

■ **Static and Dynamic Structural Validation**

Southern Research offers static and dynamic structural validation of component, sub-assembly, and full-scale structures for military, aerospace, and commercial applications. We have a large 35'x35' reaction floor and a 12'x12'x12' reaction frame. Our comprehensive knowledge of load application, instrumentation, hydraulic control, metal and composite materials, and test design provides turnkey structural testing services for simple proof testing or complex analytical validations

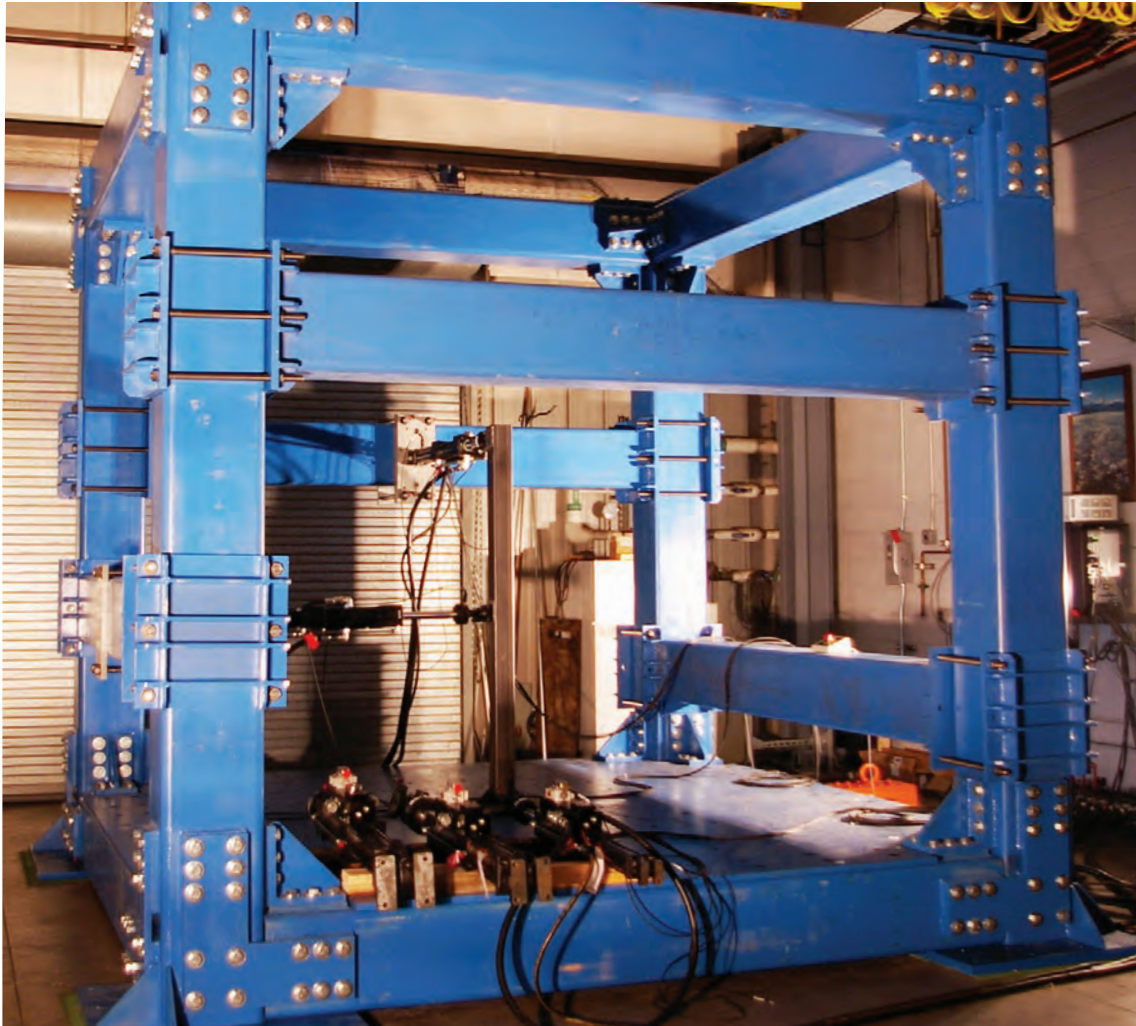
■ **Capabilities and Features**

- Multi-axis servo-hydraulic loading
 - › MTS actuators: 1 to 100 kip
 - › MTS FlexTest® 100 Control
 - › Static or dynamic (≤ 60 Hz)

- 35'x35' load reaction floor, 30' under crane
- 15-ton bridge crane hook
- 12'x12'x12' adaptable load frame
- >120 channels data acquisition
- Digital image correlation (DIC)
- Structural test planning and coordination
- Test fixture design and fabrication
- Specimen preparation and instrumentation
- Data reduction, analysis, and reporting

■ **Applications**

- Aerospace structures
- Automotive components
- Civil structures
- Infrastructure



SR

ABOUT SOUTHERN RESEARCH

Founded in 1941 in Birmingham, Alabama, Southern Research is a scientific and engineering research organization that conducts preclinical drug discovery and development, advanced engineering research in materials and systems development, and energy and environmental technologies research. SR supports clients and partners in the pharmaceutical, biotechnology, defense, aerospace, environmental, and energy industries.

We pursue entrepreneurial and collaborative initiatives to develop and maintain a pipeline of intellectual property and innovative technologies that contribute to the growth of the organization and positively impact real world problems.

www.SouthernResearch.org