



# GULF CONTROLS COMPANY

## INNOVATIVE MOTION CONTROL

**YOU CAN'T DO THAT! Tightly synch cylinders 160' apart? YES WE CAN!**



**Customer Challenge:** Tightly synching hydraulic cylinders to lift a one piece, 72,000 lb, 160' airport hangar door. The customer had installed flow dividers on smaller doors under 50', however with a 5% tolerance and no position feedback to sync the cylinders together, a larger door may buckle and fail.

**GCC Solution:** 2 hydraulic cylinders with closed loop feedback to detect the position of each cylinder. The controller then reads feedback and continually corrects and compensates each cylinder.

### How we did it: Superior mechatronics expertise

Gulf Controls provided a turnkey system solution for the automation of 2 cylinders synched together including; panel design, layout and build along with controller programming and HMI development.

- Designed & manufactured electrical enclosure & HPU
- Developed Controller "Sync" code
- Designed HMI screens including:
  - Operator screens: controller can even accept and display real time video on screen!
  - Diagnostic and maintenance screen: gather data for preventative maintenance and remote diagnostics with web server interface for remote troubleshooting
- Remote secure access to hangar door and planes
- Quick project completion time of 3 weeks

Email [mechatronics@gcc.com](mailto:mechatronics@gcc.com) to help you with your next project.

