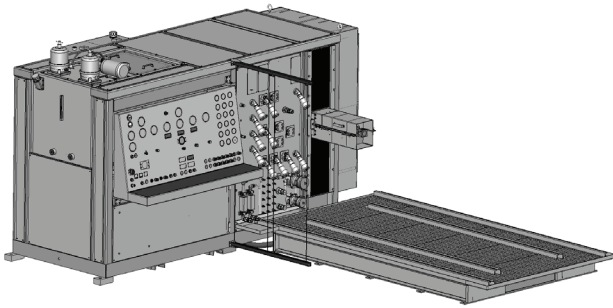


Model 900C Transmission And Hydraulic Component Test Center



900C Hydraulic Test Center shown

Overview

The AIDCO Model 900C Test Center may be used for continuous-duty transmission performance verification, quality assurance, endurance, and certification testing for heavy-duty off-highway transmissions. In addition to transmission testing, the 900C is capable of testing various hydraulic system components. Components include, but are not limited to, hydraulic cylinders, valves, torque converters, closed or open loop pumps and motors.

Model 900C features:

- 300, 400 or 450 HP options available.
- Soft Start System provides a smooth, stepless, reduced-voltage acceleration of the main motor.
- Closed-loop hydrostatic drive system ensures isolation from contamination.
- Drive speed is controlled from a single potentiometer for simplified operator control.
- Integral 300 gallon (1,136 L) hydraulic oil reservoir with supply pumps to deliver pressurized oil to Main (Aux), Supercharge, Lube, Pilot and High Pressure flow oil supply circuits.
- Sixteen pressure taps in conjunction with liquid-filled pressure gauges monitor pressures within the component under test.
- Equipped with five (5) diagnostic flow loops: (2) loadable, (3) non-loadable.
- PowerNet TD Data Acquisition and Control System for automated control and data reporting. The system will monitor and record the pressures, temperatures, flows, rpm, torque and has high speed shift capture capabilities.
- Includes Transmission Drive Group for connecting component to test stand output.

Enhance the AIDCO Model 900C Test Center by ordering an optional Eddy Load Unit. This combination adds the capability to perform dynamic load testing of transmissions and hydraulic motors to the test center.

