ENGINEERED COILED TUBING DESIGNS FOR CHALLENGING APPLICATIONS

Worldwide success in development of unconventional resources has driven the “Shale Revolution” and new technology to unlock resources contained in the reservoir rock. Well Operator’s requirement for optimal field efficiencies and wellbore exposure to high-quality reservoir rock has driven the demand for extended-reach horizontal wells.

Long horizontal sections, tortuous wellbores, high-pressure environments and other complex well conditions present challenges to the companies tasked with completing them. SMARTaper™ and Continuous Taper technologies available from Global Tubing allow the engineer to design optimized, custom-tapered tubing strings that overcome the conditions that would typically limit the use of coiled tubing in extended reach horizontal wells.
SMARTaper TECHNOLOGY

SMARTaper technology provides additional strength to the tubing at the bias weld, where you need it, while tapering to a lighter gauge wall thickness where extra strength is not required. Wall thicknesses can be increased or decreased to yield stiffness or flexibility, depending upon the well profile. Utilization of this technology allows the engineer to optimize a tubing design for better performance in the toughest wells.

- Extended Reach
- Maximized Fatigue Life (Running footage)
- Tubing Weight Optimization (Logistics)

Tubing design and performance modeling on third-party software and real-world successes in field operations in the toughest conditions has proven SMARTaper™ and Continuous Taper designs outperform conventional taper designs for extended reach wells.

Contact Global Tubing for engineering support for SMARTaper or Continuous Taper coiled tubing designs.

Sizes and grades are available to handle the higher pressures and demands of modern extended reach horizontal wells.

COILED TUBING DESIGN OPTIMIZATION WITH SMARTaper™ TECHNOLOGY AND ENGINEERED SOLUTIONS

- Optimized Wall Thicknesses for Adequate Overpull Capabilities
- Heavier Wall Thickness Strategically Located to Maximize Horizontal Reach and Increase Durability
- Lighter Wall Thickness in the “Whip End” for Extended Reach

TUBING SIZES

OUTSIDE DIAMETER

1.500” (38.10 mm) to 3.250” (82.55 mm)

WALL THICKNESS

0.109” (2.77 mm) to 0.276” (7.01 mm)

TUBING GRADES

GT-90 (90,000 psi yield)
GT-100 (100,000 psi yield)
DURACOIL 110 (110,000 psi yield)