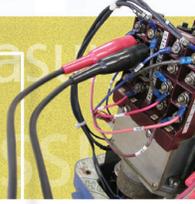
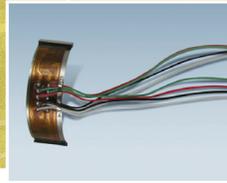


# QUG Newsletter

Information and news for the QUIKLOOK Users Group

Vol 3, No1

December 2012



## QUG 6

By Mike Sullivan

The Quiklook Users Group meeting this year, held as usual during the third week of August in Marion, MA, had the highest turnout yet. We hope that the event was interesting and informative to all participants. We welcome any suggestions for future QUG meetings. If you missed it but would like to see the various Teledyne presentations, you can see them on the internet at <http://www.valvetest.com/QUG2012.asp>.

## Upcoming Events

By Mike Sullivan

Teledyne Test Services will again have a booth at the annual MUG/AUG conference, to be held next year in San Antonio, Texas from January 14-18, 2013. If you plan to attend this event you are welcome to visit the TTS booth to see the latest in MOV and AOV hardware and software and to ask questions of our engineers.

## QUIKLOOK II Software - Features Under Development

By Eric Solla

(Version 2012.?) (To be Released Fourth quarter 2012)

### CONFIGURATION

- Multiple Waveforms in one Config File
- Edit Sensor Database from Configuration Screen
- Calculate Rotary Sensitivity – Values Retained

### Test Menu

- Combine Test
- Combine two tests @ marker
- Combine two tests end to end
- Split test into two tests
- Crop a test, saving only the data between two markers

### Replay

- Plot between markers

### Analysis

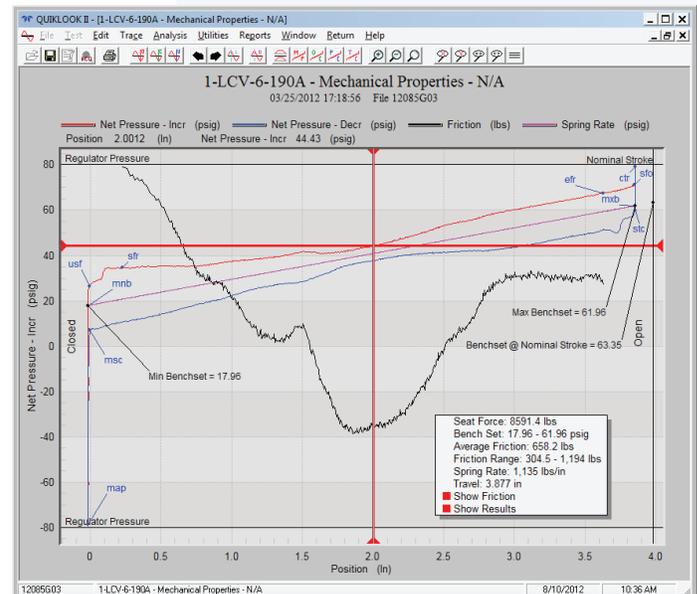
- Automark MOV traces

### Configuration / Analysis

- Add I/P Action
- Mechanical Properties
  - Double Acting Valves - Add line to show Negative Regulator Pressure

### Monitor Screen

- Warning if pressure channels are zeroed with a large offset
- Zero disabled for I/P Input Channel



TELEDYNE TEST SERVICES

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[www.ValveTest.com](http://www.ValveTest.com)

# QUIKLOOK II Software - Previously Released Features

## (Version 2012-061)

Released to address Error Notice 2011.350-1

Error Notice 2011.350-1:

"On a QUIKLOOK acquisition computer if the Monitor screen had been used then trying to close QUIKLOOK with the Quit menu or by clicking the X on the upper right corner of the form QUIKLOOK will not always close."

## (Version 2011.350)

### Acquisition

- Prompt to confirm Date & Time on Startup
- Add timer to second start screen (time since last test ended) for MSIV testing

### Monitor

- Zero all pressure channels option added
- Warning if pressure channels are not zeroed
- Add option to Save Config in Monitor Screen

### Test Menu - Find Test

- Open dialog box now a Standard Windows dialog box
- Moved Recent List to Test Menu

### Preferences

- Customizable Default Preferences
- Add Quikstyle "Default"
- Changed default trace colors

### Configuration

- Added graphics for rotary valves
- Added Pilot Spring Action Field
- Add option for number of actuators
- Load Sensor – Remember Filter

### Sensor Database Utility

- Added Copy Sensor Utility

### Replay

- AOV special plots only include markers applicable to the plot
- Added Open Close Labels to Calibration Plots

### Analysis

- Added AOV analysis option: if ctr marker is added to test then Mechanical Properties plot is available

