

Tuboscope 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 enhance efficiency to ensure the end user gets the most out of their assets. As the energy industry evolves, we continue to develop cutting-edge coating technologies to meet the needs of these challenging environments.

This commitment to innovation has led to the introduction of low thermal conductivity coatings. Reducing thermal conductivity of the coating allows the end user the ability to better maintain optimal fluid temperature within the pipe.

Building on the success of our first insulative coating, and in response to customer requests for a more robust product, we developed TK-Drakōn Coating. This novel technology consists of a proprietary topcoat chemistry that delivers 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

*Coating thickness ranges provided on marketing literature and in technical reports are a general range and do not encompass allowed variances defined in Tuboscope's SOP. These variances come from material type, geometry, and +/- allowances outlined in the SOP. For true thickness range and allowances for a specific product/application, please contact a member of the Coating Technical Support or Corporate Quality Team.

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

- 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

