

Syringe Needle Twist Force Torque Transducer

Industry: Medical and Healthcare

Summary

Customer Challenge

A syringe needle manufacturer uses robotic arms to assemble syringes. The robot arm picks up and places the plunger of the syringe into the syringe body, and a special assembly workstation twists the two parts together. The manufacturer needs a torque system to measure the amount of torque it would take.

Interface Solution

Interface's T2 Ultra Precision Rotary Torque Transducer can be installed into the syringe assembly workstation that twists the syringe body and plunger together. The syringe body is placed into the assembly work station where it is locked. The robot arm attaches the plunger to the syringe body. The assembly workstation's twisting mechanism then twists the two parts of the syringe together.

Results

Interface's T2 Ultra Precision Rotary Torque Transducer successfully measured the amount of torque it took to twist the parts of the syringe together.

Materials

- T2 Ultra Precision Rotary Torque Transducer
- Syringe twisting workstation
- Robotic arm

How It Works

1. The T2 Ultra Precision Rotary Torque Transducer is installed into the twisting mechanism in the assembly workstation. The body of a syringe is placed here.
2. A robotic arm picks up the plunger part of the syringe, and places it inside of the body. The assembly workstation twists the syringe body and plunger together, and the T2 captures the torque.

