# Aerospace



Improving reliability, DSTI rotary unions undergo the most sophisticated inspection technologies available today.

DSTI offers innovative and high performance aerospace rotary unions that are customized to integrate into customer flight hardware designs.

DSTI provides government and commercial aerospace manufacturers with high quality fluid rotary unions for flight & test systems. Contact DSTI to learn more about DSTI's aerospace industry solutions.

### **Applications**

- + Space-Based (Orbiting) Solar Power
- + In-Orbit Refueling & Storage
- Airborne Radar Antenna Cooling Systems

**Environmental testing** & material certification



High speed /pressure specialized designs

+ 2 PASSAGE + >1 RPM + 2428 PSI + MEDIA: CHEMICAL + MATERIAL: STAINLESS STEEL Specialized Example 1 - designed for a thermal control system for next-gen spacecraft

radiators. Features include a compact, lightweight construction, electrical slip ring ready design and specialized vacuum jacketed tubing to reduce media temperature loss.

+ 3 PASSAGES + 30 RPM + 175 PSI + MEDIA: GAS, WATER + MATERIAL: STAINLESS STEEL Specialized Example 2 - designed for a Disorientation Research Device (DRD). The system aims to help researchers study visual / vestibular interactions in efforts to improve safety for military aviators. Features a heat-treated shaft and integrated crosstalk

+ SINGLE PASSAGES + 1 RPM + 50 PSI + MEDIA: CHEMICAL + MATERIAL: CARBON STEEL Specialized Example 3 - designed for a micro gravity environment for a robotic satellite refueling system. Features include specialized components, seals and environmental testing and material certifications.





## **About Us**







### DSTI specializes in the design and manufacturing of application-specific fluid solutions worldwide.

Between our proven technology and long-term experience working with highly complex applications, we aim to achieve our customers' project goals by reducing costs, increasing efficiency, and decreasing risks.

Our core business segments are fluid rotary unions, electrical slip rings, and value-added products and services providing a singlesource solution from design and manufacturing through to testing and qualification - all under one roof.

We conduct our operations to ensure our people work together and take responsibility for the health and safety of ourselves and others, to minimize our impact on the environment and to ensure the best quality in products and services.

### **IN-HOUSE CAPABILITIES & SERVICES**



Engineering & Simulation



**Project** Management



**CNC** Precision Machining



Assembly, Testing & Qualification



Inspection & Quality Management



Welding & **Fabrication** 

See project examples at www.dsti.com/industries



