

APPLICATION SOLUTION: Rehabilitation Chair



Photo courtesy of VibeTech, Inc.

Product Family: Electric

Product Used: ERD15 rod actuator

Product Type: Modified Standard

Application Requirements:

Stroke: 12 inches

Application Description:

Apply pressure points to counter muscle atrophy.

Challenge:

A medical device manufacturer developed a rehabilitation chair that uses vibrations to counter muscle atrophy in patients. They were looking for an electric cylinder to provide tension on the legs of the patient by pushing them against a knee restraint. They required an economical actuator to provide smooth, silent movement, pushing at an accurate, reliable force while being subjected to constant vibration.

Tolomatic Solution:

An ERD15 electric rod actuator was slightly modified by mechanically restraining the magnets used for the position switches and mounted on the footplate mechanism. This allowed the actuator to withstand the vibration of the chair. The overall solution met their budget and exceeded life requirements.

Customer Benefit:

- Smooth, quiet motion
- Cost-effective vibration resistant solution
- Accurate dose of pressure (force) and vibration for patient recovery

(Reference: 9900-4041)