

Ideal Rig 1500/2000



NOV

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The Ideal™ Rig is a safe, effective, and configurable land rig that capitalizes on proven and advanced design controls and automation and reliable drilling equipment. By integrating innovative features and advancements with our proven designs and technology, the Ideal Rig responds to key market-driven configuration requirements, such as an increased rig floor height, higher setback capacity, 7,500-psi mud system, drawworks at rig floor, and digitalization of the drilling process.

- Amphion™ integrated drilling control system
- TDS-11HD top drive
- NOVOS™ enabled
- AtomRTX Robotics System Ready
- ReedHycalog drilling performance applications
- Optimized rig performance
- Drill Force™ AC Power
- 6012 ram BOP and Shaffer Spherical BOP
- IRX-120 Iron Roughneck
- DSGD-CX-375/425 Drawworks
- FC-1600 mud pumps, 7,500-psi
- Brandt™ Alpha shakers
- Rig Sense Ready

The Ideal Rig is readily configurable with innovative, optional solutions to improve your drilling performance, increase safety, and differentiate your rig in a competitive market. A future proof design, ready to integrate the ATOM RTX Robotics system at the racking board and rig floor, with an integrated walking system that enables enhanced mobility on the rig pad for your drilling applications.

The Ideal Rig is also ready to integrate a third mud pump and a fourth generator, ensuring an increase in uptime and providing greater hydraulic pressure and flow for today's longer lateral wells. The power controls are ready to integrate alternative power sources such as Hi-line or Energy Storage Systems.

Controlled with the industry's most reliable control system, Amphion, as the operations center of your rig, the Ideal Rig is now NOVOS enabled and ready to manage hardware and software so that your decisions to control, monitor, and optimize your drilling operations are consistently executed across your fleet. In addition to equipment control system Amphion and drilling automation NOVOS, AURA facilitates real-time collaboration and remote solutions. Further differentiate your rig by successfully merging the downhole and surface drilling environments with our ReedHycalog drilling performance applications to achieve impactful, consistent results—high-quality wellbores delivered safely and efficiently.

The Ideal Rig is the leading combination of drilling equipment, structures design, and equipment controls enabling the drilling activity to take advantage of the present and future digital tools.

Specifications

Substructure	
Substructure Type	Slingshot-Cylinder Raised
Rotary Load	1,000,000 lb
Setback Capacity	750/850 Kips
Drill Floor Height	28 ft
Clear Height	24 ft

Mast	
Mast Type	Cantilever Triples-Cylinder Raised
Hook Load Rating	750,000 / 1,000,000 lb
Mast Height	142 ft
Base Dimensions	21 ft, 8 in x 9 ft, 9 in

Key Attributes	
Rig Size	375 / 500 tons
Rig Power	Alternating current (AC)
Engine Type	Four CAT 3512, 1,200-rpm engines (Hi-line, Gas powered engines or Energy Storage Systems Optional)





Industry-Leading Performance



AMPHION and Driller's Cabin

- Three redundant, configurable screens maximize operational efficiencies with a dedicated CCTV screen
- User-friendly responsive touchscreens allow simultaneous monitoring of various equipment on one screen
- Ergonomic, adjustable, climate-controlled work station
- Multi-Tool controller with battery back-up and redundant power network, shields against power loss



TDS-11HD Top Drive

- 1200 horsepower (Two 600 hp motors) providing dependable power and torque
- 500 ton hoisting capacity
- 58,800 ft-lbs continuous drilling torque at 110 rpm
- 75,000 ft-lbs Maximum Makeup Torque



IRX-120 Roughneck

- Trackmounted design
- 100,000 ft-lbs make-up torque and 120,000 ft-lbs of break-out torque
- 4¼ to 8½ in. tubular connection range



6012 Ram BOP

- Manufactured from forged materials that meet H2S Service in accordance with NACE MR0175
- 13½ in. bore size and 10,000 psi
- Proven trim package is standard and includes Xylan coating in the through bore, ram cavities and all wellbore wetted surfaces

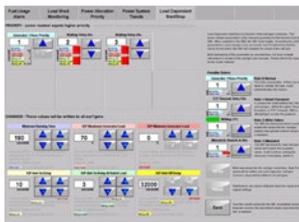


DSGD-CX425 Drawworks

- Can operate up to 377 ft/min, 40% faster than previous models
- Gearbox design eliminates need for lube oil cooler
- High torque, high speed, motor for quicker tripping speeds
- Redundant brake calipers and discs increase operational safety
- No air intensifier or receiver required while maintaining drawworks brake integrity



Field-Proven Technology



MAESTRO Power Automation

- Manage, control, and monitor drilling applications and power efficiency of your land rig in real time
- By monitoring drilling equipment, Maestro effectively calculates and determines the appropriate and safe level of required power generation.
- Maestro functions in real-time with rig operations and, with built-in simple overrides, full power can be available for emergencies.



FC 1600 Mud Pumps

- Dual motor drive, 7500 psi fluid ends
- Three-cylinder, single-action, piston-type mud pump made from rugged construction



PipeCat Pick Up and Laydown System

- Tubulars transferred from catwalk level to drill floor
- Wireless radio control or local control
- Manual V-door ramp functionality



ATOM RTX System - Ready

- Automated robotics system for performing a variety of tasks to improve your rig's performance
- Scalable design to meet specific operation and applications
- Tasks performed become consistent and repeatable, regardless of weather conditions or crew variables



Walking System

- Enhanced mobility, safer operations
- Critical equipment remains stationary or mounted in place on the rig during walking operations
- Clear well heads with ease
- Walk in the X or Y direction

The Ideal Rig

provides drillers with cost-effective drilling capabilities that increase performance, productivity and differentiate your rig fleet in today's market.

