

Metal Press Cutting Machine

Multi-Axis

Industry: Test and Measurement

Summary

Customer Challenge

A customer wants to test the amount of force it takes to cut through different thickness's of metal on their metal press cutting machine. They want to ensure their metal press cutting machine is working properly, and also its maximum limitation.

Interface Solution

Interface's suggests installing their 3AXX 3-Axis Force Load Cell underneath the plate where pieces of metal are placed to be cut, or punched holes in. When connected to the BX8-HD44 BlueDAQ Series Data Acquisition System, the force results of different metals being cut will be displayed, graphed, and recorded on the customer's PC. It also has an analog output that can connect to the machines PLC in case of an overload.

Results

The customer was able to determine the different amount of forces it took for their metal press cutting machine to cut through different types and thicknesses of metal.

Materials

- 3AXX 3-Axis Force Load Cell
- BX8-HD44 BlueDAQ Series Data Acquisition System for Multi-Axis Sensors with Lab Enclosure
- Customer PLC
- Customer PC or Laptop

How It Works

1. The 3AXX 3-Axis Force Load Cell is placed underneath the metal machine's plate. It is also connected to the BX8-HD44 BlueDAQ Series Data Acquisition System.
2. Different types of metals and thickness's are tested through the metal press cutting machine.
3. The force results are then sent to the customer's computer, where the customer is able to display, graph, and record the results. The BX8-HD44's additional analog output also can send the customer's PLC to shut off the machine in case of an overload situation.

