



## BlueCoil® Technology achieves more than 2.2 million running feet in the Permian Basin

A service company achieved a record amount of running footage in which the BlueCoil® string performed flawlessly for 79 jobs spanning an 8-month service life.

### Summary

#### Unconventional performance

A coiled tubing service company was running conventional tubing strings for its operations in the Permian Basin. As expected, these conventional strings had to be changed frequently in order to accommodate their limited useful life span. On average, these conventional strings were lasting approximately 425,000 running feet.

Tenaris offered the customer its innovative BlueCoil® technology, a heat treated coiled tubing that is designed to last between two to four times longer than conventional coiled tubing. For nearly a year, the customer continued to run its BlueCoil® strings longer and longer, achieving running footage and fatigue milestones not previously seen in conventional coiled tubing.

The consistency in performance from BlueCoil® led to the customer to pushing the fatigue limits further than ever before. As a result of the customer trusting in the technology, they were able to achieve a remarkable record of 2.2 million running feet at 99% fatigue on their model.

### Challenges

#### Conventional difficulties

The service company was facing the industry's usual inconveniences caused by the uncertain life expectancy of conventional coiled tubing strings. This inconsistency forces operators to change strings frequently in order to avoid failures, or on site NTP. This time consuming activity results in lost revenue for the service company; therefore, the customer was willing to apply Tenaris' innovative technology in order to achieve more efficient coiled tubing operations.

### PROJECT PROFILE

#### Location

Permian Basin, Texas,  
United States

#### Products Highlighted

2.375" diameter, HT-125,  
BlueCoil® technology

#### Type of Well

Onshore



▲ BlueCoil® technology is a heat treated coiled tubing that is designed to last between two to four times longer than conventional coiled tubing.



- ◀ Tenaris has deployed more than 350 BlueCoil® strings since 2015, totaling more than seven million feet shipped worldwide.

## Solutions

### Longer life in the field

The customer ordered a 25,900 ft. long, 2.375-inch diameter HT-125 BlueCoil® string. BlueCoil® technology is based on new steel designs, never used before in the industry, developed by Tenaris to produce coiled tubing that has a homogenous microstructure and, therefore, has better fatigue resistance than any other coiled tubing in the world.

The life of a conventional coiled tubing string is primarily limited by the fatigue life of its bias weld. In contrast, the uniform microstructure of a BlueCoil® string offers an advantage in string longevity and fatigue resistance. This allows greater utilization of the string and brings additional strength, reliability and longer useful life to coiled tubing operations.

BlueCoil® strings are also compatible with all field equipment currently used to run coiled tubing, so there is no need for special handling or unique equipment.

## Results

### A global record

Using BlueCoil® technology, the service company was able to achieve a new industry record. The running footage of the large diameter BlueCoil® string currently stands at an outstanding 2.2 million feet.

The reported fatigue usage was 99% of the Model Recommended Retirement limit. The string performed flawlessly over an 8-month service life that included 79 jobs, including milling, cleanouts, fishing, toe preparation, and perforation runs.

With a lifespan, in this case, of five times longer than conventional tubing, this technology not only achieved a notable industry milestone, but also saved the customer a considerable amount of time and money.

### Field-proven results

Tenaris has deployed more than 350 BlueCoil® strings since 2015, totaling more than seven million feet shipped worldwide. The technology has been applied by 51 service companies, with 35 of those companies operating in North America as of Q1 2018.

In addition, over 200 million total running feet have been achieved in field operations, and over 60% of all BlueCoil® strings are still operational.



For contact information, please visit our site:  
[www.tenaris.com](http://www.tenaris.com)