

Alternative Energy



DSTI's long-life rotary union designs provide reliable performance for the most demanding environments.

High pressure & multiple passage designs

Integrated mounting & electrical slip ring options

Intelligent designs deliver increased efficiency and reliability. DSTI offers innovative rotary union designs specialized for wind, solar, biofuel, hydropower & nuclear energy.

With worldwide growth in alternative energy, DSTI understands the challenges faced by next-generation energy equipment designers. DSTI offers specialized solutions to fit the unique requirements of each application.

Applications

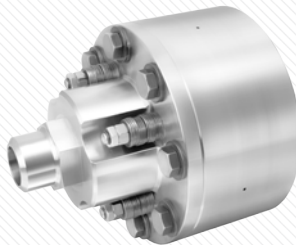
- + High temperature swivels for concentrated solar power
- + Rotating joints for automated applications in nuclear power
- + Hydraulic rotary unions for wind turbine blade pitch control
- + Rotary joints for hydroelectric (Kaplan) turbine pitch systems

+ 2 PASSAGES + 50 RPM + 5,100 PSI
+ MEDIA: OIL + STAINLESS STEEL



Specialized Example 1 - designed to provide hydraulic circuit for blade pitch control. Features include corrosion resistant materials for potential use in offshore environments and hydrodynamic seals with minimal oil bypass for limiting stress on the hydraulic system.

+ SINGLE PASSAGE + < 1 RPM + 3,625 PSI
+ MEDIA: STEAM / HEAT TRANSFER FLUID + STAINLESS STEEL



Specialized Example 2 - designed to provide rotational movement to collector piping in a parabolic trough concentrated solar power (CSP) field. Features include a high temperature packing sealing system (1,000° F), internal corrosion-resistant bearings, and a design for direct welding to the piping system.

+ 2 PASSAGES + 325 RPM + 700 PSI
+ MEDIA: OIL + CARBON STEEL



Specialized Example 3 - designed for a hydroelectric (Kaplan) turbine application. Features include a specialized design for direct integration into the turbine governor and an electrical pin connector slip ring for electronic feedback data.

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 single-source 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

