Electro-Hydraulic Actuator Force Test Load Cell

Industry: OEM

Customer Challenge

A customer wants to monitor the forces applied on their electro-hydraulic actuators and conduct a quality test. Their actuators are usually in constrained environments, since their actuators suited for high force applications. For instance, hydraulic actuators installed on naval vessels.

Summary

Interface Solution

Interface suggests conducting a quality test using their 1200 High Capacity Standard Precision LowProfile™ Load Cell. The 1200 is installed in the test frame, where the electro-hydraulic cylinder's rod moves up and down when it is connected to a motor. The 1200 load cell measures the forces of the actuator in the load frame. Precise force results are captured using the 9840 Calibration Grade Multi-Channel Load Cell Indicator.

Results

Interface's 1200 High Capacity Standard Precision LowProfile[™] Load Cell successfully measured forces from the customer's electro-hydraulic actuator.

Materials

- 1200 High Capacity Standard Precision LowProfile™ Load Cell
- 9840 Calibration Grade Multi-Channel Load Cell
 Indicator
- Customer's electro-hydraulic actuator
- Customer's test frame

How It Works

- The 1200 High Capacity Standard Precision LowProfile[™] Load Cell is installed in the customer's test frame.
- 2. A motor is connected to the electro-hydraulic actuator, which sets off the internal hydraulic system in the actuator, thus moving the actuator rod up and down.
- Force results are captured by the 1200 and displayed using the 9840 Calibration Grade Multi-Channel Load Cell Indicator. If needed, the analog output of the 9840 can be connected to their control system to log and graph data, and comes in a single or double channel version.

Hydraulic Actuator Test Frame



