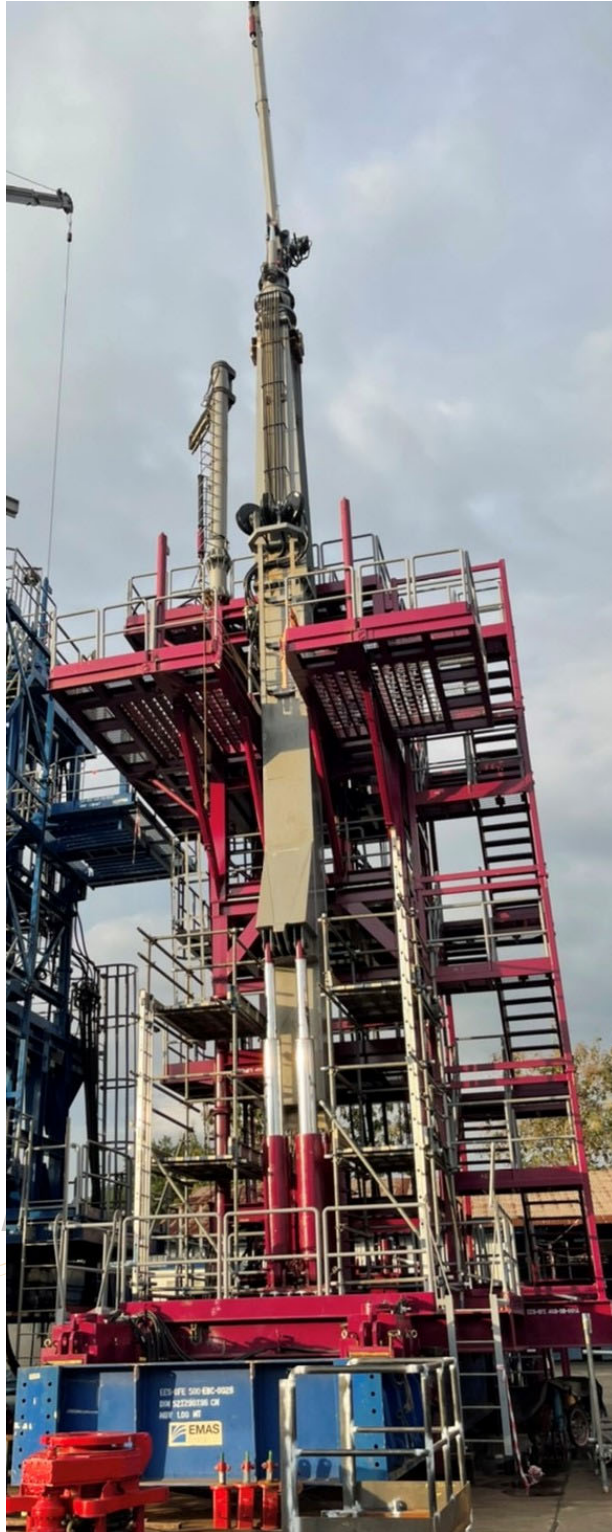


## EQUIPMENT SPECIFICATION



### Hydraulics workover unit

The 340K Unit has been designed for HWO & Snubbing operations on high pressure wells on offshore as well as onshore. Besides working on live wells (Snubbing), the 340k is also very well suited to carry out all type of Hydraulic Workover operations (dead wells). The 340k Unit has the capability to operate on locations where space is limited and a high rate of flexibility is required. Further, the unit is widely used by Snubbing Service Companies around the world and is famous for reliability and mobility.

The 340k moves tubular (drill-pipe) in- and out of the well by means of 4 hydraulic cylinders (10ft stroke). The use of hydraulic cylinders allows perfect control over (drill) string movements and makes it easy to use all types of oil tools.

### Operational activities:

- Removal and installation of all types of completion.
- Packer Setting.
- Milling.
- Well Clean Out.
- Fishing Operations.
- Removal and Installations of Liners.
- Remedial Operations.
  
- Well Head Re-configurations.
- Installation and removal of ESP Pumping Systems.
- Gravel Packing.
- Fracturing.
- Perforation.
- Logging.
- Fishing.

### Advantages:

- Small Footprint.
- Flexible.
- Mobile.
- Excellent Cost/Quality ratio.
- Multi-functional.

### Custom Specific Solutions

- As part of the Job planning, a Rig-Up Configuration will be selected, which optimizes operational performance. This customer specific approach ensures optimal results during each operation.

### Rig-Up Time

The Rig-Up time varies based on the configuration and the type of offshore operation between 36-48 hours.

