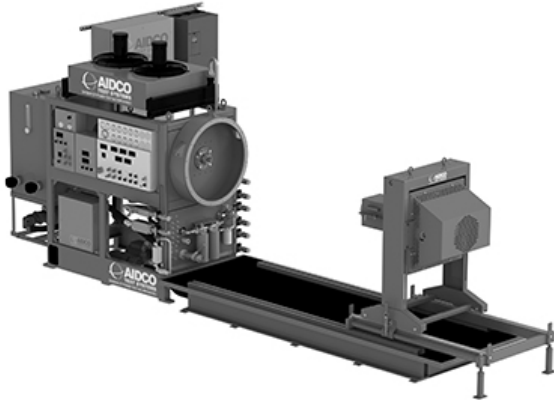


# Model 500E Transmission Test Stand



*500E Transmission Test Stand Base Model with SAE 0 Bell Housing shown with Worktable, Eddy Load Unit, PowerNet Data Acquisition and Control System, Fill/Drain/Kidney Loop Kit, Oil Reservoir Tank Kit, Aux Pump Kit and Additional Flow Loops add-on's.*



*500E Transmission Test Stand Base Model with SAE 0 Bell Housing shown with optional cover panels.*

## Overview

The AIDCO Model 500E 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.

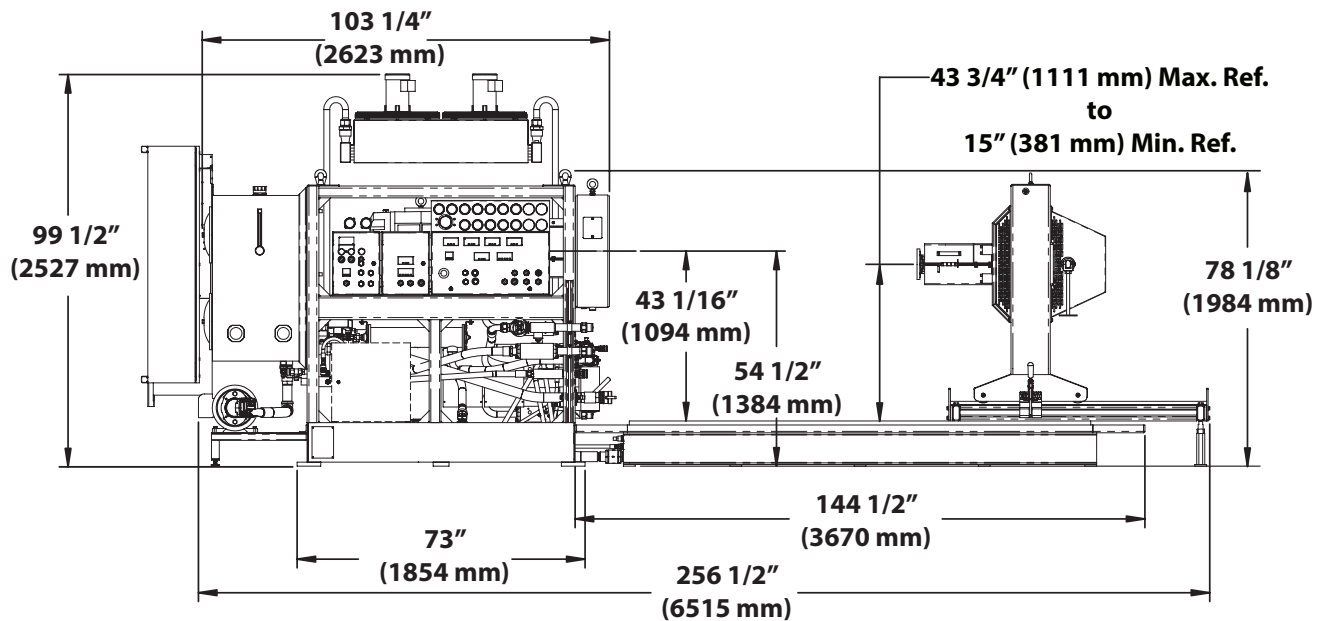
### Model 500E Features:

- Uses a variable speed, high efficiency AC motor to simulate the engine driving the transmission. 100, 200 or 300 HP motor configuration options are available.
- Includes ten (10) external pressure taps for monitoring pressures within the unit under test.
- Frame mounted standard SAE housing for direct mount transmissions. Available configurations include SAE 1, SAE 0 and SAE 00.
- Designed to accommodate in-line or drop box model transmissions mounted in a direct, remote, or mid-ship configuration, with or without integrated torque converters (some configurations require optional mounting kits).
- An optional Eddy Load Unit may be connected to a transmissions output to apply a load.
- PowerNet Data Acquisition and Control System option is available for automated control and reporting.

