

**APPLICATION SOLUTION: Catheter Coating**



**Product Family:** Electric

**Product Used:** Electric Screw Actuator

**Product Type:** Custom and Modified

**Application Requirements:**

**Stroke:** 30 inches vertical; 2 inches horizontal

**Load:** 10 lbs vertical; 1.5 lbs horizontal

**Application Description:**

Catheter coating surface testing machine used in industrial medical production

**Challenge:**

This customer had been using an in-house designed actuator on a machine used to test the coating consistency of catheters. The actuator was becoming too costly and an alternative solution was needed. The application required a vertical motion to pull the catheter from the coating solution and a horizontal motion which controlled a clamp to “pinch” the catheter surface to create drag.

**Tolomatic Solution:**

Tolomatic designed two screw actuators, one custom and one modified. The vertical axis custom actuator was designed with two carriers. One driven carrier contained a load cell and a stationary carrier that the X-axis modified actuator was mounted to. The actuators were encased in a powder-coated sheet metal to aesthetically hide the system cabling. The horizontal actuator was designed with a dual direction screw controlling the clamping device which precisely held the catheter in place. This configuration allowed the two axes of motion to be mounted directly to the catheter-carrying magazine per the defined application specifications.

**Customer Benefit:**

- Reduced component costs
- Reduced installation time
- Eliminated design and assembly time
- Accurate, consistent and precise measuring process