



# VASCULAR GRAFTING MATERIAL

**Medical - Material Handling**  
**Smooth-Running Actuated Solution for Vascular Grafting**

## **APPLICATION DESCRIPTION:**

An actuator guides a tape carrier parallel to a rotating mandrel. The tape is wound onto the mandrel which ultimately produces a tube of material. The whole mandrel is then baked in an oven and the resultant tube is released from the mandrel.

## **SOLUTION:**

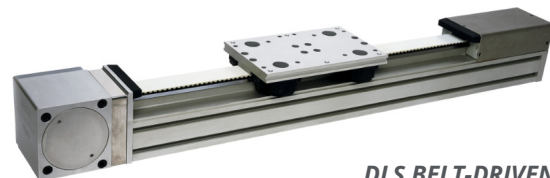
A combination of HepcoMotion® DLS actuator, GV3 linear guide, and MCS machine frame was used to meet the demanding functions of this application. A 1.5 meter long DLS (Driven Linear System) guides the tape carrier, using precision ground slides and double row bearings to achieve smooth, consistent motion. The GV3 slide performed an adjustment motion for each mandrel length and ensures process uniformity. The entire machine structure was built with the MCS aluminum frame system for ease of assembly.

## **CHALLENGE:**

Build a system that could accurately control the winding of vascular grafting material within precise limits at a slow speed. Proper winding is critical to ensure the material functions correctly following surgery.

## **WHY BISHOP-WISECARVER:**

- Customizable linear and rotary solutions
- Consistent, smooth, and uniform motion



**DLS BELT-DRIVEN  
LINEAR ACTUATOR**

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