MEDSCI-013-E

APPLICATION SOLUTION:	Radiation Treatment

Product Family: Electric
Product Used: Rod Style Actuator
Product Type: Custom

Application Requirements:

Stroke: 22 mm
Move Distance: >3 microns
Speed: 25 mm/sec

Application Description:
Primary adjustment of radiation beams used for the treatment of cancerous cells

Challenge:
In this machine, an electric actuator was used to adjust the focus of radiation beams used to treat cancer cells. The manufacturer was experiencing increasing delivery issues with the current actuator being used (sometimes 20 weeks) and several of the engineers were frustrated with the quality control, and overall actuator package. The customer was looking for an additional source for a component that could be backwards compatible with their existing servo drive and dimensionally backwards compatible due to FDA certifications.

Tolomatic Solution:
Tolomatic worked with the customer to supply a variety of electric rod-style custom designs, including several prototypes that were able to command moves of 1 micron. A custom design was engineered to meet their budget constraints and still meet their requirements for motion, speed and space constraints.

Customer Benefit:
- 25% overall cost savings from previous supplier
- Increased aesthetic product appearance
- All performance and space requirements achieved