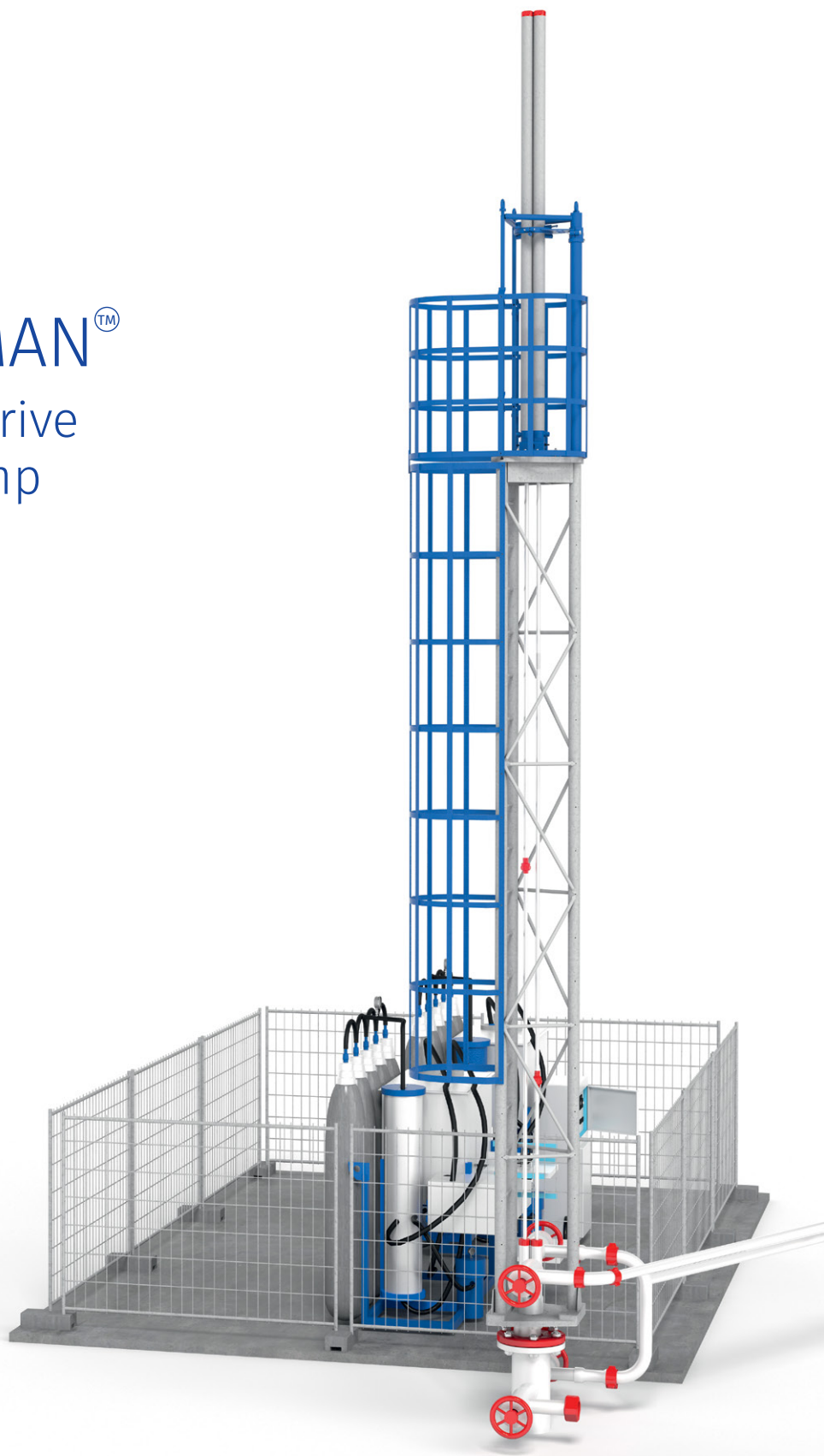


TAGRAS Oilfield Services Holding



## TMC-POWER MAN<sup>TM</sup>

Pneumohydraulic drive  
of a sucker rod pump  
with a load on a  
polished rod from  
30 to 140 kN



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# New technologies for oil production

## Application

Pneumohydraulic drive "TMC-POWER MAN<sup>®</sup>" is designed to reciprocate a plunger of a downhole pump when pumping liquid from the oil wells.

## The advantages compared to the conventional drives

- Many times less metal consumption and mass compared to other downhole sucker rod pump drives up to 70%
- Reducing the terms of the installation, dismantling and commissioning works up to 60%.
- Continuously variable reciprocating speed and stroke length of the pump plunger without stopping the drive, performed by one operator within 5 minutes.
- Pump plunger retention in the upper position (increase in the pump fill rate).
- Presence of reciprocation function (withdrawal of the well from jamming).
- Reduction of energy consumption up to 30%.
- Remote control of the hydraulic drive and automatic maintaining of operating modes
- Hydraulic drive is configured to maximize well flow rate and to optimize specific power consumption and dynamic level
- Reduces equipment wear and increases mean time between repairs (MTBR) of a well

- Well development after drilling and major repairs.
- Quick selection of optimal parameters of well operation during the development period.
- Operation at wells fitted with single-lift units of dual completion.
- Investigation of a well's water cut thanks to the possibility of quick changing the parameters of a downhole pump's plunger operation when switching from one formation to another (performed within 5 minutes by one operator).
- Operation of a periodically working idle well stock  
Possibility to operate a downhole pump in wide ranges, the minimum stroke length is 0.25 m.
- Rehabilitation of wells where the risk of hanging and jamming of the rod strings exists.

## Additional equipment (upon Customer's request)

- Rod rotor.
- Special shelter (booth) for the hydraulic station in explosion-proof and vandal-proof design.
- Remote control function with the possibility of changing parameters, remote monitoring and online control of the hydraulic drive operation from the operator's console

## Field of application

TMC POWER MAN

Drives types			
single-lift	dual-lift	rehabilitation	long-stroke

Well reciprocation\* function

Operating temperature\*  
+40  
-40

Compatibility with SAM Well Manager\* controller

Derrick weight with hydraulic cylinder (weight of complete set), lb
1.653 (5.512±110.2) weight - 1 pc. hydraulic power unit - 1 pc.

Complete set mass, kg
from 2420 ± 50 to 3840 ± 50

Overall dimensions (length, width, height), ft
Frames
2.3x4.6x13.1 to 2.3x4.6x42.7
Hydraulic power unit
4.4x4.6x5.6

Pneumatic balance system (compressed nitrogen balancing)*
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Control station SKAD control system (adapted for operation with hydraulic drive)*
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Electric motor power, kW
from 5.5-7.5-11 to 15-18-22

Motor and pump overload protection automatic*
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Maximum load on wellhead rod, kN
from 30 to 140*

Wellhead rod stroke length, ft.
0.7 to 19.7

Stroke length changing interval, m
stepless

Number of 2 strokes per min
from 0.3 to 4*

\* applies to any mark