- **Conventional**
- **Geothermal**
- **Shale**
- **Horizontal**

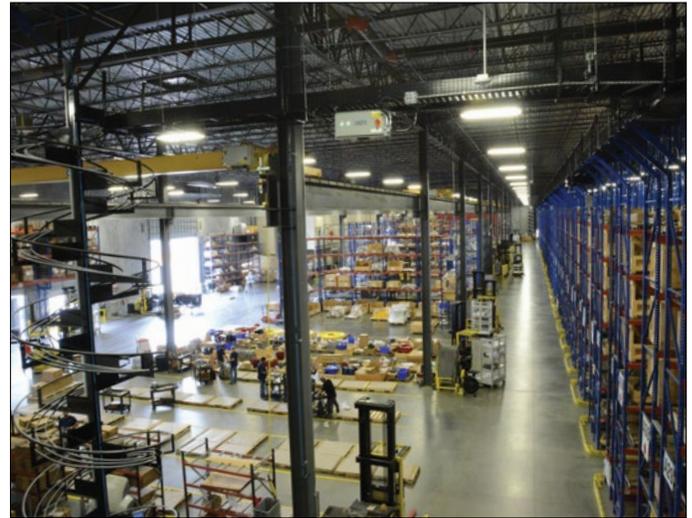
Advantages and Features

- Reduced transport loads lowers overhead cost, transportation time, and streamline rig up/down time
- Intuitive, simple assembly procedures
- Configurable and upgradeable: higher 7500 psi mud system, increased setback (750/850 Kips), higher torque top drive TDS-11HD, Walking System, 3rd Mud Pump and 4th Generator
- NOVOS enabled providing consistent and optimized drilling performance
- Dynamic Drilling Solutions applications are seamlessly coupled with Amphion, providing rig differentiation
- Traveling block and top drive travel in the mast for easy rig up and rig down
- Remote-controlled hydraulic raising system requires no main rig power and keeps the operator at a safe distance
- Electrical system benefits from deployable overhead cable booms and swing arm boom to minimize connections for easier hook-up and longer service life
- Proven NOV-Ross Hill AC VFD power system and generator controls for reliable and safe power supply
- Integrated mud system suite of Brandt solids control equipment included to maximize efficiency and effectiveness
- Wireless controlled hydraulic utility floor winches for a safe working environment



Field Service

Our growing staff of proven field service personnel is available 24/7 to support all NOV products. Knowledgeable field service technicians can quickly deploy to your operating site to resolve your equipment issues, whether structural, mechanical, electrical or software-related. Our FAST solution service trucks are pre-stocked with an extensive list of NOV's top drive, iron roughneck, BOP, and Amphion replacement parts, filters, consumables and tools to get your NOV equipment running at OEM specifications. Expert on-call technicians are ready to provide FAST, on-site service and repair.



Training

Field technicians train on NOV Rig Technologies product lines including competency training and evaluations through our NOV technical colleges and training facilities to ensure the highest quality service and support for your equipment repairs on-site.

Repair

Our highly skilled shop technicians overhaul, repair, rebuild, and re-certify a wide range of NOV equipment to the NOV Quality Assurance and OEM specifications — using only OEM parts. Our worldwide network of repair centers provides unrivaled quality customer service, on-time delivery and unmatched technical integrity. In addition, equipment exchange programs are available at various facilities. Through the Used Equipment Refurbishment Program, we provide viable, short turnaround solutions to immediate capital equipment needs, complete with data books and certificates of conformance as required.

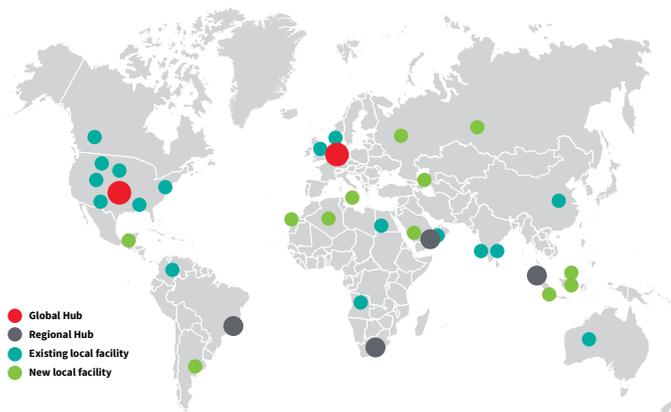
Technical Support

One phone call to one of our technical support centers initiates a technical support team of multi-skilled backgrounds to troubleshoot and resolve your worldwide equipment needs, 24/7/365. Our team of highly skilled and experienced technical support members work together with our global pool of qualified field service technicians and subject matter experts to keep your rigs operating. The technical support team utilizes our web-based application “Tracker” to record, manage, and resolve issues.

Field Engineering

Our field engineering groups offer the unique service of providing one-off, rig-specific equipment designs, modifications and solutions to your rig-specific issues.

For 24/7 Support Services: **+1 281 569 3050**



Comprehensive Aftermarket Products and Services

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