



A versatile test stand designed for testing heavy-duty off-highway hydraulic components, the 850 Hydraulic Test Center features some of the most advanced technology on the market today. Designed for complete hydraulic pump, motor, and transmission testing, the 850 is much more than a standard transmission test bench.

The 850 provides a durable and reliable platform for performance testing transmissions, torque converters, gear pumps, vane pumps, hydrostatic pumps and hydraulic motors, cylinders, and valves. Performance testing results in reduced operating costs due to rebuilding error and possibility of critical failure in the field; equipment dealers can realize more profitable maintenance contracts and increased customer satisfaction. Additionally, the 850 features an independent closed loop hydrostatic drive for a contamination free drive system, independent constant display digital instrumentation for easy readability, and industrial grade glycerin filled pressure gauges.

Capable of detecting shift points and mechanical binding, identifying vibrations, diagnosing and locating leaks, and measuring pressure and flow, clutch leakage and output torque (optional), the 850 Hydraulic Test Center is one of the most comprehensive hydraulic testing tools on the market.

Features

- 200 hp (149 kW) Electric Motor (300 hp (224 kW) motor upgrade available)
- On-site Training and Commissioning
- Interior Soundproofing
- 3-Micron Kidney Loop Filtration System:
 - » Dedicated circulation pump and motor
 - » Filtration system includes electronic indicators
- Power Lift Assembly:
 - » Facilitates easy maneuvering of the hydraulic drive motor/ drive shaft for alignment with the test component
- Safety and Maintenance Features:
 - » Rear door access and ample interior lighting for added visibility and safety during maintenance
 - » Roof access to filters for easy maintenance
 - » Multi-location ladder for convenient machine-top access and maximum safety
 - » Polycarbonate Sliding Safety Shield Used to protect operator from fluid splash and small projectilies

Optional Features

- PowerNet TD Data Acquisition and Control:
 - » Offers full control and data acquisition for complete pump, motor, and hydrostatic transmission testing
- Optional Rectifier Manifold:
 - » Allows for testing of closed circuit pumps
- Output Load, Eddy Current Absorber and Stand:
 - » Trolley mounted capable of vertical and horizontal movement
 - » Continuous torque 525 lb-ft (712 Nm)
 - » Intermittent torque 1,470 lb-ft (1,993 Nm)
- · Main Reservoir heater to warm oil to preset temperature
- Closed-Loop Cooling Kit (designed for converter flow cooling):
 - » Includes heat exchanger, temperature control valve, digital control and display, hoses and accessories to maintain operator set temperature range on components that function as closed loops
- High Pressure Flow Cicuit with Pilot Flow Circuit:
 - » High PSI: 0 5.8 gpm (0 22 lpm) at 5,000 psi for testing cylinders and valves
 - » Pilot: 0 5.8 gpm (0 22 lpm) at 800 psi for testing components
- Super Charge Flow Cicuit:
 - » 0-31 gpm (0 117.3 lpm)at 800 psi for testing components
- Low Flowmeters:
 - » 0.5 5.0 gpm (1.9 18.9 lpm)
 - » 0.2 2.0 gpm (0.8 7.6 lpm)





PowerNet TD is designed to provide a comprehensive, easy to use data acquisition and control system. PowerNet TD utilizes a Windows-based computerized data acquisition system to monitor and record speeds, torque, pressures, temperatures, flow rates and shift events.

In addition to advanced monitoring and recording, PowerNet TD enables users to run an automated test procedure for electronically controlled transmissions. This not only ensures consistent repeatability of test procedures, but provides a record of performance parameters exhibited during a test.

Designed for ease of use, PowerNet TD allows for easy configuration of instrumentation, operator designated warnings for high/low limit and operator customized full-feature data reports. All reports are generated in a standardized Portable Document Format (PDF).

Dimensions





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Specifications

Electric:

Test centers utilize a wye-delta starting method to reduced motor startup voltage drop.

• 850-200

» 200 hp (150 kW):	460V/60 Hz - 350 amps
» 165 hp (125 kW):	380V/50 Hz - 350 amps
850-300	
» 300 hp (225 kW)	460V/60 Hz - 500 amps
» 250 hp (185 kW)	80V/50 Hz - 500 amps

Hydrostatic Drive System:

Direction:	CCW & CW	CCW & CW	
Maximum Speed:	4,000 RPM	4,000 RPM	
Maximum Torque:	777 lb-ft (1,05	777 lb-ft (1,053 Nm)	
Maximum Torque Speed Range:	850-200: 850-300:	0 - 1,422 rpm 0 - 1,922 rpm	
Maximum Pressure:	6,000 psi (41,3	6,000 psi (41,369 kPa)	
Pump Displacement:	850-200: 850-300:	130 cc 180 cc	
Motor Displacement:	160 cc		

Diagnostic Flow Loops:

 Loadable: 	
» 150 gpm:	0-150 gpm (0-568 lpm), 0-6,000 psi (41,369 kPa) flow loop with manual load valve and 6,000 PSI (41,369 kPa) gauge for monitoring pressure
» 60 gpm:	0-60 gpm (0-227 lpm), 0-6,000 psi (41,369 kPa) flow loop with manual load valve and Two (2) 6,000 PSI (41,369 kPa) gauges for monitoring pressure
Non-loadable:	
» 60 gpm:	0-60 gpm (0-227 lpm), 0-2,500 psi (17,237 kPa) flow loop and a 3,000 psi (20,684 kPa) gauge for monitoring pressure

Hydraulic Fluid Supply Circuits:

Main: 0-60 gpm (227 lpm), 0-2,500 psi (17,237 kPa) pressurized oil supply circuit with flow control valve, panel meter and 3,000 psi (20,684 kPa) gauge for monitoring pressure
 Lube: 0-60 gpm (227 lpm), 0-65 psi (448 kPa) circuit with 200 psi (1,379 kPa) gauge for monitoring pressure



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