Mission Critical

For more than 25 years Moog CSA Engineering has been providing mission critical motion control products. Our major customers include the U.S. Government, Boeing, Lockheed Martin, Northrop Grumman, semiconductor manufacturers and leading research laboratories. Moog CSA Engineering — a part of Moog since 2006 — is a recognized world leader in the field of vibration suppression, providing unparalleled experience in the analysis, design and production of a wide array of leading edge, high precision systems.

Integrated Systems

From offshore energy production to deep space, Moog CSA Engineering is a premier precision motion solution provider for systems requiring high dynamic performance, extreme accuracy and exceptionally low noise levels. The combined expertise of our engineering staff provides the technical depth required to meet requirements for mission critical systems. We offer a complete portfolio of systems engineering, design, and integration, test and production services covering the entire spectrum of Moog’s motion control product line.

Space:
Moog CSA’s structures connect satellites to launch vehicles. During launch, our patented Softride system reduces shock and vibration loads on spacecraft. Our SEU Secondary Payload Adapter (SEPRA)gunta up to six secondary satellites to a single primary spacecraft. The versatile SEPRA also serves as the structural backbone for NASA’s high profile LCROSS mission to the moon. On orbit our isolation systems and dampers mitigate the effects of mechanical disturbances on vibration- and jitter-sensitive payload sensors.

Defense:
Providing cost effective solutions for land, sea and air, Moog CSA’s motion control products are found on a wide range of applications from directed energy and radar detection systems to ultra-low noise underwater propulsion. Our electromechanical positioning systems help improve aiming and stabilization of vehicle payloads. Simulation, modeling, test and design engineering for UAVs enables improved performance of ISR systems.

Science and Industry:
We offer a range of both standard and custom vibration mitigation devices including tuned mass dampers (TMDs) to reduce vibration and improve performance. Our products are recognized as world-class and are easily adaptable to multiple configurations. In the semiconductor industry, Moog CSA’s high reliability damping technology is utilized to improve process yields and lower production costs. Our engineers, in collaboration with leading universities and government laboratories, are developing ultra-stable optical systems to help extend the boundaries of scientific knowledge.

Energy and Green Technology:
Moog CSA engineers excel at developing innovative solutions that require engineer-to-engineer sharing of information to help solve tough design problems. From offshore platforms to next generation wind systems, our design teams are working to solve existing production problems to improve efficiency and extend operational life. Our expertise and engineering depth accelerate early-stage technologies for partners proving innovating renewable concepts.

About Us

We are specialists when it comes to providing solutions for challenging applications. This is why our customers approach us for systems designed to improve efficiency, reduce cost and extend the operational life of their equipment. Below are some of the ways we interact with customers.

We solve problems for existing products and systems:
Most often, our customers have special technical issues that have to be addressed, problems that need to be solved. Often the customer needs solutions quickly. Moog CSA’s technical staff enjoys these challenges and works to meet them with effective hardware and software solutions.

We develop products and provide technical solutions for newer systems:
Our experience and capabilities are valuable in the early phases of a product development or system definition. Building in vibration, motion or noise control solutions from the start often leads to a better completed product. We work with customers to develop components or subsystems, hardware or software, to support their new products.

We sell several existing products:
In some cases, a customer’s needs may be met through purchase of one of our existing products. Moog CSA doesn’t have a formal catalog of products because most of what we manufacture is done on a semi-custom basis. For example, we offer specialty products in low frequency suspension, Softride spacecraft isolation systems, actuation, tuned dampers, and hexapod platforms.

We collaborate on research into new technologies:
We partner with others in applied research that takes ideas to prototypes, proof of concept and beyond. Three-quarters of Moog CSA’s engineering staff has earned a masters degree, and this academic experience is balanced with a practical hardware sense. We serve as a technology accelerator in mechanical systems, structures, electromechanical systems, and motion control so our customers can remain focused on their core expertise.

Focused on Customer Solutions

We have the expertise and experience in a range of technical specialties to provide solutions for your entire system, including:

- Structural Dynamics
- Shock and Vibration Suppression
- High-performance Control Systems
- Kinematic Analysis
- Systems Integration
- Test Systems
- Software Development
- Active and Passive
- Mechanism Design
- Control Electronics
- Test Services
U.S. LOCATIONS

Moog Space and Defense:

Albuquerque, NM
Chatsworth, CA
Decatur, GA
East Aurora, NY
Gaithersburg, MD
Mountain View, CA
Northbrook, IL
Orlando, FL
Orrville, OH
Salt Lake City, UT