure (doc.no. 15066-DWP-O-MG-0001, Rev. 5) shall be clearly stated on the information plate.

DNV GL surveyor to witness important production and test events and issue Form no. MOP 201 “Certificate for Portable Offshore Unit” for each unit.

Production strength tests to be carried out according to DNV 2.7-3 and after agreement with the DNV GL Surveyor.

Lifting set
Lifting set for these units shall be designed according to the lifting arrangement drawings listed in section C of DNV-PP114877-DVR-001 rev.03;

DID168	DID180	DID192 (mm/inch)
10062903/10063182	10062861/10063164	10063163/10057561
10046115	10041142	10057553
10048612	10065609	10065610

The below listed lifting set components (or similar) having minimum strength as indicated, can be used:
- Shackles (all): WLL = 55 t (Green Pin Super G-5263, SF=5)
- Slings – lower (wire sling, thimbles & ferrules):

DID	MBL	Length
168	1808 kN	1900mm
180	1808 kN	2100mm
192	1808 kN	2300mm

- Slings – upper (wire sling, thimbles & ferrules):

DID	MBL	Length
168	1868 kN	4708mm
180	1868 kN	4708mm
192	1868 kN	4708mm

- Master link: WLL 84 t (GN Rope Fittings, Type SC1 Master Link, 12720000, SF = 5).

Note that 100% traceability is required for all lifting equipment/components.
The certificates are only valid when the units are fitted with certified lifting set.

Spreader Bars
Dedicated spreader bars which are part of the lifting set shall be certified. Certification of spreader bars shall be based on separate design verification report, Doc. No.: DNV-PP114877-DVR-002 rev. 02.

Type Approval documentation

Tests carried out
Prototype testing according to Standard for Certification No. 2.7-3, May 2011.

All-point lifting acc. to 5.2.3, total load (table 5-2): 98 550 kg

Marking of product
Each unit to be marked with:

- Safety marking according to Standard for Certification No. 2.7-3, May 2011, sec. 6 including
  - Operational Class Identification
  - "OPERATIONAL RESTRICTIONS"
- Data plates according to Standard for Certification No. 2.7-3, May 2011, sec. 6
- Reference to operational procedure shall be clearly stated on information plate
- The general DNV GL hard stamp "VL" to be hard stamped on frame
- Manufacturer's Serial Number to be welded on frame
- DNV emblem for Portable Offshore Units

Periodical assessment
Periodical assessment to be carried out at intervals not exceeding 12 months and after substantial repair or alteration according to Standard for Certification No. 2.7-3, May 2011.

END OF CERTIFICATE