- Mechanical Properties
  - Benchset @ Nominal Travel added and labeled on graph
  - Added line to trace to show Nominal Travel, from closed
  - Added line to show Regulator Pressure
  - Pilot Valve – Show Rated Travel, from closed, and Pilot Travel, from msc
- Incorporated Pilot Spring Action into Pilot Spring Rate Calc
- Double Acting Valves
  - Always calculate Net Pressure for all test types
  - Net Pressure calc changed to account for valve type:
    - Reverse Acting valves - Net Pressure = Bottom Pressure – Top Pressure
    - Forward Acting valves - Net Pressure = Top Pressure – Bottom Pressure

## Hardware Upgrades (Free Calibration!)

by Mike Sullivan

Over the years we have made upgrades and adjustments to the hardware in our QUIKLOOK systems in order to improve performance and durability, at no cost to the client. These improvements include wiring harness upgrades, better fastening systems, power supply adjustments, BIOS changes and calibration improvements. Note that the suite of fixes now in place allows our systems to operate more reliably at higher temperatures.

Teledyne typically includes these upgrades at no charge when customers return their systems for calibration. Also included with a factory calibration is a complete virus scan and a CMOS battery change. Unfortunately, those customers who perform their own calibrations are not afforded an opportunity to keep their QUIKLOOKs "up to date" with factory standards. Teledyne would like to address this situation with a one-time System Update offering for our self-calibrating customers. In addition to implementing the above fixes, Teledyne will bring all units within a client's fleet up to date with the latest version of QUIKLOOK approved for use by that utility. Contact Dave Johnson for details and scheduling.

# QUIKLOOK 2.5!

By Mike Sullivan

As of the first of the year, Teledyne incorporated a number of hardware upgrades into both of our diagnostic platforms. This included a switch to Windows 7 as the operating system, a solid-state flash drive in place of the previous hard drive, a more efficient power supply, an improved wireless card and replacement components for items facing long term obsolescence unavailability. These new units have been tested to over 125F with excellent performance. The new QUIKLOOK 2.5 and QL 2.5+ represent another level of performance, reliability and longevity for valve testing diagnostic systems.

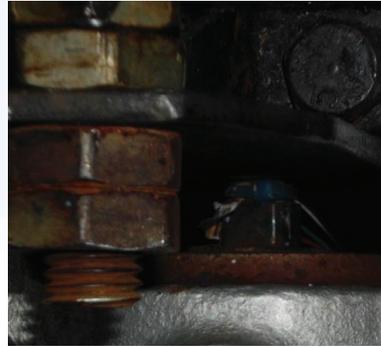
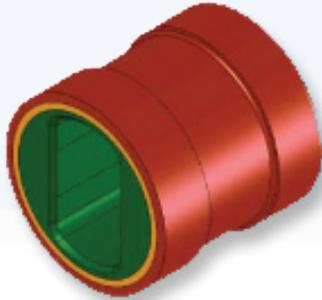
## Direct Measurement Examples

by Mike Sullivan

TTS has a legacy of providing direct measurement solutions for diagnostic and operability testing. The most accurate load measurements are made using strain gages applied to a component directly in the load path, whether the load be torque or thrust. The standard TTS valve-test transducers are either QSS's attached directly to the valve stem in the field or, in other cases, SmartStems that are instrumented and calibrated at our laboratory. For those valves where neither of these approaches can be used, direct measurement may still be applied. Here are a few examples to get you thinking.

**Client:** Dominion Millstone

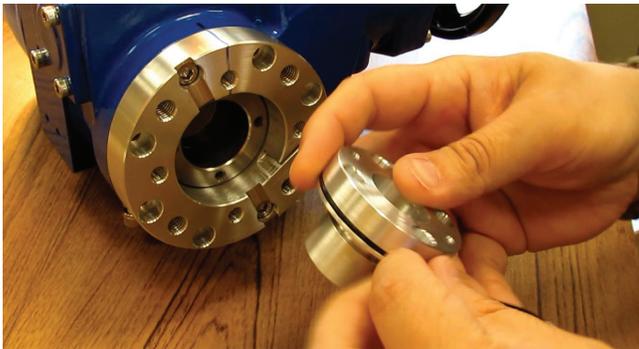
**Application:** Saginaw Tufline  
Manual Service Water Valves  
**Component:** Compensator



