

This is to certify:

That the Portable Offshore Units

with type designation(s)
Choke Manifold Skid

Issued to

Worldwide Oilfield Machine, Inc.
Houston, TX, USA

is found to comply with

DNVGL Standard: DNVGL-ST-E273, "2.7-3 Portable offshore units", Edition April 2016

Application :

Max. gross weight	3,538 kg	7,800 lbs
Max. payload	2,858 kg	6,300 lbs
Max. sling leg angle	30°	

Issued at **Houston** on **2021-07-08**

This Certificate is valid until **2026-07-07**.

DNV local station: **Houston, Approval CMC**

Approval Engineer: **Simon Ouyang**

for **DNV**

.....
Simon Ouyang
Senior Engineer

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Mohsen Shavandi
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.





Job Id: 262.1-035889-1
Certificate No: TAS0000312

Manufactured By

Worldwide Oilfield Pvt. Ltd.
DNV CIM No.: 1217208
Pune, India
Local DNV Office: Mumbai

Responsibility

Worldwide Oilfield Machine, Inc. takes full responsibility that both the design and production are in compliance with the Rules, Standards and / or Regulations listed on page 1.

Product description

POU Type : DNVGL 2.7-3 Type B R30
Max. Tare* : 680 kg 1,500 lbs
*) Tare mass is to be confirmed by weighing. The sum of Tare and Payload shall never exceed the maximum gross weight stated on the front page of this certificate.

Application/Limitation

Max Hs Offshore Lift : 3.0 m
Min. Design Temperature : -20 °C -4 °F
Max. Sling Angle w/ Vertical : 30 °
Shackle WLL : 6.5 t 14,330 lbs
Min. Shackle Pin Diameter : 25.4 mm 1 inch

DNV surveyor to witness important production and test events and issue no. MOP 201, "Certificate for Portable Offshore Unit" for each unit.

Type Approval documentation

This approval is based on DVR-261.1C-J-27149 Rev. 0 issued 2021-05-05.

Doc. No.	Rev.	Title
M7877-S	1	Weldment Drawing for Skid Assembly, 3-1/16"-15K
M7877-S-10	0	Detailed Drawing for Padeye Assy, 3-1/16"-15K
M09-8-6	7	Detailed Drawing for Lift Eye Assy, 3-1/16"-15K
M7877-S-9	0	Detailed Drawing for Padeye Assy, 3-1/16"-15K
M7877-S BOM	1	Engineering BOM Report for M7877-S Skid Assy, 3-1/16"-15K

Materials Specifications

Component	Material	Min Yield Strength	Avg. Charpy Value
Structural Tubing	ASTM A500 Grade B	315 MPa	32 J @ -10 °C for 6 < t ≤ 12 mm 32 J @ -20 °C for 12 < t ≤ 25 mm 32 J @ -40 °C for 25 < t ≤ 50 mm
Plates/Padeyes	ASTM A516 Gr. 70	260 MPa	27 J @ -10 °C for 6 < t ≤ 12 mm 27 J @ -20 °C for 12 < t ≤ 25 mm 27 J @ -40 °C for 25 < t ≤ 50 mm

Tests carried out

Prototype of P/N: M7877-S, S/N:WI6430 tested on 2021-06-29 according to Standard for Certification DNVGL-ST-E273, April 2016.

Prototype Load Test Reports reviewed and accepted by DNV Houston on 2021-07-06. Production testing to be carried out per DNVGL-ST-E273 Section 5.2.3.

Marking is to be carried out in accordance with DNVGL-ST-E273 Section 6.

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 DNVGL-ST-E273, 2016 edition.

END OF CERTIFICATE