

HH-1300F MAC RIG



HH-1300F MAC RIG

8300 McHard Road, Houston, Texas 77053

Tel: 832-448-8100

Fax: 832-448-8101

www.honghuaamerica.com

Honghua America, LLC

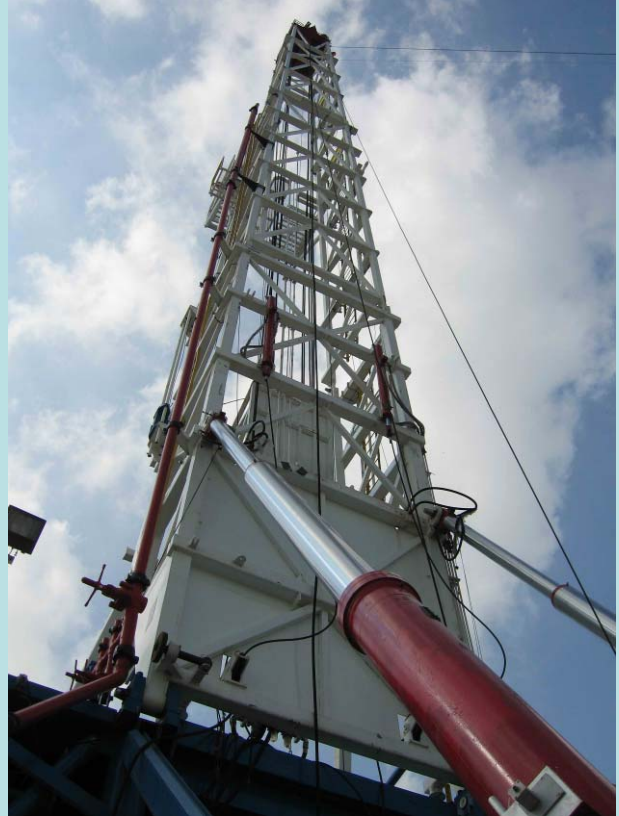




HongHua America, LLC

- *Fast moving and rig-up/down*
- *Seventeen(17) oil field transport loads*
- *Raise mast and substructure hydraulically via remote control*
- *AC Drawworks , Rotary table, Mud pumps*
- *Deployed with winch truck and single forklift*
- *Climate controlled driller's cabin on wide rig floor*

HH's new FMAC rig is an efficient fast moving AC land rig with reduced transport loads and smaller crew team. Rig HH-1300FMAC, rated 13,120 ft, (4,000 m), comes with a number of improvements to make it one of the most efficient and advanced land rigs available. It has a newly designed substructure, drawworks climate-controlled driller's cabin, system controls connected through programmable logic controllers and cabling, and other overall designs to reduce manual labor, optimize processes and performance, and improve safety in operations. The sophisticated data acquisition, storage, processing, and setup system makes it possible for automatic and continuous loop drilling.





RAISING THE MAST AND SUBSTRUCTURE

1. The mast and substructure raising is accomplished using the hydraulic power unit (HPU).
2. The substructure is 3-load assembled, including the rotary table module, the setback module, and the base tail.
3. The substructure is pinned together at ground level and raised to working position with four hydraulic cylinders which can be controlled manually or by HH patented automatic hydraulic synchronization system.
4. The 138' API-rated mast is backed into position as a trailer package. Its racking board is raised and the line spool is set out alongside the rig base. This mast moves strung up with the traveling block cradled over the three-axle dolly which is anchored to the rig base at the end, and the manipulating cylinders are swung into position.
5. The three-section telescoping mast is extended with the semi-truck and pinned in full length position. The manipulating cylinders provide easy pin alignment.
6. The three-axle dolly is unpinned and the hydraulic raising cylinders are lowered and pinned to the rig base. The mast is pushed up the diagonal ramp hydraulically with the mast cylinders, using the hydraulic power unit.
7. The rear mast legs are pinned into the substructure. The raising cylinders are pulled forward into raising position and repinned to the rig base. The raising stand is put on position supporting the mast while disconnecting the truck with it.
8. The mast is raised at full length to its vertical position and the front legs are locked to the substructure.