**Client:** Dominion Millstone

**Application:** Gimpel  
Trip-Throttle pilot valve

**Component:** Shaft with  
square shoulder



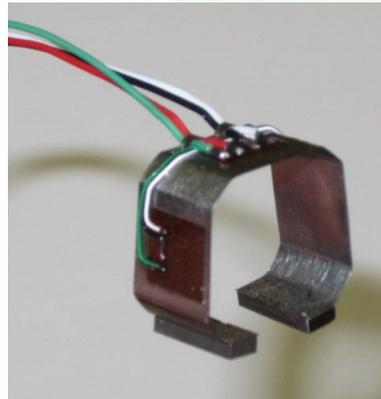
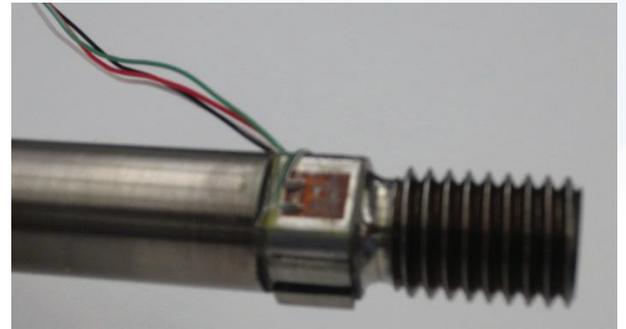
A drop-in solution that comes factory calibrated!

**Client:** Progress Energy – Crystal River

**Application:** ABZ ¼ Turn Chiller Valve

**Component:** Adapter

Note the cable routing that accommodates the ¼ turn valve motion. You can't even see the sensor!



A QSS-style built-up strain-gage shim sensor was applied to a square cross-section of the shaft. Who said the stem has to be round?

# ACE / ACETEST

by Eric Solla

ACE, the AOV design calculation software, was acquired by TTS from AREVA in 2009. Version 4.0 was released in January 2012. ACE 4.0 split ACE into two programs, ACE & ACEDP. The interface was totally redesigned and the use of Access was eliminated. The calc engine remained identical to ACE 3.0

ACETest 4.0, Teledyne's AOV test analysis software, was released in January 2012. This was just a minor upgrade to be compatible with ACE 4.0. ACE 4.1, ACEDP 4.1 & ACETest 4.1 are anticipated to be verified and shipping by the time of the 2013 MUG/AUG week.

Upgrade for these programs include:

## ACE:

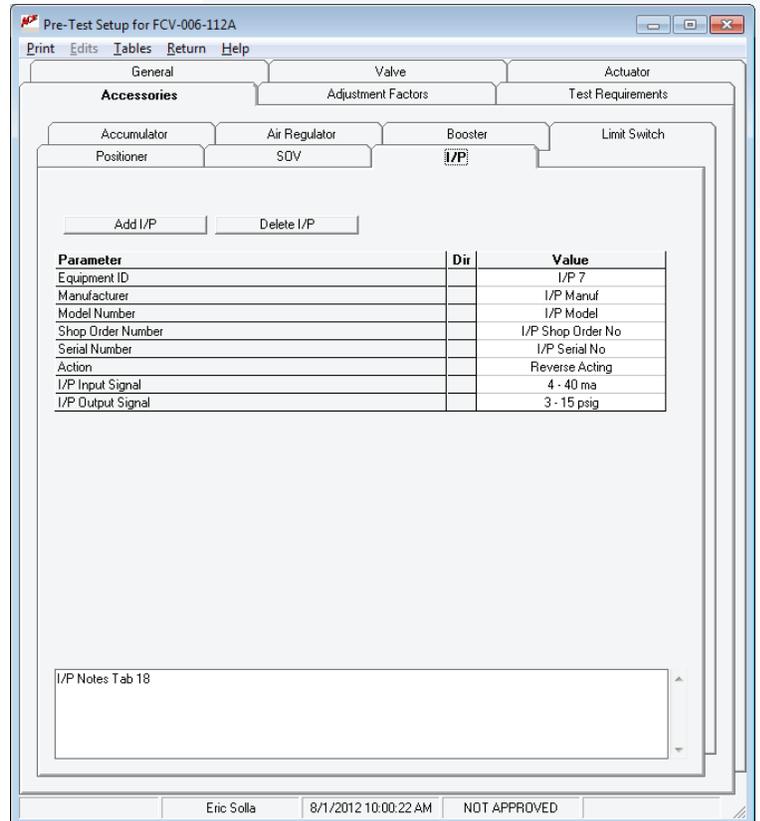
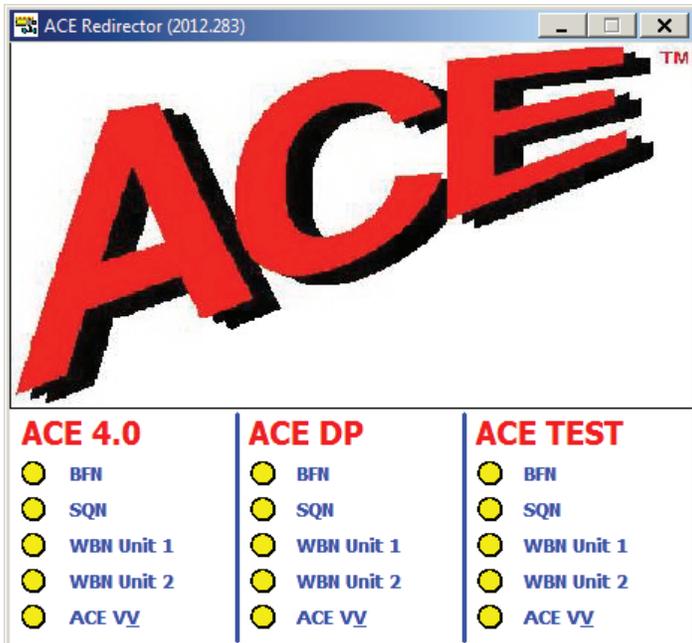
- SQL Server Compliant
- Butterfly Changes to include compressible flow
- Added Self Verification module
- Added Custom & Special Filters
- Added Open Issues to History
- To see screenshots of the basic operations of ACE 4.1 go to <http://www.valvetest.com/QUG2012.asp>

