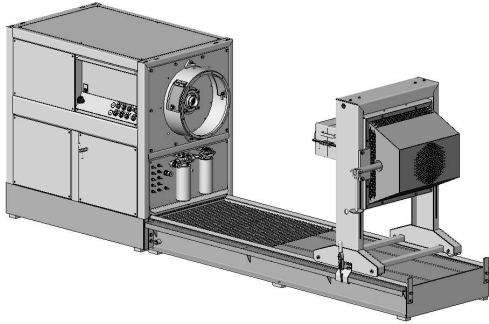


Model 450E Transmission Test Stand



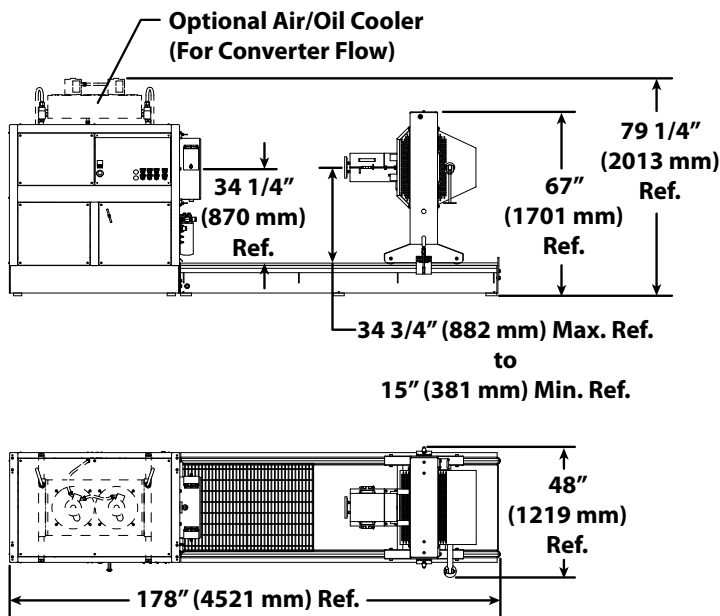
450E Transmission Test Stand shown

Overview

The AIDCO Model 450E Transmission Test system is used for continuous-duty transmission performance verification, quality assurance, endurance, and certification testing. This quiet, compact machine allows simple diagnostic testing to be conducted to evaluate performance and troubleshoot faults of in-line transmissions.

Model 450E Features:

- A variable speed, high efficiency AC motor used to simulate the engine driving the transmission.
- Transmissions with SAE #1 flange mount directly to the 450E bell housing. Adapter rings are available for other SAE sizes.
- Designed to accommodate remote mounted transmissions using optional transmission drive, adapter and worktable extension kits.
- Splined input facilitates quick transmission coupling and alignment.
- Indexing allows for rotation of a mounted transmission so the operator can easily access the valve body during setup.
- The Eddy Load Unit connects to the transmissions output to apply a load simulating actual operating conditions.
- The Eddy Load Unit flange bolts to a standard drive shaft resulting in a simple, easily aligned connection.
- Ten pressure taps are available for monitoring pressures within the unit under test
- PowerNet TD Data Acquisition and Control System option is available for automated control and reporting.



The Model 450E is designed for testing automatic or manual in-line transmissions used in commercial or military medium to heavy-duty vehicle applications.

Transmission Test Stand - Model 450E

450E Transmission Test Stand Specifications		
Description	Specifications	
Electric Motor (Prime Mover) Selections (other voltage options available on request)	450E-150	125HP (93 kW) 380V/50 Hz - 225 Amps
		150HP (112 kW) 460V/60 Hz - 225 Amps
	450E-200	165HP (125 kW) 380V/50 Hz - 300 Amps
		200HP (147 kW) 460V/60 Hz - 300 Amps
	450E-300	250HP (185 kW) 380V/50 Hz - 400 Amps
		300HP (224 kW) 460V/60 Hz - 400 Amps
Max. Transmission Input Torque (continuous)	450E-150	442 Lb.-ft. (610 N-m) up to 1,785 RPM
	450E-200	588 Lb.-ft. (811 N-m) up to 1,785 RPM
	450E-300	883 Lb.-ft. (1,216 N-m) up to 1,785 RPM
Direction	Clockwise & counter-clockwise (bi-directional)	
Max Speed	4,000 RPM (bi-directional)	
Transmission Oil Cooling	Water cooling comes standard. Customer must supply a clean water supply of min. 5 GPM (19 L/min) at 30 PSI (207 kPa) at maximum 85° F (30° C) to operate the test stand's heat exchanger at continuous load.	
Data Acquisition / Control (must select at least one)	PNET TD	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 13 pressure gauges to monitor unit under test and incorporates displays for input speed, output speed, input torque, output torque and converter flow.
	For the greatest flexibility, order both PNET TD and the Gauge Panel Package. Together they allow control and monitoring from the control room as well as in the test cell.	
Input Speed Indicator	4 digit, digital display of motor speed	
Output Speed Indicator	4 digit, digital display of load-unit speed	
Converter Flow Monitoring Circuit	(1) 50 GPM (189 L/min) flow meter with digital display. Flow circuit includes a *22 Micron filter. Manual control for differential pressure adjust (backpressure). Heat exchanger with digital temperature controller.	
Rotation / Indexing	Manual transmission rotation and indexing.	
Eddy Load Unit (Air Cooled)	Continuous braking torque 525 Lb.-ft. (712 N-m) Intermittent braking torque 1,474 Lb.-ft. (1,998 N-m) Max. stall torque (with stall bar) 2,000 Lb.-ft. (2,712 N-m) (with air brake) 3,000 Lb.-ft. (4,067 N-m) Maximum RPM: 3,000 Rotation: bi-directional (standard unit specifications listed above, optional larger load unit is available)	
Worktable Sump / Fill	Standard worktable is 116" (295 cm) long and contains a 60 gallon (227 L) capacity sump w/ *25 Micron filter.	
Pressure Taps	(10) pressure taps to monitor pressures of component under test (8) 600 PSI (4,137 kPa) and (2) 100 PSI (689 kPa)	
Transmission Bell Housing Mount	SAE #1 Adapter ring (other adapters and remote mounting kits are available)	
Weight (with worktable)	Approximately 6,000 Lbs. (2,722 kg)	

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☑ Note

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

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