

# STANDARD RIG HYDRAULIC POWER UNITS

Maximize Efficiency and Reduce Downtime at the Heart of Your Drilling Rig

The Hydraulic Systems standard hydraulic power unit (HPU) provides virtually all land rigs with the power needed to carry out vital drilling operations. Each HPU system features an electrical pump package for normal operations, as well as a diesel pump package for rigup operations and redundancy. Hydraulic Systems specially designed the pump heat sink manifolds and heat exchanger to allow the HPU to run cooler, which extends the overall life of the system.



The standard HPU comes in 80cc, 112cc and 150cc pump sizes. Each unit can be configured to incorporate additional features such as controls packages to monitor temperature, alarms and data, an oil contamination sensor, a power inverter, and others.

All HPUs are designed and manufactured completely in-house to meet the industry's highest standards of safety and performance. The entire line of Hydraulic Systems HPUs was designed with optimal reliability and ease of maintenance in mind. Components are easily accessible, so rig crews can quickly complete maintenance activities and minimize downtime.

## Operational Benefits

- Reduces downtime
- Easy to maintain
- Design keeps pump cooler to prolong equipment life
- Meets Tier 4 diesel requirements for CO2 emissions
- Reduces fuel costs by using electric power when the rig is operating
- Provides redundancy with diesel system for backup power and rig-up operations

Hydraulic Systems has built a strong reputation by providing a team of savvy hydraulics technicians, manufacturing quality and long-lasting products, offering excellent customer service, and repairing a gamut of hydraulic systems in use within the industry. For more information on maximizing your rig performance and reducing overall drilling cost, visit [www.hsi-power.com](http://www.hsi-power.com) or contact your local Hydraulic Systems representative.

## Standard Features

- Bulkhead connection plate
- Heat sink pump manifold
- Pressure relief valve
- Tank-level sight glass
- Oil containment plate
- 480 VAC starter box for electric motor
- Main pressure and main return filters
- Top-mounted tank clean out
- Tier 4 diesel engine
- Tank drain valve
- Heat exchanger
- Diesel controller with start battery
- Tank breather

## General base model specifications

MODEL	BL1	BL2	BL3
<b>Output volume</b>	38 gpm	50 gpm	65 gpm
<b>Tank size</b>	250 gallons	500 gallons	800 gallons
<b>Electric HP</b>	75 HP	100 HP	125 HP
<b>Diesel HP</b>	90 HP	129 HP	150 HP
<b>Pump type</b>	80cc	112cc	150cc
<b>Approximate dimensions</b>	120 in. x 108 in.	160 in. x 108 in.	190 in. x 108 in.
<b>Pressure rating</b>	3,000 psi	3,000 psi	3,000 psi
<b>Voltage control/motor</b>	120/480 VAC	120/480 VAC	120/480 VAC

Additional features are available, many of which are included below. Contact your Hydraulic Systems representative to learn more.

- Temperature control package
  - PLC temperature controller
  - Tank heaters and RTD sensor
  - High-temp warning indicator
  - Temperature shutdown indicator
  - Heaters-on indicator
- Alarms package
  - High-fluid and low-fluid level indicators
  - Hardwire alarms—customer tie-ins for feedback
  - Includes temperature controls package
- Oil contamination sensor
- Power inverter package
  - Dedicated start battery for diesel
  - Dedicated battery for control power 120 VAC
- Fill/drain system
  - Electrical and mechanical options
- Data acquisition/feedback package
  - Includes alarms package
- Roof cover package