

EXPLORER SERIES DRILL RIGS

The Foremost Explorer Series of drilling rigs were first introduced in the early 90's and since then have evolved to be one of the most versatile rigs in the industry today. Based around a modular design, the Explorer Series offers a large selection of options which allows every rig to be customized to suit the individual requirements of each customer or application.

KEY FEATURES

- Hydraulic cylinder hoisting system providing the ability to pull down, or a conventional hoisting system using hydraulically driven drawworks
- Slant or angle drill packages up to 45 degrees
- Two distinct types of mechanized pipe handling systems promoting a hands-off approach to pipe and casing handling
- Various trailer options designed to meet domestic and international transportation requirements
- Capacity to handle up to Range III drill pipe and casing
- With or without integral substructure including BOP handling
- Hoisting capacities up to 200,000 lbs
- API Monogrammed as per RP 4F and 8C



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EXPLORER SERIES SHALLOW OIL & GAS RIG

STANDARD SPECIFICATIONS

Carrier	Dependent on transportation requirements, the Explorer Series of rigs are typically mounted on custom trailers with axle and suspension systems that adhere to North American Department of Transportation regulations and standards for axle weights, dimensions, braking and lighting. Specialized International Standards can also be provided. Optional configurations include self propelled carriers.	
Engines	The three major engine manufacturers used in Foremost Explorer Series builds are Caterpillar, Cummins and Detroit. Dependent on hoisting requirements, options and accessories selected, engine HP requirements range from 500 to 750 HP. Various engine emission standards are available. Standard operating temperature range is -40°C to +40°C. High temperature operation to +50°C is also available.	
Top Drive	Hydraulically driven Foremost F150T Top Drive utilizing fixed displacement vein motors with infinitely variable control for speed and torque. Standard through bore is 3" with optional 5" available. Optional hydraulic motors are available to suit specific speed and torque requirements. Monogrammed in accordance with API RP 8C.	
Max Drill Torque	0-23,000 ft-lbs	3,118 daN-m
Max Speed	0-200 RPM	
Feed System	Standard	Optional
	Top drive is raised and lowered using hydraulic cylinders in combination with a wire rope and sheave arrangement. Hoisting and pull down speeds and forces are infinitely variable.	Top drive is raised by means of hydraulic driven winch and traveling block assembly. Hoisting speeds and forces are infinitely variable.
	Hoisting forces	Hoisting forces
	0 - 130,000 lbs (<i>optional to 150,000 lbs</i>)	0 - 200,000 lbs
	Pull down forces	Feed rate down
	0 - 25,000 lbs	0 - 200 ft per minute
	Feed rate down	Fast feed rate up
	0 - 150 ft per minute	0 - 200 ft per minute
	Fast feed rate up	
	0 - 150 ft per minute	
Mast	Fixed length free standing light weight design monogrammed in accordance with API RP 4F. Depending on final configuration the mast is of sufficient length to allow top drive travel of 50' to accommodate range III casing.	
Pipe Handling - Range III	Standard	Optional
	Mast mounted pipe arm capable of loading pipe and casing from a horizontal position at the side of the rig to a vertical position in line with well centre. In addition the pipe arm is used to back up when making or breaking connections.	Hydraulically powered catwalk with V-door and skate system presents drill pipe and casing to top drive elevators.
	Lifting Capacity	
	4,000 lbs (load evenly supported between jaws)	
	Pipe/Casing Diameter	
	3 1/2" - 10 3/4"	
Iron Roughneck	Hydraulically operating iron roughneck and slip bowl assembly to assist in the make up and breakout of tool joints	
	Jaw Capacity	
	2 3/8" - 13 3/8"	
	Torque Capacity	
	90,000 ft-lbs	
	Slip Bowl Opening	
	Maximum Opening 16 1/2"	
Hydraulic System	Closed loop variable displacement system with independent pumps for feed and top drive. Additional equipment is operated through a separate open loop hydraulic system.	
Controls	24V DC Electric over hydraulic PLC based controlled system in accordance with API RP 505. Control system is designed for either rig or remote mounted applications.	