### Auxiliary Equipment

- Dependent from the scope of work the following equipment may be needed:
- Hydraulic Power Pack.
- Well Control Equipment (Blow-out preventers, Flow-lines, Choke, etc.). » Mud Pump.
- BOP Remote Control Unit.
- Substructures as per client specifications.

Skidding Feature for offshore operation (Optional)

- X,Y Axis Remote hydraulics operated.
- Guy wire free system
- Adjustable gripper clamp

### 340K Specification

Specification	Details	
Maximum Pulling Force	340,000 lbs	
Snubbing Force	188,000 lbs	
Servicing Depth	6,732m (22,086 feet) using 2 7/8" TBG	
Workover depth	5,386m (17,670 feet) using 2 3/8" DP	
Jack's Details		
Jack Model	HRS-340K	
Legs	4 Legs	
Stroke length	305 CM / 120 Inches	
Thru Bore	14" / 35.56 CM	
Dimension L x W x H	127CM x 114CM x 394CM	
Weight	26,185 lbs/ 11,878 Kg	
Maximum Load Capacity		
Leg Mode	Force @ 3,000 psi	Area
Pull 4 Low	339,293 lbs / 153,903 Kg	113.09 in <sup>2</sup>
Pull 2 Low	169,500 lbs / 77,045 Kg	56.55 in <sup>2</sup>
Pull 4 High	150,780 lbs / 68,536 Kg	50.26 in <sup>2</sup>
Pull 2 High	75,390 lbs / 34,268 Kg	25.13 in <sup>2</sup>
Push 4	188,490 lbs / 85,677 Kg	62.83 in <sup>2</sup>
Push 2	94,248 lbs / 42,840 Kg	31.42 in <sup>2</sup>
Maximum Speed		
Leg Mode	Theoretical Time in Seconds	
Pull 4 Low	33.9	
Pull 2 Low	16.9	
Pull 4 High	15	
Pull 2 high	8	
Push 4 Snub	19	
Push 2 Snub	9	
Swingable Gin Pole		
Type	Square tubing construction telescoping	
Length	15.9 Meter long at extended	
Weight	4,000 lbs/ 1,814 Kg	
Mast Rating	5 MT Rating	
Total capacity	2.3 Tons/ 2300 Kg	
Rotary		
Capabilities	Maximum torque 14,000 Ft-Lbs	
Dimension	11" Thru Bore size	
Max RPM	RPM 63 at 3,000 psi.	
Max applied pressure	5,000 psi.	
Tong Arm		
Maximum Hanging Weight	3,200 lbs/ 1,451 Kg	

Auxiliary Equipment Specifications	
Work Basket with 110CM high hand rails	
Length	540 CM
Width	540 CM
Height	430 CM
Weight	5,000 Kg
Cavin Spider Model F Slip Bowl Specification	
Operated Functional	Hydraulics Operated

Tubular Range	2-3/8" – 8-5/8"
Maximum Load Capacity	400,000 lbs / 200 ,000 Kg
<b>Cavin Spider Model CHD Slip Bowl Specification</b>	
Operated Functional	Hydraulics Operated
Tubular Range	1.315" – 5-1/2"
Maximum Load Capacity	250,000 lbs / 113,398 Kg
<b>Skidding Substructure</b>	
Vertical Rack back system	Max. 242 Joints
Axis	X ,Y Remote operated hydraulics system
Base Beam	50' Long or upon on request
Skidding Stroke 16"	
<b>Swivel</b>	
Swivel	3-1/2" IF NC38 x Fig 1502 Female Union King Swivel
<b>Accumulator Unit</b>	
Max Operating Pressure	5,000 psi
Bottles Capacity	11 gals x 24 Bottles
Machined Manifolds, Isolation Valves on each manifolds	4 x 5 bottles each
Reservoir Capacity	1,287 liters/ 340 gallons
Dimension	470CM L x 245 CM W x 260 CM H
Weight	7,500 Kg
Function + Bypass Valve	9 x 3 Position / 4 way valves
Electric Operated Triplex pump Output	12.4 GPM,25 HP
Radio Air Operated Pump Output	100 psi (4.5 GPM)
Explosion Proof Control Module	On/off/Auto for Electric pump
Relief Valves situated on strategic points	3 x 3500 psi
Hydro Pneumatic Pressure switch for Air Pump	
Electric Pressure Switch for Triplex pump	
Pilot Operated control valve for annular regulator operation from unit	
Lifting frame/Bumper bars with cargo basket on top	
Suction Strainers fitted to all pump	
DNV Certification and 3 copies of full documentation package supplied	
Facility to operate two panels	
Frame Designed as per DNV European lifting Reg	

