

APPLICATION SOLUTION: Solar Panel Assembly



Product Family: Electric
Product Used: MXB Belt Drive Actuator
Product Type: Standard, Custom length

Application Requirements:
Stroke: 6350 mm (250 inches)
Load: 65 kg; Horizontal, carrier down
Motion Profile: Trapezoidal

Application Description:

Aluminum rib assembly process in the manufacturing of solar thermal power systems.

Challenge:

Solar mirror panels needed to be held in a precise parabolic shape by aluminum ribbing which is joined together by an automatic clinching tool with very high precision into an optical rib. The customer needed a solution to rivet the panels to the ribbing and required a quickly delivered solution in order to meet their project time line schedule.

Tolomatic Solution:

A MXB profiled rail belt drive actuator with a 250-inch stroke was coupled together with an identical “slave” unit to balance the additional load weight during the crimping process. The actuator was able to precisely operate the crimping arms to ensure consistent positioning.

Customer Benefit:

- Found a supplier that could produce extremely long belt drives for future projects
- Quick delivery kept project on schedule