



# TK™ -340XT

Drilling industry practices have dictated the need for internal coating systems that offer greater flexibility, abrasion resistance and chemical performance than historically used materials. As a result, we continue to enhance our coating systems by developing new coatings with greater levels of abrasion and chemical resistance that meet today's environments.

TK™-340XT is a modified-novolac coating formulated to provide greater flexibility while delivering excellent chemical, abrasion and wear performance over wide temperature and pH ranges. By design, it will maintain barrier properties under repeated stresses imposed during drilling and completion operations. This high-performance coating prevents corrosion pitting, which can lead to corrosion fatigue, washouts, and failures through twist-off. Coated drill pipe has proven to extend asset lifecycle three to four times compared to uncoated drill pipe.

The surface finish of the coating provides increased hydraulic efficiency and deposit mitigation. In addition, power reductions of 10% to 25% are commonly realized due to the reduction of friction losses throughout the drilling/completion string.

## Specifications

Type	Modified Novolac (Powder)
Color	Dark Green
Temperature	Withstands all temperatures commonly encountered during drilling, provided circulation is maintained
Pressure	To yield strength of pipe
Applied Thickness	7–14 mils (177–355 $\mu\text{m}$ )
Primary Applications	Drill pipe coating for corrosion, abrasion resistance and hydraulic efficiency
Primary Service	Natural and synthetic drilling fluids

### Stimulation Fluids:

When stimulation fluids are charged through coated tubing, there is generally little effect if the fluids are flushed completely through the tubular. However, some organic acids, caustic and solvents may have a detrimental effect on certain organic coating systems and should be evaluated prior to use. If stimulation fluids are left in the tubing, they can reach formation temperature and cause accelerated attack on the coating. A Tuboscope representative should be consulted when stimulation is contemplated.

### Sample of Testing Capabilities:

#### Thermal Analysis

- Differential Scanning Calorimeter (DSC)
- Thermomechanical Analysis (TMA)
- Thermogravimetric Analysis (TGA)

#### Spectroscopy

- Fourier Transform Infrared Spectrophotometer
- Electrochemical Impedance Spectroscopy (EIS)
- Contact Angle

#### Chromatography

- Gel Permeation Chromatograph (SEC)
- High Performance Liquid Chromatograph
- Gas Chromatograph

#### Additional Physical/Chemical Testing

- High Pressure Autoclaves
- Microscope Analysis
- Immersion Testing
- Flow Loop Analysis

#### Product Development

- Lab Compounding Capabilities