



## **Stellar Technology**

237 Commerce Drive Amherst, NY 14228 • USA Tel: 716.250.1900 Fax: 716.250.1909 Web: stellartech.com Email: info@stellartech.com Load Cells for Well Logging Systems

Custom Designed



# **Application Summary**

Oil field service providers use weight indicators and depth measuring devices on wireline when deploying and retrieving well logging tools in wells. Often a load cell is integrated into the depth and weight measuring assembly system to provide precise tension measurement and an electronic readout of the suspended weight on the wireline. This electrical telemetry is transmitted via cabling to the surface to communicate to the operator the depth of the wireline tools as well as many other logging measurements.

### **STI Solution**

An independently owned well logging company came to STI in search of a load cell that would connect to their custom steel-braided relief cabling system. The bolt-type anchor shackle S-beam load cell they were using was not designed to survive moisture exposure, so when the well-logging company needed to apply the wireline measuring system in a water well, they knew they needed a custom engineered solution. The customer required a transducer that would be resistant to stray voltage up to 220V and that was designed to connect to their custom steel-braided strain relief electrical cabling system. STI answered with a stainless steel, hermetically sealed Model RDE900 shackle load cell transducer, modified with custom fittings for their preferred electrical cabling. STI provided a sensor product with enhanced accuracy achieved by incorporating a precision shackle design, increased durability with improved fatigue rating, and additional customization potential for internal signal amplification.

## Shackle Load Cell Series: RDE900

- Load range: 0-10,000 Lbs Tension (can be much higher...to 120K or more.)
- All Welded Stainless Steel
- Shock and vibration protection
- Output options2mV/V
- 4 20mA,
- 0 5Vdc,
- 0 10Vdc
- CANbus, RS-232, RS-485 digital output options
- Connection to steel braided, strain relief electrical cabling (not a standard option)
- Intrinsically safe certification available

# **STI Advantages**

STI offers experienced engineering support to satisfy the unique design and construction challenges our customers face. We work within our customer's constraints to design and deliver a sensor solution for their unique applications. We apply tried and true strain gage sensor technology and our in-house CNC machining expertise to design and manufacture only the highest quality all-welded stainless steel sensor products. All our load cells come with a 5-point calibration record traceable to NIST as a standard.