

TK™-Drakōn

For over 80 years, Tuboscope™ has led the industry in the development and supply of innovative coating products that increase tubular life and provide better economic efficiency to ensure the end user gets the most out of their assets. As the energy industry continues to evolve, we see significant growth in alternative energy, and innovation in drilling & production techniques. To meet the needs of these challenging environments, we continue to develop cutting-edge coating technologies.

Our ongoing effort to address the changing needs of the industry has led to the introduction of low thermal conductivity coatings. Reducing the thermal conductivity of the coating allows the end user the ability to better maintain optimal fluid temperature within the pipe.

As a result of the success of our first insulative coating, and in response to customer requests for a more robust product, we developed TK-Drakon Coating. This innovative technology consists of a proprietary topcoat chemistry that provides excellent tubular performance, including greater abrasion, chemical and impact resistance, along with improved flexibility and lower thermal conductivity.

Specifications

Type	Proprietary Resin Technology
Color	Green
Temperature	400°F (204°C) or all temperatures commonly encountered during the drilling process, provided that circulation is maintained
Pressure	To yield strength of pipe
Applied Thickness	20–30 mils (508–762 µm)*
Thermal Conductivity	0.1620 W/mK

*System allows for thicknesses outside this range based on application needs.

Stimulation Fluids

When stimulation fluids are charged through lined 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 liner 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 liner. A Tuboscope representative should be consulted when stimulation is contemplated.

Sample of Testing Capabilities

Thermal Analysis

- Differential Scanning Calorimeter (DSC)
- Thermomechanical Analysis (TMA)
- Guarded Heat Flow Meter (GHFM-01)
- Thermogravimetric Analysis (TGA)

Spectroscopy

- Fourier Transform Infrared Spectrophotometer
- Electrochemical Impedance Spectroscopy (EIS)
- Optical Tensionmeter

Chromatography

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

Additional Physical/Chemical Testing

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

Product Development

- Lab Compounding Capabilities

