

QL-SENTRY MOV Online Valve Monitoring



Online Valve Monitoring: Continuously monitor the health & condition of Motor Operated Valves (MOV's) using permanently-installed data acquisition systems and sensors. QL-SENTRY reduces manpower requirements for heavily resource loaded MOV diagnostic tests. The system is compact, lightweight, and can be accessed remotely by ethernet or wireless connection. The QL-SENTRY includes the following features:

Key Features

- Independently monitors up to two MOV's on each QL-SENTRY (7 analog input CH's per valve)
- Unattended data acquisition for unlimited time periods
- Automatically records all valve strokes
- Variable trigger levels
- Ethernet or wireless communication for downloads to laptop or plant network for local or remote operation
- Power: 9-36VDC or Power over Ethernet (PoE)
- NEMA Rated, compact and lightweight package

The next generation nuclear diagnostic testing will help the industry move forward toward condition-based monitoring instead of the previous time-based monitoring.

Benefits

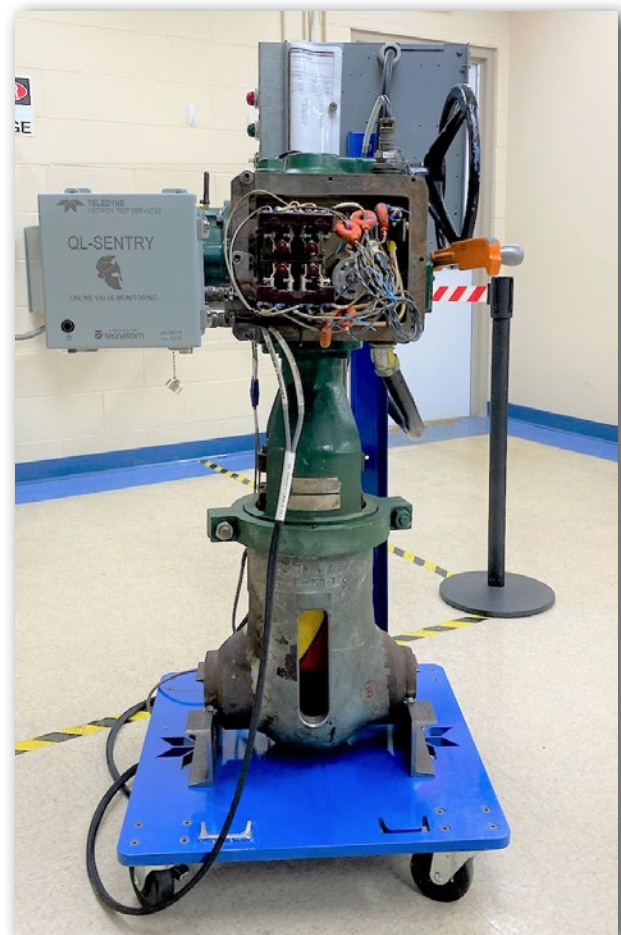
- Reduces at the valve manned testing
- Reduce number of workorders for:
 - scaffolding
 - MOV testing
 - clearance orders
 - walkdowns
- Decrease supplemental workers during outages
- Reduce outage scope, saving time and money
- Supports ALARA radiation safety principle

Applications

- GL 96-05 and BOP valves

Specifications

- Accuracy: 1% of reading
- Size: 8" x 8" x 2.2"
- Sample rate: 1000 s/s
- System weight: 10 lbs.



QL-SENTRY placed 3rd at the 2019 Exelon Innovation Expo.

QL-SENTRY MOV ONLINE VALVE MONITORING

The online monitoring system hardware consists of the QL-SENTRY data acquisition device, a permanently-installed torque/thrust sensor, and the QL-SENTRY Current Transformer Assembly. The CT Assembly, which includes one CT for motor current and four low current CT's for indicator lights and control switches, features a multi-pin connector manifold that allows direct access to current measurements without removing the limit switch cover.

The 2-valve QL-SENTRY is configured to continuously monitor Torque, Thrust, Motor Current, and light/switch current on seven analog input channels per valve. The system can be powered externally from a DC source, AC/DC adapter, or power over ethernet (PoE).

In most applications, the QL-SENTRY will be connected to the plant network via WiFi or ethernet. The device is designed to run unattended, acquiring and storing test files without a host PC each time the valve strokes. In applications where a network is not available or practical, the test files can be manually retrieved by direct connection to a laptop.

The SENTRY online monitoring systems also includes the Test Fetcher software application which runs in the background on a network server or PC. The application periodically queries each QL-SENTRY in the plant, retrieves new test files, and places them in a dedicated folder on a network drive. The test files can then be viewed and analyzed using the QUIKLOOK-FS software application.



Current Sensor Assembly

- Quick Disconnect 1" NPT Manifold
- (1) 50 Amp or 350 Amp motor CT
- (4) low current CT's for indicator lights & control switches
- Switch CT weight: 1.4 oz.
- Motor CT weight: 2.8 oz.

Ordering Information

Product Description

Product Number

QL-SENTRY 2-valve System, 14Ch, Ext PS	160775
QL-SENTRY CT Assembly, 5CT's (50A Motor CT)	160748-50
QL-SENTRY CT Assembly, 5CT's (350A Motor CT)	160748-350
QL-SENTRY Cable Set	160750

QL-SENTRY Online Monitoring System

