

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 WTSSHK-B Wireless Crosby™ Load Shackles are installed onto the crew module at three points. The crew module is loaded into the test frame, and the center of gravity is calculated with the load shackles. Data is wirelessly transmitted to the customer's computer using WTS-BS-4 Industrial USB Base Station, where it is displayed, logged, and graphed with included Log100 software. Results can also be displayed using Interface's WTS-HK-S Next-Generation Wireless Handheld.

Results

Interface's WTSSHK-B Wireless Crosby™ Load Shackles successfully measured the weight distribution of the crew module, thus calculating the center of gravity.

Materials

- WTSSHK-B Wireless Crosby™ Load Shackles
- WTS-HK-S Next-Generation Wireless Handheld
- WTS-BS-4 Industrial USB Base Station
- WTS Toolkit Software and Log100 Software Included
- Customer PC or Laptop
- Crew module test frame
- Crew Module

How It Works

1. Three WTSSHK-B Wireless Crosby™ Load Shackles are installed onto the crew module.
2. The crew module is loaded into the test frame.
3. The crew module is weighed and the center of gravity is calculated. Data is wirelessly transmitted to the customer's computer using WTS-BS-4 Industrial USB Base Station, where it is displayed, logged, and graphed with included Log100 software. Results can also be displayed using Interface's WTS-HK-S Next-Generation Wireless Handheld.

