Crew Module Center of Gravity Load Cell

Industry: Aerospace

Summary

Customer Challenge

The crew module center of gravity test is conducted to identify the specific point within a spacecraft's crew module where its entire weight is concentrated. The center of gravity test is essential to guarantee the stability and optimal performance of the spacecraft thus ensuring the overall success of the mission.

Interface Solution

Interface's 1200 High Capacity LowProfile™ Load Cells are installed at the top of the test frame. The crew module is loaded into the test frame and the center of gravity is calculated with Interface's 1200 High Capacity load cell. Data is displayed and recorded with customer's instrumentation.

Results

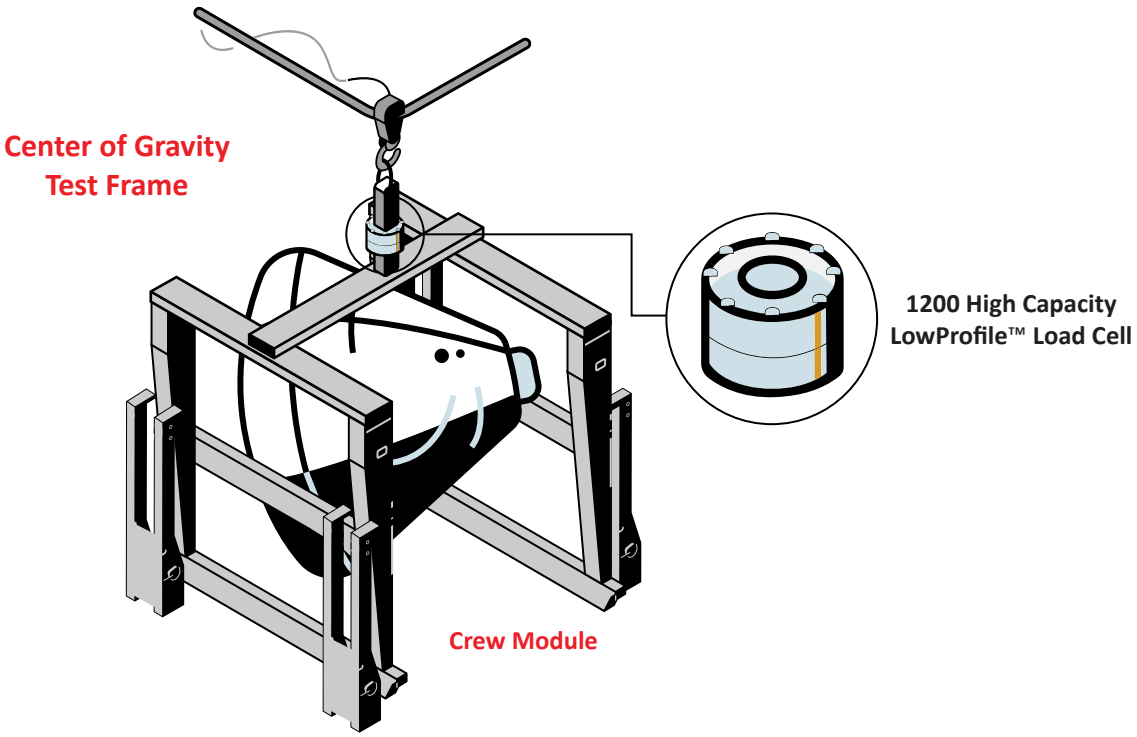
Interface's 1200 High Capacity LowProfile™ Load Cells successfully measured the weight distribution of the crew module, thus calculating the center of gravity.

Materials

- 1200 High Capacity LowProfile™ Load Cell
- Crew module test frame
- Crew Module

How It Works

1. 1200 High Capacity LowProfile™ Load Cells are installed at the top of the crew module test frame.
2. The crew module is loaded into the test frame.
3. The crew module is weighed and the center of gravity is calculated with customer's instrumentation.



Interface
FORCE MEASUREMENT SOLUTIONS

7418 East Helm Drive, Scottsdale, AZ 85260 ▪ 480.948.5555 ▪ interfaceforce.com