COILED TUBING & E-COIL SERVICES
COIL DRILLING TECHNOLOGIES
PROVEN EXPERIENCE. TRUSTED RESULTS.
Applying engineering and ingenuity to create innovative solutions.

As well telemetry moves beyond traditional well completions, Cudd Energy Services (CES) has modified its approach to coiled tubing technology. In today’s horizontal environments, we are building better solutions for unconventional challenges and resource plays.

Our technology features proprietary string designs with higher strength capabilities and rigidity. This provides quicker trip times, improves safety, and increases productivity in well completion operations. By combining downhole camera technology with our e-coil capabilities, we facilitate real-time and memory data acquisition for downhole logging and observation.

More importantly, our personnel are highly trained, experienced specialists and engineers who pair ingenuity with the latest technology to deliver innovative solutions. Our specialized levels of expertise and prediction models provide you with the best information for each concentrated region of interest.

Benefits

• Safer live well intervention operations
• Quicker mobilization with faster rig-up and rig-down processes
• Reduced trip time
• Significant cost reduction
• Trained specialists to monitor and control operations
Cudd Energy Services (CES) offers a comprehensive portfolio of services for completion, production, and well intervention applications. From a simple sand wash to a complex, high-pressure well recovery operation, CES continually evaluates new methods for coiled tubing applications, equipment, and technology.

Applications
- High Pressure/High Temperature (HPHT)
- Jetting, Displacement, and Cleanout
- Milling, Drilling, and Underreaming
- Dead-String Stimulation
- Cement Squeezes and Packers
- Asphaltene and Scale Removal
- Thru-Tubing Gravel Packs
- Siphon, Velocity, and Injection String Installation
- Flowline Installation and Cleanout
- Sand Cutting
- Multi-Zone Stimulation Treatments (fracturing/acidizing)
- Abrasive Perforating
E-COIL

Quickly growing in versatility, our e-coil capabilities offer multiple solutions for downhole information gathering. Our e-coil services present our customers with a cost-effective method to acquire downhole data to help identify problems, reducing downtime and costs, while enhancing production.

**Cased-Hole and Open-Hole Applications**

- Cased Bond Log
- Temperature Log
- Gamma Ray/Neutron/CCL
- Perforations
- Casing Cutting
- Caliper Surveys
- Bridge and Isolation Plug Settings
- Cement Retainer Settings
- Convey Tools
- Fishing
- Plugs Setting & Retrieval
- Well Logging (Real Time and Memory)
- Post-Production Identification Logging
- Live Camera Well Insertions
- Multilateral Navigation
Coil Drilling Technologies (CDT) performs slim-hole directional services in multibench and multileg horizontal applications. This innovative coil steering technology provides increased directional control and can be deployed on a variety of e-coil reels at a range of lengths and sizes. The technology is optimal for open-hole completions up to 4⅞-inch OD, whipstock setting and multilateral navigation for remedial intervention or stimulation operations.

**Applications**
- Setting Whipstock
- Directional Drilling
- Casing exits
- Lateral extension
- Open-hole sidetracks
- Multilateral Navigation
- Logging run
- Cleanouts
- Stimulation
- Fishing
CES continually strives to provide the best service to our customers. This means providing technology that helps our customers stay informed of their operations and make better decisions, whether in the field or in the office.

Our remote viewer provides real-time monitoring, assessment, and diagnostic capabilities for coiled tubing operations. Integrated with the OrionNet™ data acquisition software, the remote viewer streams live well data through a secure satellite connection. The satellite connectivity also provides reliable telecommunication access to field operations, especially in remote locations where cellular and wired lines are unstable or not available.

OrionNet™ data acquisition software used with permission from National Oilwell Varco.
EXPERIENCE and EXPERTISE

Experience and expertise are the cornerstones of our coiled tubing and e-coil services. Our personnel are highly trained, IADC certified specialists and engineers who complete ongoing training. Our engineers utilize a full suite of advanced modeling software that helps predict string performance, well interaction, and fluid behaviors to design the optimal plan for your well’s performance.

CUSTOM ENGINEERING

Our coiled tubing units are engineered to accommodate a variety of environments and applications for onshore and offshore operations. Adhering to recommended procedures outlined in API 16ST, API 16D, API 53, and BSEE standards helps ensure our equipment is engineered to the highest specifications to meet your objectives.

Our injection systems include injectors that can safely handle O.D. coil ranging from 1 to 2.875 inches, with a continuous maximum pull force of 140,000 pounds, and a continuous maximum snub force of 50,000 pounds.