

CONTROLLING WIMBLEDON'S RETRACTABLE ROOFS DURING RAIN AND SUN!

When The All England Lawn Tennis and Croquet Club made the decision to install retractable roofs over the two Courts at Wimbledon they had envisaged a hydraulic solution. However following a design review with Moog, an electric solution was developed.

MARKET



Niche
Automation

CAPABILITY



Expertise



Modelling
& Simulation



Support



Training



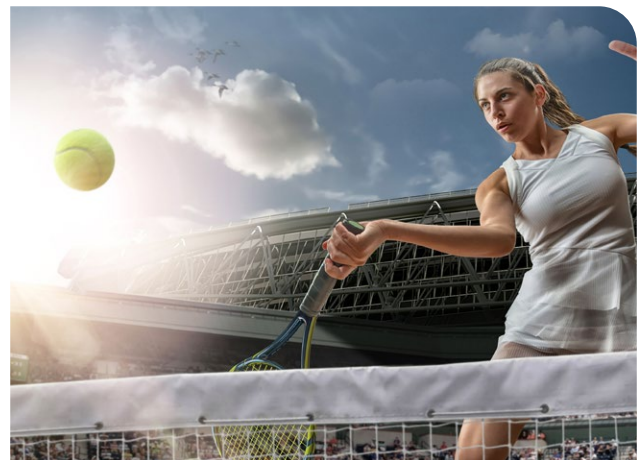
Field Service

THE CHALLENGE

To provide an electric solution capable of moving over 1,000 tonnes of steel above 15,000 fans, within a tolerance of +/- 12.5mm over a span of 75 metres, and when not in use to occupy the minimum space.

THE SOLUTION

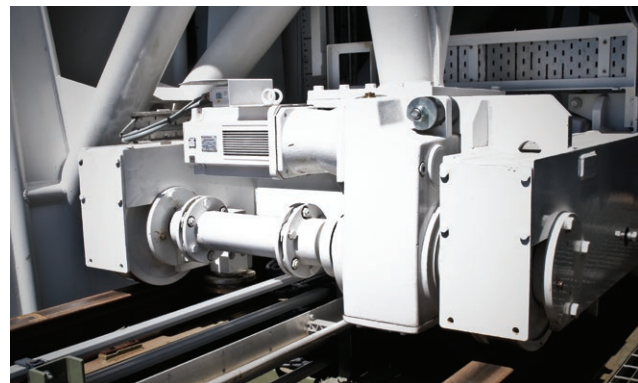
To move the two sections of roof, comprising 10 "trusses" each weighing 100 tonnes. Moog provided brushless servomotors, electric actuators, servodrives, servocontrollers, control panels, main control desk, SCADA and data logging. Also design, specification development, engineering, including dynamic modelling, commissioning and future service and support.



THE RESULT

Motion control of a unique retractable roof on an iconic building:

- Over 150 axis of control.
- Controlled movement of 10 "trusses" each weighing 100 tonnes.
- Can be fully deployed in 8 minutes.
- Demonstrates Moog's ability to provide electro-mechanical actuation (EMA) technology, and software.
- Completed on time for the June 2009 championships and continues to be highly reliable in rain and sun.
- Designed for long life and low maintenance.
- Serviced and supported by Moog.



EM ACTUATORS, TECHNOLOGY AND SOFTWARE
BRUSHLESS MOTORS

Contact us today to find out more
about **Moog precision motion control**
on **01684 858000**