HongHua America, LLC



Comfortable driller's cabin with advanced auto drilling, monitoring, and data acquisition & processing. A single joystick controls the AC drawworks' speed while hoisting and lowering



HH single speed gear driven AC Drawworks with regenerative brake and Eaton emergency disc brake



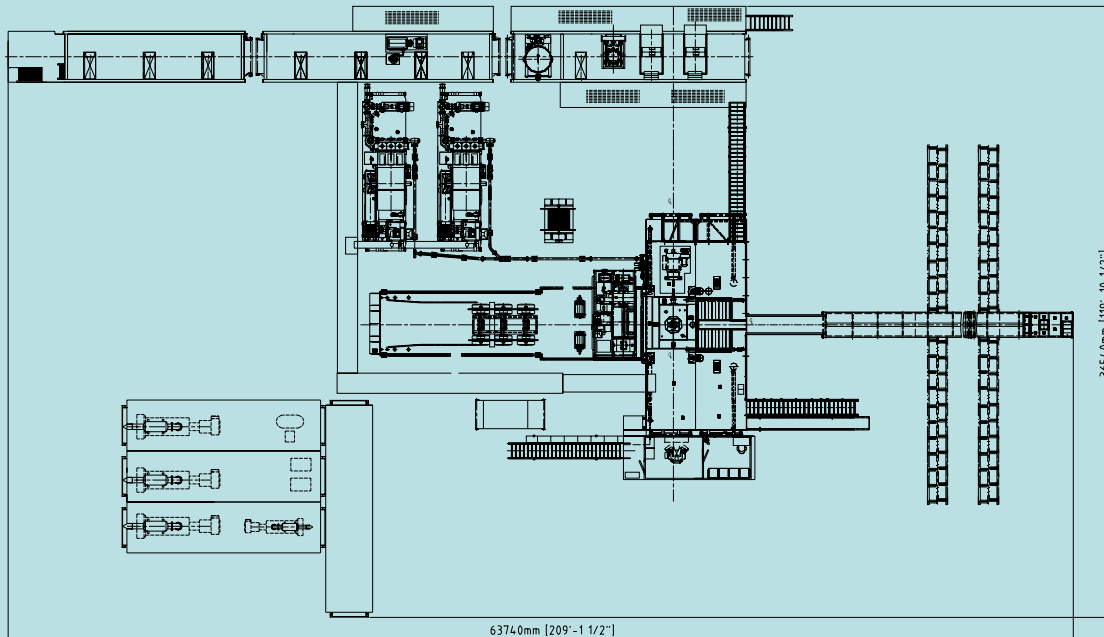
Traveling Block (Top Drive) and Rotary Table are mounted in mast and substructure during transportation and assembly



HH-1300F Mud Pumps package unitized with charging pumps



Modular mud system is designed for optimized drilling fluid processing . Rounded bottom mud tanks are engineered for less deposit, better mixing and maintenance



A smaller footprint for rig-up and operations



HongHua America, LLC

SITE RIG-UP FEATURES



- No cranes required for trailerized rig modules
- Put on position by winch truck and forklift
- Rigged up hydraulically



