



**FCT Transmission
Dynamometer System**
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FCT Transmission Dynamometer System

Based on Power Test's popular FCT engine dynamometer system, the Fully Contained Transportable Trans Dyno (FCT-TD) comes ready to use in its own shipping containers that double as the testing facility. This allows the customer to benefit from the testing capabilities of AIDCO transmission testing equipment whether in a remote location, or simply avoiding the costs associated with a permanent testing facility. The FCT-TD features everything needed for complete transmission and valve body testing. The entire system and all components arrive pre-assembled, making reliable, repeatable testing available in less than one hour. At the end of the day, when testing is completed, simply shut down the system and lock the doors for secure storage of the test stand, transmission, and equipment. For quick relocation, disconnect the non-spill hydraulic hoses and power extension cable and the system is ready to ship.

A Transportable Testing Solution

While the outside may look like standard shipping containers, that similarity ends when the doors are opened. AIDCO's engineers and designers have provided all of the amenities one would normally find in a test cell, including full instrumentation for the model 450H Transmission Test Stand, the model 265 Valve Body Test Stand, and a control desk with features of the AIDCO ESC Electronic Shift Console. Both containers feature climate controlled and acoustically insulated control booths, full fluorescent shop lighting, and conveniently placed AC power outlets.

With more available room than expected, the FCT-TD Test System has been designed to make efficient use of the space provided. Last minute adjustments and repairs are easily accomplished with the transmission in position. Additionally, the FCT-TD is designed for flexibility. With a wide assortment of optional equipment, the FCT-TD is configurable to meet nearly every testing need. All components can easily be upgraded, allowing maximum performance and compatibility.



Transmission Test Container Components

- AIDCO 450H Transmission Test Stand
- PowerNet TD Data Acquisition and Control System
- Transmission Cart and Hoist/Pulley System
- AIDCO ESC Electronic and Manual Shift Controls
- Positive Filtered Ventilation System
- Climate-Controlled, Acoustically Insulated Control Booth

Valve Body Test Container Components

- AIDCO 265 Valve Body Test Stand
- Caterpillar C7 225HP Diesel Power Unit
- Climate-Controlled, Acoustically Insulated Control Booth
- Hydrostatic Reservoir and Cooling System
- PowerNet TD Data Acquisition and Control

A Complete Testing Solution

Power Test is committed to ensuring EVERYTHING will work in your test cell. We partner with our clients, emphasizing professional service and personal attention at the support level that's right for them. We bring this level of professionalism to all projects, from providing a standard room layout to complete construction and installation management, Power Test experts partner with you and your construction project team to ensure you get a cost-effective and efficient test cell that WORKS AS PLANNED.

Transmission Test Stand Container

The Transmission Test Stand Container is equipped with a positive filtered ventilation system. The Transmission Test Stand Container provides a comfortable work space for the operator, and a completely enclosed operating space for the 450H.



The operator can access the 450H and transmission being tested through the double hinged doors found on both sides of the container. Removable rails leading up to the dynamometer and a pulley and hoist system are used to bring the transmission into the container via our specially designed transmission cart. That same hoist is used to lift the transmission into place for installation to the test stand.

Full analog instrumentation is provided on the 450H for complete testing at the transmission test stand. Additionally, the FCT-TD features a specially-designed transmission fluid recirculation system, consisting of a sealed reservoir and 10 micron filtration unit. This system replaces the work table sump and helps to minimize the potential for contamination in extreme conditions.

Valve Body Test Stand Container

The Valve Body Test Stand Container houses the hydrostatic reservoir for the 450H, a cooling system for the hydrostatic drive, the diesel engine power unit, which powers the hydrostatic motor and the AC generator, and a control booth equipped with the model 265 Valve Body Test Stand.

The diesel engine power unit utilizes a Caterpillar C7 225 horsepower diesel engine to drive the hydrostatic pump for the 450H and to drive the electric generator used for producing the AC power required for the 265 Valve Body Tester, the air circulation and cooling systems, and the lighting systems.

The AIDCO 265 Valve Body Test Stand is contained within an acoustically insulated, air conditioned operator's booth, providing a clean, comfortable work space for testing valve bodies and governor drives, while providing storage space for the various adapters and accessories for the FCT-TD.



AIDCO ESC

Electronically controlled transmissions can be tested from the comfort of the acoustically insulated, air-conditioned operator's control booth. Shift control keypads and ECMs/TCUs provide full control of the transmission being tested. A cable and lever system is also included for shifting non-electronically controlled transmissions.



PowerNet - The Future of Testing

PowerNet TD is designed to provide a comprehensive, easy to use data acquisition and control system for all AIDCO customers. PowerNet TD utilizes a Windows-based computerized data acquisition system to monitor and record speeds, torque, pressures, temperatures, flow rates, and shift events. Manual set-point and fully automated tests are just a mouse click away.

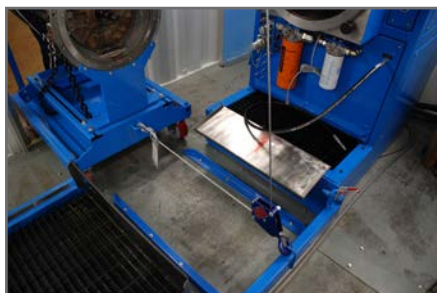
With PowerNet TD, standard transmission tests can be recalled from a file and by clicking on the start button, anyone can perform and achieve the same test results. The automation of the transmission input speed and the dynamometer load assure that every step of the test is performed correctly.

The PowerNet TD data acquisition and control system is equipped to monitor and record: speeds, torque, pressures, temperatures, flow rates, and shift events.

Through automated recording, verifiable test results are obtained and PowerNet TD assures that the data is true and accurate. Reports are easily produced that include your company logo, specific workshop information, customer information, and the manufacturer's specifications, along with the actual test results in table and graph formats. The paragraph feature allows you to enter any notes or observations made during the test.

The included alarm feature provides visual displays and flashing warnings when a sensor exceeds the usual operation range. Whenever an alarm condition is reached, data is automatically recorded so that a determination of the trouble can be diagnosed.

The PowerNet TD software package may be used as supplied or you may easily change the sensor units, ranges, alarm values, and even the language of display if desired! Once changes have been made, they are stored to the system for future usage. Data that is saved to the hard drive may be recalled and printed at any time and may even be sent by e-mail.



Power Test, Your Full Service Manufacturer

AIDCO manufactures a wide range of transmission testing equipment, including electronic shift consoles, valve body test stands, and transmission test stands.

Contact your Power Test representative or visit our web site at www.pwrtst.com for more information.

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