



LOW NOISE HYDRAULIC POWER UNITS

SmarTEST HYDRAULIC POWER UNIT FOR AEROSPACE TESTING

At Moog FCS, we understand that the best aerospace test solutions start with the proper foundation. That's why we focus our expertise and world-class resources on ensuring the core components behind every critical application offer unsurpassed performance, reliability and longevity.

The SmarTEST Hydraulic Power Unit is specifically designed to be the heart of the aerospace test system. Installed in test labs around the world, the unit is available in a variety of sizes for virtually any application. The unit provides continuous hydraulic power to ensure your tests run exactly as planned, while offering a superior level of test specimen protection.



ADVANTAGES

- Provides reliable 24/7 continuous duty for total confidence and virtually no room for user error
- Specifically designed for aerospace applications
- Ensures total protection of the test specimen
- Available in a wide range of sizes, designs (standard to low-noise level) and flow capacities for strategically important fatigue tests
- Control interface incorporates comprehensive safety interlocks to protect the entire system
- Utilizes the highest-grade components available

AEROSPACE TESTING APPLICATIONS

Moog FCS offers static and fatigue testing that ranges from complete aircraft to sub-assemblies to components.

- Aircraft/airframe structural tests
- Fuselage and cockpit pressurization
- Engine casing
- Fin actuation loading tests
- Landing gear tests
- Hydraulic system tests
- Load calibration tests
- Spacecraft structural integrity
- Iron bird tests



SmarTEST Hydraulic Power Units deliver an efficient turnkey solution in a full array of flow capacities and designs. It is a critical part of any professional aerospace test system, providing the confidence that test applications will run smoothly with minimal user attention.

KEY FEATURES

- Compact modular design
- Quiet fixed or variable delivery pumps
- High-strength 3 micron filters
- Water or air blast cooling options
- Independent pilot supply option
- Comprehensive safety interlocks for unattended running
- Off-line cooling available (standard on larger systems)
- Local and remote operation
- Low hydraulic noise
- Pressure and return accumulators
- Optional acoustics hood for low noise levels (68 dB)
- Electrical control unit with remote signaling
- Water/oil heat exchanger

HPU DESIGN FEATURES

- High-quality components ensure reliable operation and low maintenance costs
- Comprehensive safety monitoring with automatic interlocks for protection against high temperature and low oil level
- Selection of sizes to meet needs of specific test
- High-quality filter assemblies tailored to the system ensure accurate filtration for maximum reliability of both the hydraulic power unit and testing equipment
- Accumulators are fitted to the main output manifold to meet instantaneous flow demands. A return line accumulator provides damping of return line transients.
- Designed to interface with Moog FCS digital control of hydraulic supply and comprehensive safety monitoring for unattended operation
- Full range of flow capacities available to cover small one-channel applications up to full-scale structural tests
- Operation of the HPU is facilitated by a local control cabinet manually or by PLC with touch screen operation
- Automatic oil flow control available through use of Smart PLC technology, saving electrical energy on oil pump and cooling water pump operation

This technical data is based on current available information and is subject to change at any time by Moog FCS. Specifications for specific systems or applications may vary.

Moog FCS has offices around the world. For more information or the office nearest you, contact us online.

e-mail: info@moog-fcs.com

www.moog-fcs.com

Moog FCS is a registered trademark of Moog, Inc. and its subsidiaries. All trademarks as indicated herein are the property of Moog, Inc. and its subsidiaries. ©Moog, Inc. 2007. All rights reserved. All changes are reserved.

SmarTEST HPU Aerospace
Mobium/PDF/0207