

## **Shortens Design Cycle to Improve Cardiac Care Procedures**

## **Background:**

"Protect-E" allows the anesthesiologist to deflect the esophagus and move it away from the heart while actively monitoring the temperature to ensure the esophagus is not exposed to the energy of the ablation procedure

## **Challenge:**

- Considered injection molding but required lengthy and costly tooling cycles that could significantly delay the development phase
- Requires medical grade material

## **Solution:**

- S4 Medical consulted with Resolution Medical, to rapidly iterate designs while simultaneously manufacturing end-use parts that were comparable to injection molded equivalents
- Medical grade MPU 100 has been tested for cytotoxicity, irritation and sensitization, as well as, acute systemic toxicity, validating it for use in the esophagus
- S4 Medical was able to greatly reduce their time to market by shortening design cycles, ultimately helping them secure early clinical trials



DEVICE TO IMPROVE ABLATION PROCEDURES + SHORTEN
DESIGN CYCLE TO SECURE EARLY CLINICAL TRIALS

Made by Resolution Medical, a Carbon Production Network Partner, using Carbon MPU 100 and a Carbon M2 Printer