

# Tire Force and Moment Torque Transducer

Industry: Automotive and Vehicle

## Summary

### Customer Challenge

A tire production company wants to put their tires under a stress test. They want to research the dynamic control capabilities of their tires. They want to measure both the torque and lateral force of the tire.

### Interface Solution

Interface suggests using the AT105 Contactless Force/Torque Transducer to measure both the lateral force and torque of the tire being tested. Torque and force results can be displayed and graphed when connected to the SI-USB4 4 Channel USB Interface Module.

### Results

After conducting a stress test on their tires, the tire production company was able to record and log the measurements of the torque and lateral forces implemented on their tires.

## Materials

- AT105 Contactless Force/Torque Transducer
- SI-USB4 4 Channel USB Interface Module with supplied software
- Customer PC or Laptop

## How It Works

1. The AT105 Contactless Force/Torque Transducer is installed in the customer's tire friction test track.
2. The tire was tested on the company's test track where torque and lateral force was measured.
3. The SI-USB4 4 Channel USB Interface Module was able to log and graph both the torque and force results from the tire stress test.

### Tire Test Track

