Certificate No:
TAS00003TF

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Portable Offshore Units

with type designation(s)
3-1/16" 10k Magnum Hyd. Lift Frame

Issued to
Worldwide Oilfield Machine, Inc.
Houston, TX, USA

is found to comply with
DNV standard DNV-ST-E273 – 2.7-3 Portable offshore units, April 2016 (Amended October 2021)

Application :

Max. gross weight	**:**	**737 kg**	**1,625 lbs**
Max. payload	**:**	**465 kg**	**1,025 lbs**
Max. sling leg angle	**:**	**30 °**	

Issued at **Houston** on **2023-03-01**
This Certificate is valid until **2028-02-29**.
DNV local unit: **Houston Offshore Services**

Approval Engineer: **Simon Ouyang**

for **DNV**

Simon Ouyang
Principla Engineer

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.

Holder of certificate

Worldwide Oilfield Machine, Inc.

Manufactured By

Worldwide Oilfield Machine, Inc. (Pune)

Responsibility

The holder of the certificate 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	:	DNV 2.7-3 Type B R30	
Max. Tare	:	272 kg	600 lbs
POU External Dimensions (Lx W x H)	:	1300 x 600 x1335 mm	51.1 x 23.6 x 52.6 in.

Application/Limitation

Min. Design Temperature	:	-20	°C	-4 °F
Max. Sling Angle w/ Vertical	:	30	°	
Shackle WLL	:	4.75	t	5.24 ton
Min. Shackle Pin Diameter	:	22.2	mm	0.88 inch

The Magnum Lifting Frame with P/N: xx has been approved as Type B unit with an operational class R30 for transportation and lifting in air.

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

Production strength tests to be carried out according to DNVG-ST-E273 and after agreement with DNV Surveyor.

The certificates are only valid when the units are fitted with certified lifting set.

Type Approval documentation

Materials Specifications

Component	Material	Min Yield Strength	Avg. Charpy Value
Hollow Sections	ASTM A500 Gr. 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	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 testing according to Standard for Certification DNV-ST-E273, April 2016.

All-point lifting test shall be carried out in accordance with E273 Section 5.2.3 (Table 5-2) with the total load value at 1,843 kg (4,063 lbs).

Production testing shall be carried out per DNV-ST-E273 Section 5.2.3.

Marking of product

Marking is to be carried out in accordance with DNV-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 DNV-ST-E273, 2016 edition.

END OF CERTIFICATE