Standard Equipment Summary—1300HP AC Fast-Move Rig

QTY	EQUIPMENT	DESCRIPTION
1	Mast	3 Section Telescoping, Height—138 ft,13' X 16.4' Base, Hook Load Rating—500,000 lbs,built to API 4F
1	Mast Dolly	Three-Axle w/Heavy-duty Tires
1	Crown Block	6 Sheaves, 44" diameter,Max. Static load 500,000lbs ,built to API 8A
2	Catheads	8' Stroke X Mast Mounted Hydraulic Cylinders—Max Pull 26,430 lbs @ 2,320 PSI
1	Substructure	Telescoping vertically, Height—22' Overall, 17.8' Clear, 32.8' X 19.7' Drill Floor, Setback - 317,000 lbs,built to API 4F
2	Drill Floor Utility Winch	11,000 lbs., Hydraulic
1	BOP Hoist Device	Hoist beam w/2X55,000lbs Chain BoX, Trolley and Rail
1	Deadline Anchor	1-1/4" WL X 76,400 LBS Max Deadline Load
1	Traveling Block w/Hook	5 Sheaves, 36" diameter ,Max. Static load 500,000lbs ,built to API 8A
1	Swivel	Max. Static load 500,000lbs, Max. Speed 300RPM, Max.Working Pressure 35MPa, w/Air Spinner,Built to API Spec 8A
1	Drawworks	One 1300HP AC Motor Driven, Single Speed,Gear driven w/ Motor Regenerative Dynamic Brake and 238DBBS EATON Parking & Emergency Disc Brake,60HP AC Motor Used for Automatic Bit Feed and Emergency Hoist.
1	Rotary Table and Drive	27-1/2" Rotary Table w/Master Bushing, Built to API 7K, Independent 1300HP AC Motor Driven
2	Mud Pumps w/Drive	1300 HP Triplex Mud Pump, 12" Stroke,1300HP AC Single Motor Driven Via V-belt
1	Standpipe	Single Standpipe 4", 5000 psi WP
1	Rotary Hose	Max.5000psi WP, Length: 62'
1	Hydraulic Power Unit w/Raising Cylinder Controls	75HPX2 AC Motor Electrically Powered—40GPM
1	Mast and Substructure Raising Cylinders	Two Cylinders for Mast Raising, Four Cylinders for Substructure Raising
1	Drill Line w/Spooler	10 HP Electrical Spooler w/ 3280' of 1-1/4" Line Installed, 6×19S+IWRC EIPS built to API 9B
1	Power Generation	Three 1000kW, 600 Volt/ 60 Hz/1200RPM (Jinan/China) , One Back-up 320kW Generator Set (Volvo) , Option: 3X1100kW, 600 Volt/ 60 Hz/1200RPM (Cummins/USA)
1	Mud Tanks	Three Tank Mud System, 1270 BBL Active Mud Capacity
2	Shakers	DERRICK 3 Panel High "G" Shaker
1	Vacuum Degasser	DERRICK 1200GPM, 60HZ, 5HP
1	Desander	880GPM, (2) Vertical 10" Cones
1	Desilter	555 GPM, (10) 4" Cones
1	Centrifuge	198 GPM,40HP, Horizontal
8	Agitators	20 HP Helical Gear Mud Agitator
2	Mud Hopper	6" Mud Mixing Hopper
1	Degasser Pump	(75 HP) Horizontal Centrifugal
2	Desander / Desilter Pumps	(75 HP) Horizontal Centrifugal
2	Charge Pumps	(100 HP) Horizontal Centrifugal Mounted on Mud Pump Skid
2	Mud Mixing Pumps	(75 HP) Horizontal Centrifugal
1	Driller's Cabin w/Doghouse	Climate Controlled Cabin ,HH Digital HMI Control & Display System,HH Monitoring System,HH Auto driller
1	Instrumentation	HH Integrated Drilling Parameter Instrumentation w/M/D Totco instrumentation@Weight Indicator,Pump Pressure Indicator,Tong Line Pull Indicator
1	VFD System	Climate Controlled VFD w/MCC House, Including ABB Drive Cubicles and MCC Cubicles,Transformer and Power Distribution system
2	Air Compressor	30HPX2, Amount to 200 CFM @ 145 PSI
2	Air Dryers	134 CFM @ 145 PSI Complete with Filtration and Bypass Package
1	Air Receiver	Vertical,70 CF@145 PSI
1	Catwalk	65"Wide X 42"High X 59' Long
1	Rig Parts & Tools Package	One year recommended spare parts can be ordered separately