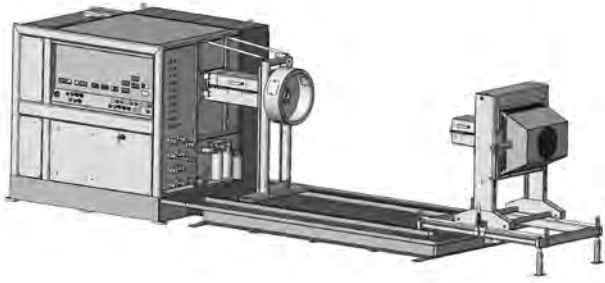


Model 550E Transmission Test Stand



*550E Transmission Test Stand shown
with optional Bell Housing Kit and Eddy Load Unit*

Overview

The AIDCO Model 550E Transmission Test Stand is a quiet, compact machine used for continuous-duty direct and remote mounted transmission and torque converter performance verification, quality assurance, endurance, and certification testing.

Model 550E Features:

- A variable speed, high efficiency AC motor used to simulate the engine driving the transmission.
- Integral 30 HP, VFD controlled hydraulic supply system capable of 0-56 GPM (0-211 L/min) and 600 PSI (41 Bar).
- Three (3) 5-100 GPM (18-379 L/min) non-loadable diagnostic flow loops.
- Designed to accommodate in-line or drop box model remote or mid-ship mounted transmissions using optional transmission drive, adapter and worktable extension kits.
- Designed to accommodate in-line or drop box model direct mounted transmissions using optional SAE Bell Housing Adapter Kit. Various interchangeable bell housing sizes can be ordered to suit your needs.
- Includes sixteen (16 ea.) pressure taps for monitoring pressures within the component under test.
- An optional Eddy Load Unit may be connected to a transmissions output to apply a load simulating actual operational conditions.
- PowerNet TD Data Acquisition and Control System option is available for automated control and reporting.

The Model 550E is designed for testing automatic or power shift direct and remote mounted transmissions and torque converters, with or without transmissions, used in commercial or off-highway applications.

Transmission Test Stand - Model 550E

550E Transmission Test Stand Specifications		
Description	Specifications	
Electric Motor (Prime Mover) Selections (other voltage options available on request) NOTE: Main Power Disconnect (provided by others) must use time-delay slow-blow fuses or a breaker with an adjustable over-current setting.	550E-150	125HP (93 kW) 380V/50 Hz - 300 Amps
		150HP (112 kW) 460V/60 Hz - 300 Amps
	550E-200	165HP (125 kW) 380V/50 Hz - 350 Amps
		200HP (147 kW) 460V/60 Hz - 350 Amps
	550E-300	250HP (185 kW) 380V/50 Hz - 450 Amps
		300HP (224 kW) 460V/60 Hz - 450 Amps
Max. Transmission Input Torque (continuous)	550E-150	442 Lb-ft. (610 N-m) up to 1,785 RPM
	550E-200	588 Lb-ft. (811 N-m) up to 1,785 RPM
	550E-300	883 Lb-ft. (1,216 N-m) up to 1,785 RPM
Max Speed	3,600 RPM (bi-directional)	
Fluid Supply Circuits	Aux	0-56 GPM (0-211 L/min), 0-600 PSI (41 BAR) pressurized oil supply circuit with flow meter.
	Lube	0-10 GPM (0-38 L/min), 0-65 PSI (4 BAR).
	Gravity Feed Port	2" gravity feed port from the Main Reservoir.
Converter Flow Monitoring Circuit	Converter Flow	5-100 GPM (18-379 L/min) filtered converter flow loop with flow meter, digital display, manual control for diff. pressure adjust (backpressure) and digital temp. controlled heat exchanger.
Diagnostic Flow Loops (3 ea.) (Non-Loadable)	FM 1	5-100 GPM (18-379 L/min) flow loop.
	FM 2	5-100 GPM (18-379 L/min) flow loop.
	FM 3	5-100 GPM (18-379 L/min) flow loop.
Main Reservoir	130 Gal (492 L) reservoir with two (2 ea.) 5 kW immersion heaters with digital temperature control.	
Transmission Oil Cooling	Water cooling comes standard. <u>Customer</u> must supply a clean water supply of 5 GPM (19 L/min) at 30 PSI (2 BAR) at 85° F (30° C) or cooler to operate the test stand's heat exchanger at continuous load.	
Worktable Sump / Fill	Standard 120" (3048 mm) long x 60" (1524 mm) wide, 6,000 Lbs. (2,722 Kg) support capacity worktable with 100 gallon sump and 3 HP sump pump.	
Pressure Taps	(16) 1,000 PSI (69 BAR) pressure taps to monitor pressures of component under test.	
Transmission Drive Kit	Includes driveshaft guard, SAE 1310 driveshaft, and adapter. Kit can be ordered with or without a torque transducer for high accuracy torque readings.	
Drive Load Sensing (D.L.S.)	(D.L.S.) enables the operator to control the acceleration and deceleration rate of the unit under test to improve detection of shift events.	
Modulator Control	Simulates full or closed throttle condition. (requires 90 PSI (6 BAR) of air pressure).	
Filtration	Return to Tank	10 Micron
	Fill/Lube	6 Micron
	Converter Flow	10 Micron
Weight (with worktable)	Approximately 7,720 Lbs. (3,501 kg).	

Transmission Test Stand - Model 550E

550E Transmission Test Center Options	
Data Acquisition / Control	PowerNet TD is a complete automated data acquisition and control package. See PowerNet TD specification sheet for details.
Gauge Panel Package	Analog gauge package includes 16 pressure gauges and 4 flow gauges to monitor unit under test and incorporates displays for input speed, output speed, input torque, output torque and converter flow.
Input Torque	Provides a rotary torque transducer and torque meter for high accuracy input torque measurement.
Adapter Kit(s) (additional OEMs available)	AIDCO offers several different adapter kits for use in conjunction with test stand to mount and drive specific transmissions. Some manufacturers include CAT®, Allison, and Dana/Clark. Consult with your AIDCO sales representative for more information.
Centrifugal Oil Cleaning	Centrifugal Oil Cleaning Circuit for exceptional oil cleaning.
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(s). 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 Offset Kit	The load unit can be positioned up to 10" (254 mm) left or right of center for offset output transmissions.
Air Brake Stall Kit	The manually inserted stall bar is replaced with an air actuated brake assembly installed on to Eddy Load Unit to stall transmission output.
Motorized Vertical Eddy Movement	The manual system to adjust vertical positioning is replaced using a motorized system.

