

LAM2K SPECIFICATIONSAPI 4F 4TH EDITIONFAST MOVING 2,000HP

TECHNICAL OVERVIEW

 Rating
 2,000 HP

 Hook Load
 1,000,000

 Drilling Depth Theoretical
 21,000 ft.

1,000,000 lbs @ 12 lines 21,000 ft. 1,492 kW 454T 6,400m

Year of construction 2016

MAST				
Туре	Open Face - Hydraulically Raised			
Height	157 ft			
Base	30 ft x 14 ft			
Hook Load	1,000,000 lbs	454 T		
SUBSTRUCTURE				
Туре	Hydraulic Swing Up			
Height	35 ft			
Rotary Load	1,000,000 lbs	454 T		
Setback Load	800,000 lbs	362		
DRAWWORKS				
Туре	ABCO, DKS-2300B Single Speed Gearbox			
Horsepower Rating	2,000 HP	1,492 kW		
Max. Single Line Pull	113158 lbs	51.0 T		
Drilling Line Diameter	1 1/2"			
Auxiliary Brake	Disc brake (Parking/Emergency) + Dynamic/			
	Regenerative breaking via AC motor			
TOP DRIVE				
Туре	NOV, TDS-11SH			
Capacity	1,100,000 lbs	500 T		
Continuous Torque	51,000 ft.lbs	69,150 Nm		
ROTARY TABLE (Independent AC Drive)				
Туре	ABCO, RK-37.5			
Table Opening	37 ½"			
POWER GENERATORS				
Engine Type	5 x Caterpillar 3512B			
Horsepower Rating	5 x 1,476 BHP			
Generator Type	Caterpillar SR4B			
Generator Rating	5 x 1,750 kVA (1,225 ek	(W)		
Voltage	600 V / 60 Hz			

TRAVELLING BLOCK

Type Capacity

VFD Unit

ABCO – B60F500 <u>1,000,000 l</u>bs

Omron 8 VFD bays



MUD SYSTEM

Pump Type	ABCO MODEL K-1600	
Horsepower	3 x 1600 HP	
Standpipe Pressure	7,500 psi	
Shale Shaker (s)	3 Nos.	OPTION
	(Total Capacity 2,400 GPM)	
Active Mud System	2,000 bbl	OPTION
Reserve Mud System	2,000 bbl	OPTION
Water Capacity	1,000 bbl	OPTION
Diesel Capacity	1,000 bbl	OPTION

CONTROLS & MOVING GEAR

Control of the rig equipment is through Omron drillers' Chair with HMI screens and Joysticks along with advance drilling performance package.

Hydraulic Catwalk System

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OPTION
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Walking System capable of 30ft/hr and total walking system capacity is 1,600 MT (3,520,000 lbs), not to exceed 400 MT (880,000 lbs) per jack assembly. Wireless operator console.

Rig Move Dollies

В

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E

OPTION

OP HOIST		
уре	2 x 75 T Ingersoll Rand - Pneumatic	
RON ROUGHNECK		
уре	NOV ST- 100	OPTION
ZY TORQUE		
уре	Drilco - Model-d	

Fast Moving Land Rig LAM2K Features

LAND RIG Services Lam2k

Designed with standardisation in mind in order to provide long term cost benefit, the 2000hp unit can be upgraded to 3000hp without significant structural modification.

The design, being Saudi Aramco compliant, means that it currently meets what are widely recognised as the most stringent operator requirements in the Gulf region and as such clients can be confident that it can be built/modified to meet their own standards without difficulty.

Along with a hydraulically raised and lowered mast and substructure, the design incorporates an integrated diesel powered HPU and therefore the need to employ an additional/external power supply is alleviated and the rig up/down time is optimised.

A hydraulic walking option adds self-contained mobility for extended pad work. Speeds attainable are 30ft/ hr. These factors once again add to the efficiency and uptime available.

The top drive and travelling block remain in place on the mast in the horizontal position for rig moves. This removes the need for additional cranage and unnecessary down time, along with the reinstallation issues that may arise from dismantling.

Incorporating our lessons learnt from past projects and client/vendor feedback has ensured that the rig design reflects current technology and build processes that ensure efficient drilling.

Third party design review by ABS provides further confidence to rig owners on the integrity of the design.





