

# CASE STUDY #1720 | TORQUEPRO

## DESK CHAIR

### Challenge

In the manufacturing of desk chairs there is a key component called a Torsion Bushing. This bushing allows an individual to lean back in a desk chair and not break the back of the chair off. The manufacturer needed to test the torque of the part and find out the limitations of each and every part.

#### Application Requirements:

- Torque range of 100Nm
- Measure and gauge entire “Torque Curve” for each part
- Rotate part of precise angle for pre-load assembly
- Data acquisition for part trace ability
- “Exercise” each part 10 times to give average torque

### Solution

After discussion with the manufacturer, the TorquePRO System was chosen because of its ability to monitor both torque and angle multiple times per part on the fly. The process involves the operator loading a part into the machine. The TorquePRO then rotates the torsion bushing several times to exercise the part. If it passes it is rotated into a pre-load position and moves on to the next process. If it fails, the part is removed and processes occurring before the TorquePRO test are examined to find the cause of a faulty torsion bushing based on the acquired data from the TorquePRO.

