

**AEROSPACE**



**STELLAR TECHNOLOGY**  
INCORPORATED

Pressure, Load/Force/Torque, Displacement, and Temperature Sensors

[stellartech.com](http://stellartech.com)





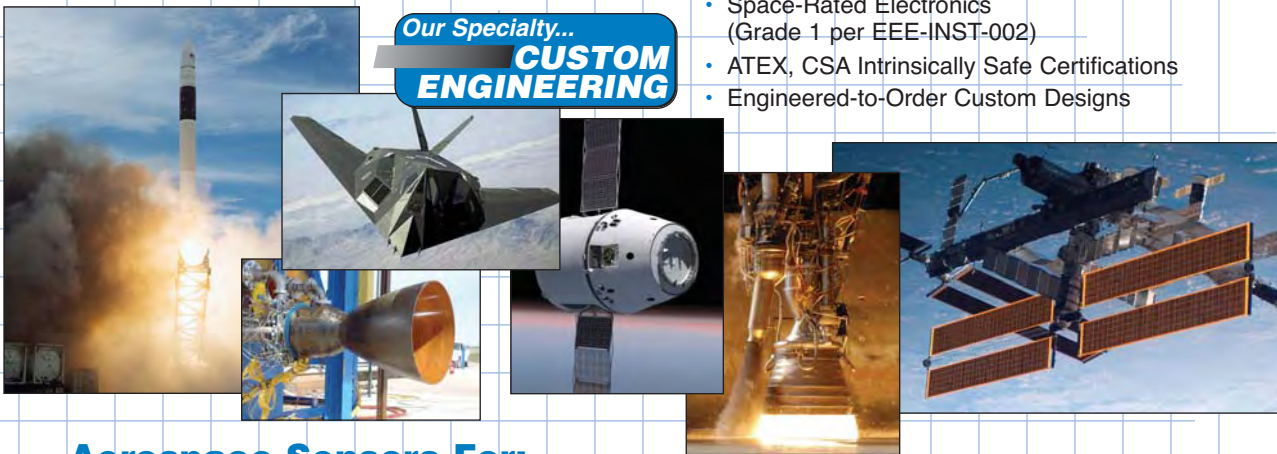
## LVDT Displacement Sensors

- Stroke Ranges from  $\pm 0.01$  in. to  $\pm 18.5$  in.
- Linearities from 1% to 0.1%
- Spring Guided, Captive Guided, Free Unguided Armatures
- AC and DC Versions
- All Welded Stainless Steel
- Precision Gauging Units with Air Push Armatures
- Submersible Designs
- Engineered-to-Order Custom Designs

## Temperature Transducers and Transmitters

- Temperature Ranges from  $-320^{\circ}\text{F}$  to  $+750^{\circ}\text{F}$
- No Thermowell Required
- Customer Specified Probe Lengths
- All Welded Stainless Steel Construction
- Hermetically Sealed
- Dual Temperature and Pressure Configurations
- Analog and Digital Outputs (Including RS232, RS485, CANbus)
- Space-Rated Electronics (Grade 1 per EEE-INST-002)
- ATEX, CSA Intrinsically Safe Certifications
- Engineered-to-Order Custom Designs

Our Specialty...  
**CUSTOM ENGINEERING**



## Aerospace Sensors For:

### General Purpose

- Components testing
- Proof-of-concept validation
- Materials testing
- Wind tunnel testing
- Fatigue testing

### Qualification Testing

- Flight simulators
- Iron-bird testing
- Hydraulic systems testing
- Linear/Rotary actuators
- APU production and flight-line testing

### Engine and Propulsion

- Jet engine test stands
- Rocket engine thrust tests
- Rocket engine fuel control
- Jet engine/rocket engine diagnostics
- Ground support monitoring systems

### Primary Systems

- Landing gear systems
- Cargo deployment systems
- Hydraulic actuator testing
- Airframe stress tests
- Flight control systems
- Fuel monitoring systems
- On-board waste disposal systems

### Space Qualified

- NASA Shuttle Program
- COTS (Commercial Orbit Transportation Systems)... Cargo and Crew
- NASA Constellation Program (Ares I, Ares V, Orion) Satellites (Commercial and Defense)
- Launch vehicles

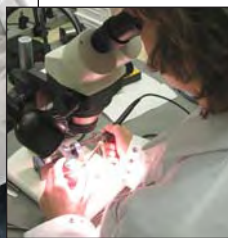
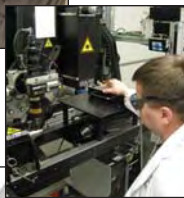
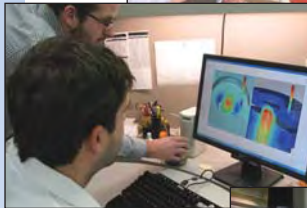
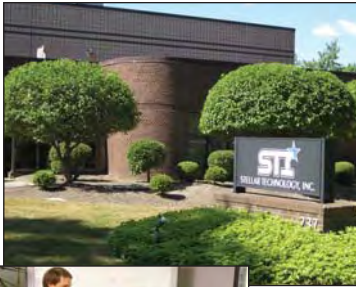
### Aircraft Assembly

- Components testing
- Materials testing
- Jack Stands
- Automated fastener systems
- Cable tension monitoring

Call: **716.250.1900**

# Capabilities

*Stellar Technology designs and manufactures a comprehensive offering of pressure transducers/transmitters, load cells, force sensors, torque transducers, temperature transmitters, and displacement sensors used in test and measurement applications across a wide range of industry sectors including aerospace, oil and gas, marine/oceanographic, automotive, medical, industrial automation, geophysical, power generation and many more.*



**Why Stellar Technology?** *Whether it's an intelligent pressure transducer used by NASA on the Ares 1 reusable solid rocket motor, a load cell to measure a commercial launch vehicle thrust, or a special satellite sensor with radiation hardener electronics, what causes aerospace engineers and designer to choose Stellar Technology sensors for their application solutions?*

## **One word: Capabilities.**

*Stellar Technology combines sales capabilities, engineering capabilities, manufacturing capabilities, and service/support capabilities into one focused business objective:*

**Provide the customer with the optimum sensor solution.**

### **Sales Capabilities:**

- Experienced technical sales professional located in your area
- Direct link to STI design engineers
- Knowledgeable inside sales engineers
- Complete pre-sales application review process
- Facilitate technical Lunch & Learns at customer's site

### **Engineering Capabilities:**

- Design engineers with years of practical sensor application experience
- Specialists in mechanical, electronic, and software design
- Innovative design and simulation tools
- ISO9001 registered documentation and control
- Work directly with customer's engineers
- Creative solution providers

### **Manufacturing Capabilities:**

- Complete vertical integration (raw material through final calibration)
- 18 CNC machines (up to 8-axis)
- Wire and probe EDM machining
- Laser and TIG welding
- Ultrasonic cleaning
- Micro assembly
- Automated pressure compensation and calibration
- 5 load cell calibration systems (to 600,000 lbf)
- 1,000,000 inch-lbf reaction torque calibrator
- High-reliability/traceability assembly and test area
- Comprehensive inventory of raw materials
- Finished goods inventory programs (standard and customer-specific)

### **Service/Support Capabilities:**

- Complete repair and recalibration (including non-STI manufacturers)
- Rapid-response on-site technical field support
- Ready access to regional sales offices
- Order status and expediting
- Direct access to STI's design engineers
- 24 hour web access to technical manuals

**Your Application-Solution Source<sup>SM</sup>**

ISO 9001



Find More Information at:  
[stellartech.com](http://stellartech.com)

Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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