The Model 500E 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 500E

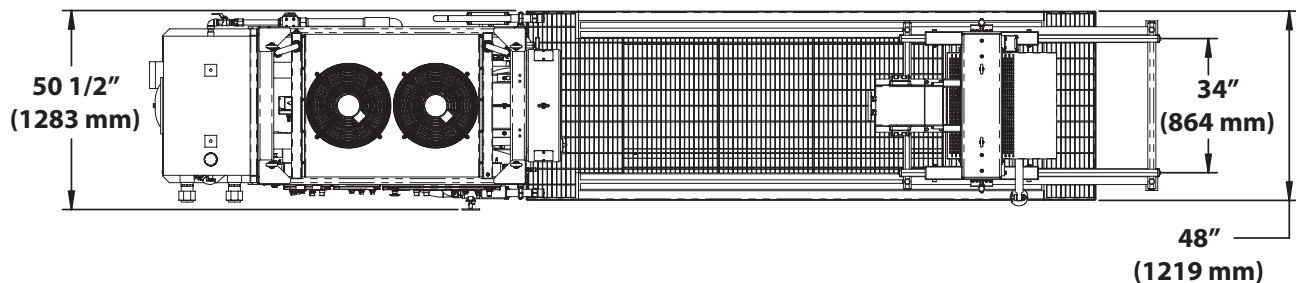
500E Transmission Test Stand Base Specifications		
Description	Specifications	
<b>Electric Motor (Prime Mover) Selections</b> (other voltage options available on request)  *Machine FLA with all configuration options	<b>500E-100</b>	100HP (75 kW) 380V - *203 FLA
		100HP (75 kW) 460V - *170 FLA
	<b>500E-200</b>	200HP (149 kW) 380V - *318 FLA
		200HP (149 kW) 460V - *286 FLA
	<b>500E-300</b>	300HP (224 kW) 380V - *435 FLA
		300HP (224 kW) 460V - *407 FLA
<b>Max. Transmission Input Torque</b> (continuous)	<b>500E-100</b>	294 Lb-ft. (399 N-m) up to 1,785 RPM
	<b>500E-200</b>	588 Lb-ft. (789 N-m) up to 1,785 RPM
	<b>500E-300</b>	883 Lb-ft. (1,197 N-m) up to 1,785 RPM
<b>Bell Housing</b> (choose one)	SAE 1, SAE 0 or SAE 00	
<b>Max Speed</b>	4,000 RPM (bi-directional)	
<b>Gauge Panel Package</b>	Analog gauge package includes twelve (12) pressure gauges, one (1) Differential pressure gauge, a flow meter with digital display to monitor unit under test and also incorporates digital displays for input speed and input torque.	
<b>Pressure Taps</b>	(10) 600 PSI (41 BAR) pressure taps to monitor pressures of component under test.	
<b>Drive Load Sensing (D.L.S.)</b>	(D.L.S.) enables the operator to control the acceleration and deceleration rate of the unit under test to improve detection of shift events.	
<b>Modulator Control</b>	Simulates full or closed throttle condition. (requires 90 PSI (6 BAR) of air pressure).	
<b>Weight</b> (Base Unit & Power Box/VFD Asm.)	Approximately 6,000 Lbs. (2,721 kg).	



# Transmission Test Stand - Model 500E

500E Transmission Test Center Add-On Options			
Converter Flow Monitoring Circuit (choose one)		100 GPM	100 GPM (379 L/min) 10 Micron filtered converter flow loop with flow meter, digital display, Differential pressure gauge and manual control for differential pressure adjustment (backpressure).
		50 GPM	50 GPM (379 L/min) 10 Micron filtered converter flow loop with flow meter, digital display, Differential pressure gauge and manual control for differential pressure adjustment (back pressure).
Converter Flow Heat Exchanger (choose one)		Water	Adds a water cooled heat exchanger with digital temperature controller to the converter flow monitoring circuit. The <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.
		Air	Adds an air-to-oil self contained cooling unit with digital temperature controller to the converter flow monitoring circuit.
Data Acquisition / Control		PowerNet is a complete automated data acquisition and control package. Ask your representative about PowerNet system that best fits your needs.	
Worktable		144 1/2" (3670 mm) long x 48" (1219 mm) wide, 6,000 Lbs. (2,722 Kg) support capacity T-slot worktable with 100 gallon (378 liters) oil storage/collection sump.	
Fill/Drain/Kidney Kit		Adds a transfer pump, fill/drain valve and a 6 Micron filter.	
Oil Reservoir Tank		Adds a 130 gallon (492 liters) oil storage reservoir with digital temperature controlled immersion heaters, flooded suction port, 10 Micron return to tank filter, tank level gauge and a 50 GPM (189 L/min) sump transfer pump. Kit is ported to accommodate the Fill/Drain kit.	
Fluid Supply Circuits		Aux Pump	Adds a 10-60 GPM (37-227 L/min), 400 PSI (27 BAR) max. pressurized oil supply circuit with flow meter and pressure gauge. Circuit uses a 20HP VFD controlled motor.
		Lube	Adds a 10 GPM (38 L/min) max., 25-65 PSI (1.7-4 BAR) lube circuit with pressure gauge. (Requires/included with Aux pump circuit)
Additional Flow Loops	Non-Loadable (choose any combination up to three (3) total)	100 GPM	Adds a 100 GPM (379 L/min) non-loadable flow loop with flow meter and digital display.
		50 GPM	Adds a 50 GPM (189 L/min) non-loadable flow loop with flow meter and digital display.
	Low Flow (choose one)	2 GPM	Adds a 2 GPM (7.5 L/min) non-loadable flow loop with flow meter.
		5 GPM	Adds a 5 GPM (19 L/min) non-loadable flow loop with flow meter.
Cover Panel Kit		Adds frame cover panels as needed, amount of panels is dependant on options ordered.	
Transmission Drive Kit		Adds a drive shaft guard, drive shaft, and adapter plate to bell housing.	
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# Transmission Test Stand - Model 500E

500E Transmission Test Center Add-On Options - Continued		
<b>Adapter Kit(s)</b> (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.
<b>Eddy Load Unit</b> (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)
<b>Eddy Load Unit</b> <b>Options</b>	<b>Offset Kit</b>	The load unit can be positioned up to 10" (254 mm) left or right of center for offset output transmissions.
	<b>Air Brake Stall Kit</b>	The manually inserted stall bar is replaced with an air actuated brake assembly installed on to Eddy Load Unit to stall transmission output.
	<b>Motorized Vertical Movement</b>	The manual system to adjust vertical positioning is replaced using a motorized system.



## Note

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