## ACEDP:

- SQL Server Compliant
- Added Self Verification module
- Added Custom & Special Filters

## ACETest:

- Redesigned User Interface Similar to ACE
- Redesigned Reports
- Only Inputs applicable to valve are shown.
- Accessories are added similar to ACE
- Only Accessories selected show up in reports
- Work Flow Changed to be Similar to Midas Test
- SQL Server Compliant
- Added Self Verification module
- Added Custom & Special Filters
- Added History
- Added Trending Tool
- To see screenshots of the basic operations of ACETest 4.1 go to <http://www.valvetest.com/QUG2012.asp>



# MIDAS/MIDASTest Updates

by Mike Richard

Development of Teledyne's MOV design and test software began in 1999 with a single utility, and continues today with nearly 20 different instances of MIDAS and MIDASTest. Here are the highlights of MIDAS and MIDASTest updates for 2012:

## MIDAS:

- Refinements to existing methodologies
- SQL server compatibility refinements
- Added method Copy To or From Mod Record
- Added method Compare to Mod Record
- Added method Compare to Other Valve
- Added tool Calculation List
- Revised Export to Excel User Interface
- Revised Build SQL User Interface
- Revised Select Reference User Interface
- Updated several customers to latest software specifications
- Teledyne Citrix Server

## MIDASTest:

- Enhanced Main User Interface to Notify for Unsat Post-Test Evaluations
- Enhanced Add Workorder function to allow user control of previous test
- Relocated Grease History Functionality
- Added tool Trend View
- Added tool Software Verification
- Updated several customers to latest software specification
- Teledyne Citrix Server

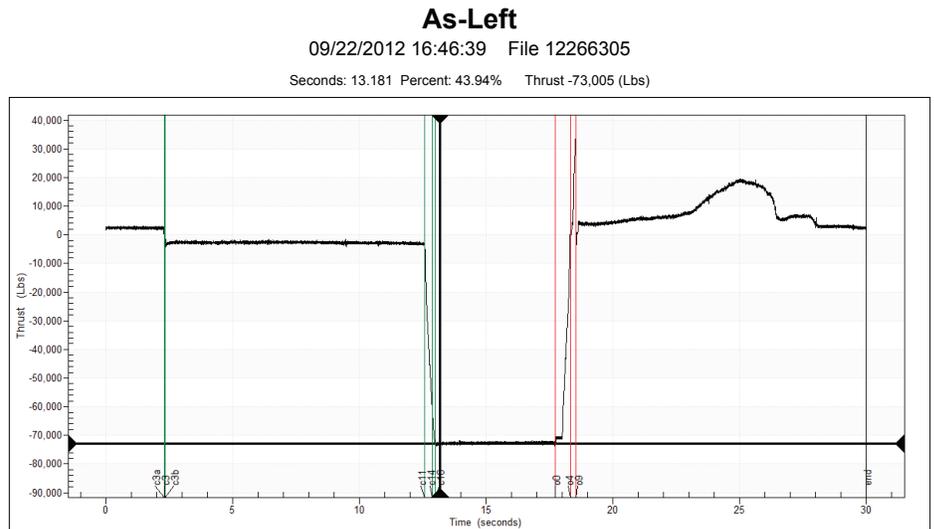
For screenshots of many of these changes, go to <http://www.valvetest.com/pdf/QUG2012/5%20-%20QUG%202012-MIDAS-Software.pdf>

## Now What!

By Joe Santangelo

Every outage has one valve that has an anomaly that we can't put our finger on and the valve is too difficult to disassemble. And the plant is asking, can we have that valve back? What do you see in this trace?

What type of valve is this, and what is causing the anomaly? Please send your carefully reasoned response to [JSantangelo@Teledyne.com](mailto:JSantangelo@Teledyne.com) to find out what's really going on.



QUIKLOOK II 2012.61  
MRNENPC40.Joe

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