Model 900C Transmission And Hydraulic Component Test Center

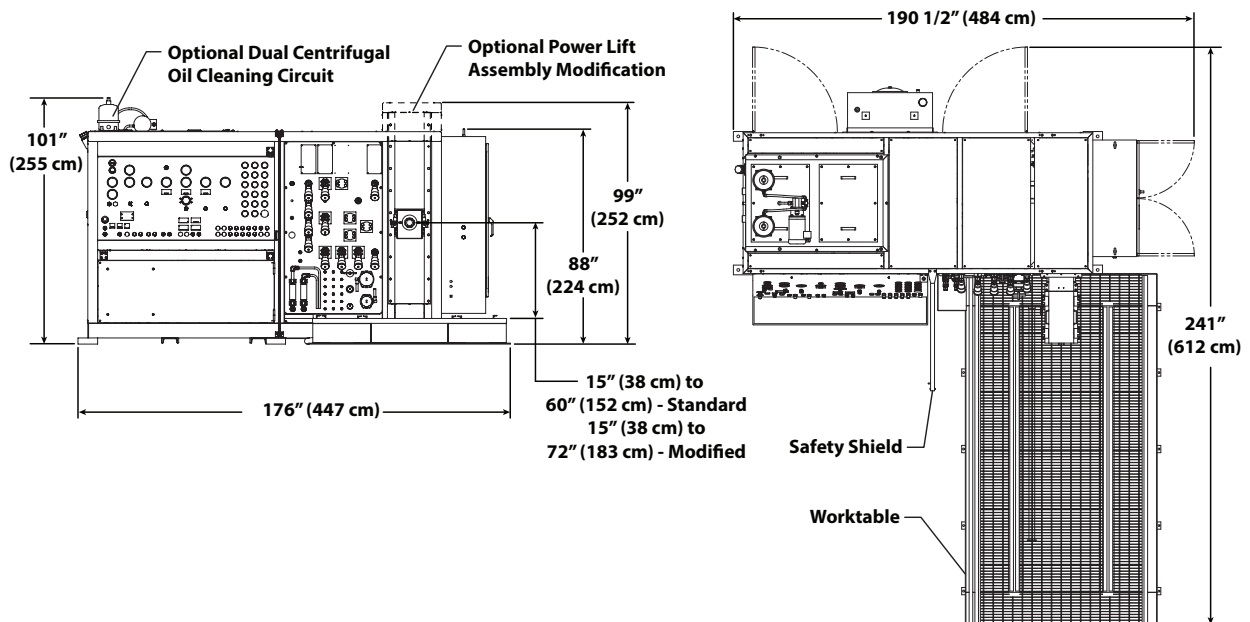
900C Hydraulic Test Center Specifications			
Electric	Electric Motor Selections (other voltage options available on request) Test centers utilize a wye-delta starting method to reduced motor startup voltage. A soft-start option is also available. NOTE: Main Power Disconnect (provided by others) must use time-delay slow-blow fuses or a breaker with an adjustable over-current setting.	900C-300 300HP (223 kW) 460V/60 Hz - 500 Amps 250HP (187 kW) 380V/50 Hz - 500 Amps	
		900C-400 400HP (298 kW) 460V/60 Hz - 600 Amps 330HP (246 kW) 380V/50 Hz - 600 Amps	
		900C-450 450HP (335 kW) 460V/60 Hz - 700 Amps 370HP (276 kW) 380V/50 Hz - 700 Amps	
Hydrostatic Drive System	Direction	CCW & CW	
	Max Speed	3,200 RPM	
	Max Torque	1,232 Lb-ft (1,670 N-m)	
	Max Torque Speed Range	900C-300 0-1,270 RPM 900C-400 / 900C-450 0-1,760 RPM	
	Max Pressure	6,090 PSI (41,989 kPa)	
	Pump Displacement	900C-300 180cc 900C-400 / 900C-450 250cc	
	Motor Displacement	250cc	
Diagnostic Flow Loops	Loadable	200 GPM	0-200 GPM (0-757 L/min), 0-6,500 PSI (44,816 kPa) flow loop with manual load valve and 10,000 PSI (68,948 kPa) gauge for monitoring pressure.
		100 GPM	0-100 GPM (0-378 L/min), 0-6,500 PSI (44,816 kPa) flow loop with manual load valve and two (2) 10,000 PSI (68,948 kPa) gauges for monitoring pressure. Loop also includes a 500 PSI (3,447 kPa) differential gauge to monitor margin pressure.
	Non-loadable	100 GPM	0-100 GPM (0-379 L/min), 0-6,500 PSI (44,816 kPa) flow loop and a 10,000 PSI (68,948 kPa) gauge for monitoring pressure.
		Low Flow	0.5-5.0 GPM (2-19 L/min) flow loop.
		Low Flow	0.2-2.0 GPM (0.76-8 L/min) flow loop
Hydraulic Fluid Supply Circuits	AUX	0-84 GPM (318 L/min), 450-6,090 PSI (41,989 kPa) pressurized oil supply circuit with flow control valve, panel meter and 7,500 PSI (51,710 kPa) gauge for monitoring pressure.	
	Supercharge	0-31 GPM (117 L/min), 180-800 PSI (5,516 kPa) pressurized oil supply circuit with 1,000 PSI (6,895 kPa) gauge for monitoring pressure. Optional flow control kit available for circuit.	
	High PSI	0-3.6 GPM (13 L/min), 0-7,200 PSI (49,642 kPa) pressurized oil supply circuit with 10,000 PSI (68,948 kPa) gauge for monitoring pressure.	
	Pilot	High PSI pump provides pressurized oil supply for this 0-3.6 GPM (13 L/min), 0-800 PSI (5,516 kPa) circuit with 1,000 PSI (6,895 kPa) gauge for monitoring pressure.	
	Lube	High PSI pump provides pressurized oil supply for this 0-8 GPM (30 L/min), 0-65 PSI (448 kPa) circuit with 200 PSI (1,379 kPa) gauge for monitoring pressure.	

