

QUIKLOOK II Software: General and MOV Features

Common Platform Design and Operation

- Teledyne's QUIKLOOK II, QLII+, and SENTRY platforms all use the same software
- Start and stop triggers enable unattended operation of any of the three Teledyne systems

Data Acquisition

- Data acquisition is integrated with the Windows-based analysis software
- Monitor screen displays all input channel values in both volts and engineering units
- Monitor screen displays single-channel bar or line graph or pretension level / target range window
- Ability to zero channels in Monitor Screen
- Data acquisition rates up to 10,000 samples per second

Plots

- No limit to the number of traces that can be plotted in a pane; up to 6 panes may be displayed on the screen at once
- Panes are independently resizable
- Plot annotations available: data point values, text and footnotes
- Markers shown on trending plots: none, all, or currently-selected test only
- XY plotting (available in both acquisition and replay)
- Can show markers on XY plots
- Plot preference controls: color / background, maximum number of points, default title, legend style and channel unit groups
- Customized plots can be saved or exported in .pdf format
- FFT Y-axis scaling may be logarithmic or linear, and more resolution choices are available
- A motor power channel can be displayed without having been previously calculated using Plot Setup

Configuration

- Up to 16 channels may be configured for acquisition
- Each channel may be defined as strain gage, single ended or differential

- Channel configuration may include sensor details including calibration information
- Channel configuration may be loaded via a sensor database
- RMS & filter channels may be predefined.
- Motor power channels may be predefined.

Analysis

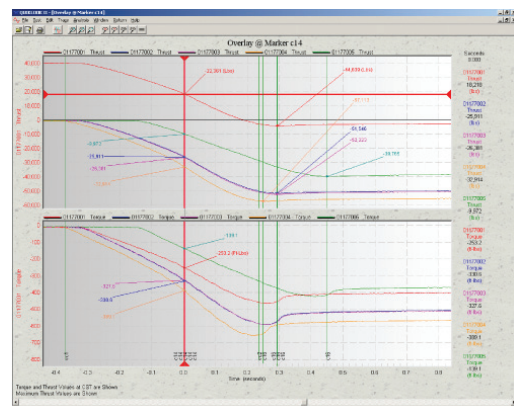
- Average running loads, lights and stroke times
- Stem Factor and COF calculations
- Analysis of motor power phasing with sensor self-correction feature
- Dependent (calculated) channels are recalculated if the channel on which they are based is changed
- FFT may be performed on a trending plot
- All traces on the screen can be zeroed at once
- Sensor calibration curves (linear, 2nd order, or 3rd order) are generated from a calibration test
- A linear, 2nd order, or 3rd order calibration may be applied to acquired data

Standard and Custom Reports

- Several standard reports are now available
- Test Equipment Calibration report now available
- Test Listing report now available
- Any client report can be replicated for use within QUIKLOOK II

Self Verification

- QUIKLOOK II automatically performs a self-check verification every time it is started



QUIKLOOK II Software:

AOV Features

Common Platform Design and Operation

- QLII AOV software utilizes the same hardware platform as the QLII MOV Software
- Teledyne's QUIKLOOK AOV and MOV Systems both use the same data acquisition software

Data Acquisition

- Data acquisition is integrated with Windows-based analysis software
- AOV control signal options: 0 to 10 volts, -10 to +10 volts, 0 to 24 ma, 0 to 55 ma
- Tests Performed:
 - Slow Ramp Test
 - Step Open Step Close
 - Step Ramp Test
 - Resolution & Response
 - Frequency Response
 - Custom Tests
- QLII System can manage up to 16 channels of input data that may include any or all of the following with no hardware changes:
 - Pressures
 - Currents
 - Voltages
 - Strain Gauges (Torque & Thrust)
 - Displacements
- A monitor screen supports manual control of the valve with readouts from selected channels for valve setup

Standard and Custom Reports

- A standard report is available
- Specific client reports can be replicated for use within QUIKLOOK II

Test Data

- Unlimited comments may be stored with the test
- Channel names and numbers are not fixed so can be set by the user

Self Verification

- QUIKLOOK II automatically performs a self-check verification every time it is started

Plots

- Predefined plots used for analysis:
 - Overall Calibration
 - Mechanical Properties
 - Transducer Calibration
 - Positioner Calibration
- All features available in the QUIKLOOK MOV software are available in the AOV software
- Both time-based and XY plots available
- Customized plots can be saved or exported in .pdf format

Analysis

- Predefined Plots show applicable results on-screen
- Calculated Results Include:
 - Seat Load
 - Unseating Force
 - Valve Friction
 - Stroke Length
 - Spring Rate
 - Benchset
 - Pilot Stroke Length
 - Pilot Spring Rate
 - Pilot Seat Load
 - Transducer HD Error
 - Positioner HD Error
 - Overall HD Error

