Fluid Power Capabilities

Wineman Technology is an industry leader in fluid power test systems. From building complex avionic systems to testing a single critical component, our solutions are designed and built to maximize performance and reliability. By applying sound engineering, creativity, and a full understanding of the customer’s testing needs, we develop custom turnkey test stands for system, sub-system, or component-level products or machinery modernization. We also provide high levels of flexibility using commercial off-the-shelf technologies.

We match each physical test system with high performance controls, from simple open loop PC- or PLC-based controls to embedded real-time systems utilizing the latest innovations in control and instrumentation hardware. Many customer solutions include cutting-edge FPGA and system technologies that marry multiple control platforms.

The heart of any good control system is the application software. Whether developing a custom LabVIEW™ application to meet a specific requirement or using our proven INERTIA™ control and automation suite, our solutions always provide an intuitive, highly flexible test environment with overall capabilities previously unattainable at its cost point.

Burst Pressure Test Stands

Wineman Technology provides state-of-the-art, custom Burst Pressure Test Stands for all industries. From small tabletop or portable systems to high impact sand-filled blast chambers, Wineman Technology can provide a system to meet all of your testing requirements.

Standard Test Parameters Include:

- A variety of test fluids to meet your product testing applications
- Test fluid pressures up to 60,000 psi
- System fill flow rates up to 200 gpm
- Pressure rate of rise test profiles up to 20,000 psi / min
- Fluid and chamber temperatures from -40°F to +350°F
WINEMAN TECHNOLOGY BURST PRESSURE TEST STAND CAPABILITIES *

Control:
- Wineman Technology’s standard or custom real-time process control utilizing National Instruments LabVIEW™ software and Horner PLC solutions
- 19-inch monitor, mouse, and keyboard

Test Chamber:
- Test chambers with horizontal or vertical orientation designed to suit the unit under test (UUT) size, number of UUTs being tested, and UUT weights
- Interior blast shields
- Perforated work surface designed to capture, filter, and reuse lost fluid

Power:
- Single- or three-phase power systems with 110 VAC or 24 VDC control power

Testing Fluids:
- Air, clean water, deionized water, glycol mixtures, PAO fluids, and lightweight oils

Test Pressures:
- 500 psi, 1,000 psi, 3,000 psi, 5,000 psi, 10,000 psi, 20,000 psi, 30,000 psi, 40,00 psi, and 60,000 psi service rated systems
- Pressure rate of rise curves to 20,000 psi/min

Input Flows:
- Input flow rates to 200 gpm

WTI Burst System Standard Software Package:
- Proof, proof then burst, or burst testing modes
- PC-based control system utilizing National Instruments software
- Automatic and manual modes
- Standard test screen that provide entry points for part serial number or test ID number, part description, technician ID and comments, lab report number, and selection of a previously created test profile (created in test configuration screen)
- Indicator screen that provide annunciating system safety interlocks, system faults, and showing system pressure versus time
- Test sequences that run to either completion or to a detection of a fault
- Preset or user-configurable pressure ramp rates (psi/sec), stepped pressure control, hold times, maximum pressure selections
- Data that is automatically sequenced and stored with references to the test date
- Collected data that is saved and downloadable as delimited text files for easy access with Microsoft Excel
- Wineman Technology’s standard or custom data reporting and charts

Standard Options:
- Available options include combination impulse, pressure pulsation, and burst test stands
- Temperature-controlled test chambers and fluid temperature control (FTC) systems from -40°F to 250°F
- Double or sand-filled chamber walls
- Observation windows or interior high speed cameras
- Carbon steel or stainless steel fluid systems and chambers
- Test sumps for submerged testing
- Test frames or fixtures to suit
- On-board or facility fluid supply systems
- Manual or automatic part filling and purging
- Tests in accordance to SAE, API, ISO, APR, ASTM, etc.
- On-board printer

*Specifications subject to change without notice.