

# Lug Nut Assembly Torque Transducer

Industry: Automotive and Vehicle

## Summary

### Customer Challenge

Customer is looking for a way to increase productivity for automobile wheel installation while ensuring that the lug nuts are installed to the proper torque values for safety purposes.

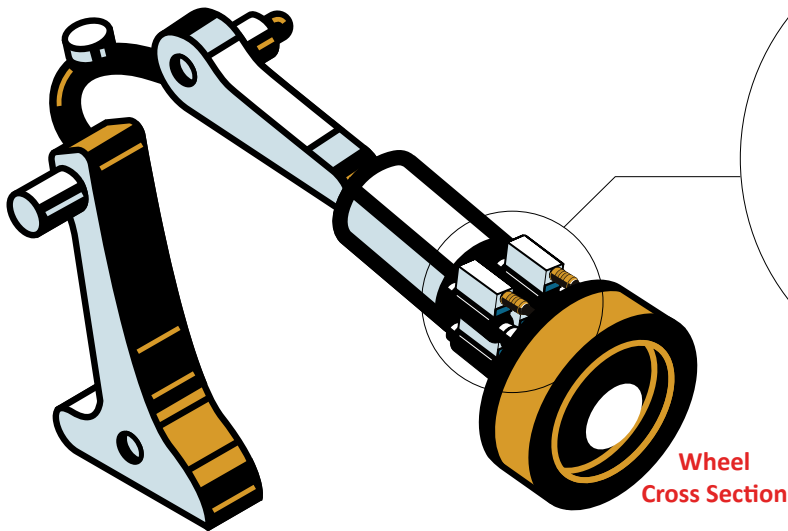
### Interface Solution

Interface supplied five T33 Spindle Torque Transducers for use in customer's Wheel Installation Assembly Machine which come standard with +/-5VDC analog output for torque measurements and a 360 pulse, 2-track encoder for Speed/Angle measurement.

### Results

Customer was able to perform five simultaneous torque measurements during wheel installation in seconds. The T33 Spindle Torque Transducer provided a +/-5VDC Signal for torque and TTL Signal for angle measurement back to customer's control system so proper values could be applied and recorded.

### Robotic Arm



Five T33 Spindle  
Torque Transducer

## Materials

- T33 Spindle Torque Transducer with standard +/-5VDC Signal for Torque with Integrated Angle Measurement
- Customer's control and data acquisition system

## How It Works

1. Customer installs multiple T33 Spindle Torque Transducers into assembly machine.
2. Customer connects T33 interconnect cables to their control and data acquisition system.
3. Customer performs wheel installation process while torque and speed/angle readings are automatically sent back to customers instrumentation for control and recording purposes.