Pinnacle
DRILLING PRODUCTS LP

Providing Innovative Drilling Solutions

325HP POWER UNIT FOR R.C. DRILLS

FEATURES AND PERFORMANCE

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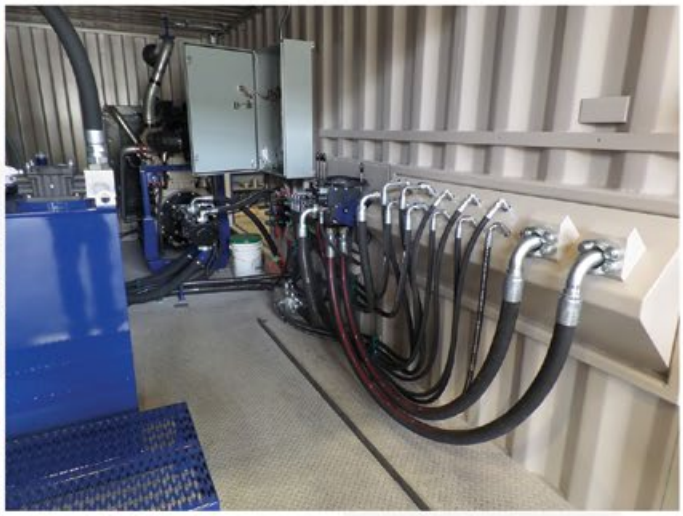
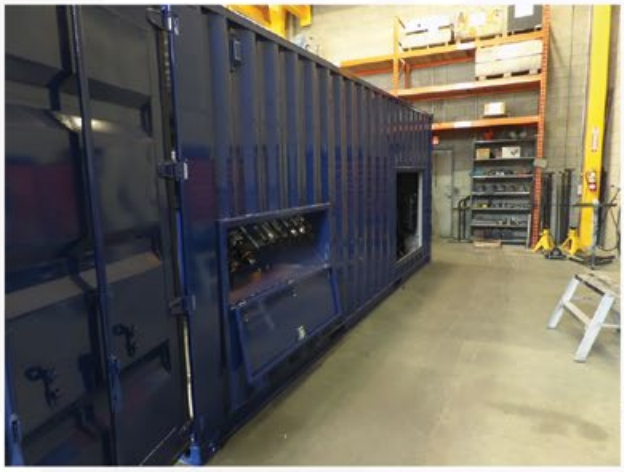


STANDARD 20' x 8' x 8.5' CORRUGATED STEEL SHIPPING CONTAINER POWER UNIT ENCLOSURE

Designed to power the Multi-Power Products RC Top Drive, this power unit features an electronically controlled 325HP John Deere diesel engine and a custom designed load sensing hydraulic system for maximum system efficiency and high performance characteristics.
This, coupled with the wireless electronic belly pack controller provides the operator with extremely smooth & precise machine control and gives instant indication of engine errors and warnings as well as providing automatic engine shutdown to protect the hydraulic system in the event of high heat or low oil level.



SYSTEM PERFORMANCE CAPABILITIES:

Rotation – 106 gpm @ 4000 psi with pressure setting range from 500 to 4000 psi
Clamp – 10.6 gpm @ 3000 psi with pressure setting range from 300 to 3000 psi
Lift Cylinders – 10.6 gpm @ 3000 psi – pressure can be limited to less if required
Spare Valve Section – 10.6 gpm @ 3000 psi – pressure can be limited to less if required
Water Pumps – 20 gpm @ 2000 psi available to each of the two water pump drives
Hydraulic cooler fan – 13.6 gpm @ 2000 psi

SYSTEM CONTROL FEATURES

- Wireless Belly Pack controller with padded neck & waist straps for operator comfort
- Spare wireless controller with unique address so only one controller can operate the machine at any given time
- 100ft tether cable for use in the event of wireless transmission failure or battery failure
- Friction detent on rotation paddle so rotary speed can be set without the need to hold the paddle in position
- Hydraulic filter clog indicator LED on wireless belly pack to indicate the need for element change
- Low hydraulic oil warning LED on wireless belly pack
- High hydraulic oil temperature warning LED on wireless belly pack
- Rotation and Clamp hydraulic pressure read-out on wireless belly pack LCD screen
- Various engine parameters displayed on wireless belly pack LCD screen - engine rpm, coolant temp, engine torque %, engine oil pressure, battery voltage and engine hours
- E-stop button on wireless belly pack to shutdown engine in emergency situation
- Potentiometer adjustments for rotation and clamp pressure
- Independent potentiometer adjustments for two water pump drives
- Automatic engine shutdown in the event of low hydraulic oil level or high hydraulic oil temperature. The hydraulic oil level/temperature sensor has 4 outputs, 2 for oil level and 2 for temperature. When the first low oil level is triggered the system considers it a warning and lets the operator know by turning on the warning LED and audible alarm on the belly pack. If the oil level continues to drop it will eventually trigger the low oil shutdown and the engine will automatically stop. The temperature shutdown works in the same manner
- Indication of engine warnings and errors. In the event of an engine warning code the audible alarm in the belly pack will turn on and the LCD screen on the belly pack will indicate there is an engine warning. It will direct the operator to check the display screen on the electrical panel in the power unit which will display the exact engine warning code. In the event of an engine error the audible alarm on the belly pack will be triggered and the LCD screen on the belly pack will indicate that the engine will shut down in 30 seconds and to check the screen on the electrical panel in the power unit which will display the exact engine error code
- Audible alarm override button on the wireless belly pack allows the operator to turn off the audible alarm once it has gone off. This is meant to give the operator the ability to turn off the alarm if he has decided he needs to keep running after the alarm is signaled. This way the operator can complete any required tasks before dealing with the cause of the alarm without the alarm continuing to sound
- Engine rpm can be controlled from the electrical panel in the power unit shack or from the wireless belly pack. In order to prevent the ability to control the rpm from two places at one time the system automatically disables the throttle switch in the power unit shack as soon as the wireless belly pack power is turned on. The throttle switch in the shack will be useable again only when the belly pack power is turned off
- Toggle switch operation for belly pack power on/off, throttle up/down, lift cylinders up/down, clamp open/close, LCD display screen up/down and a spare toggle switch for future addition of another function
- Automatic variable fan speed control for the hydraulic cooler fan based on hydraulic temperature for maximum system efficiency and low noise operation
- Load sensing hydraulic system for maximum efficiency and low noise at no load
- Hydraulic manifold for water pump and fan control valving - ease of plumbing and maintenance