Specifications Continued On Next Page

Model 900C Transmission And Hydraulic Component Test Center

900C Hydraulic Test Center Specifications		
Fluid Storage and Conditioning	Main Reservoir	300 Gal (1,136 L)
	Main Reservoir Heater	12kW
	Main Reservoir Cooler	Tube style heat exchanger
	Hydrostatic Reservoir	100 Gal (379 L)
	Hydrostatic Res. Cooler	Tube style heat exchanger
	Kidney Loop Flow	60 GPM (227 L/min)
	Kidney Loop Filter	3 Micron
	Aux Pump Servo Filter	5 Micron
	Worktable Sump Filter	10 Micron
	Return to Tank Filters	10 Micron
	Customer Supplied Cooling Water	60 GPM (227 L/min) @ 30 PSI (207 kPa) @ 85° F (30° C) or less
Misc.	Pressure Monitoring Taps	16 Total (1 ea.) 0-60 PSI (0-414 kPa), (1 ea.) 0-100 PSI (0-690 kPa), (2 ea.) 0-200 PSI (0-1379 kPa), (9 ea.) 0-600 PSI (0-4137 kPa), (1 ea.) 0-2,000 PSI (0-13790 kPa) & (2 ea.) 0-7,500 PSI (0-51710 kPa)
	Power Motor Lift	Can adjust 15" (38.1 cm) to 60" (152.4 cm) from top of worktable
	Worktable	144 1/2" (367 cm) long x 82" (208 cm) wide worktable with sump pump; 10,000 Lb. (4,536 Kg) support capacity.
	Gravity Feed Ports	(1) 3" (7.6 cm) & (1) 4" (10.2 cm) from 300 Gal (1,136L) Main Reservoir. Ports typically used in conjunction with an external pump as a suction port.
	Soundproofing	Included on enclosure panels
	Approx. weight	Test Stand = 13,000 Lb. (5,897 Kg); Worktable = 2,000 Lb. (907 Kg)

Available Options Listed On Next Page



Model 900C Transmission And Hydraulic Component Test Center

900C Hydraulic Test Center Options	
Manifold Rectifier Block	Adds a intergral 0-200 GPM (0-757 L/min), 0-6,500 PSI (44,816 kPa) flow loop used for testing closed loop pumps.
PowerNet Mounting Kit	Adds accessories to mount and locate PowerNet components (Commander PC, monitor, printer, ect.) directly to the test center.
Dual Centrifugal Filter Kidney Loop	This add-on connects to the main reservoir and circulates oil via an 8 GPM pump to provide sub-micronic oil cleansing with the capacity to trap up to 2,000 cc of contaminants.
Extended Gear Pump Filtration Kit	Adds an integral 10 Micron filter into the Manifold Rectifier Block flow loop. This is recommended for dealers who rebuild and test gear pumps frequently.
Transmission Drive Group Input Torque Sensor Upgrade	Adds a 2,000 ft-lb. rotary torque transducer for high accuracy torque readings.
Supercharge Flow Control Kit	Integral control kit includes a flow control valve, panel meter, and related items.
Pilot Pressure Manifold	A multi-port manifold that provides five (5) different adjustable pressure sources ranging from 50-1500 PSI (344-10,342 kPa) for testing tandem or triple pumps.
Suction Supply Manifold	A multi-port manifold that provides four (4) different suction supply ports; two (2) 2" (5.1 cm) and two (2) 1.5" (3.8 cm) ports.
Direct Sump Drain Plate	To reduced unwanted splashing that might occur, this kit replaces the center grate of the worktable with a plate that includes a 1" (2.5 cm) un-valved quick-disconnect hose connection port for return to tank/sump oil.
Adapter Kit(s)	Used in conjunction with test stand to mount and drive specific transmissions. Consult with your AIDCO sales representative for more information.
Eddy Load Unit (Air Cooled)	Connects to trans. output to apply a load simulating actual operational conditions. Includes V-Rail Extension Kit for mounting Eddy Load Unit. Continuous braking torque 525 Lb-ft. (712 Nm) Intermittent braking torque 1,470 Lb-ft. (1,993 Nm) Max. stall torque 2,000 Lb-ft. (2,712 Nm) Maximum RPM: 3,000 Rotation: bi-directional (standard unit specifications listed above, optional larger load unit is available)
Eddy Stall Kit	Stall Bar Manually inserted Eddy Load Unit stall bar. (standard)
	Air Brake Air actuated brake assembly installed on to Eddy Load Unit to stall transmission output. (optional)
Vertical Eddy Movement	Manual Manual system to adjust vertical position. (standard)
	Motorized Motorized system to adjust vertical position is available. (optional)
Power Lift Assembly Modification	This modification adds additional height to the Power Lift Assembly. Maximum height is expanded up to 70" (178 cm).
Electronic Shift Console	Used in conjunction with test stand to control transmission. Consult with your AIDCO sales representative for more information.

Note *AIDCO can provide a custom designed system solution to meet your application needs. Consult with your AIDCO representative for details.*