

TK™ -900

TK™-900 is a powder applied, thick-film coating based on thermosetting resin chemistry. It was specifically designed to provide the highest level of wear resistance possible while still maintaining high temperature performance and chemical resistance. Modifications were made to the filler and additive package to enhance the abrasion resistance already obtained through the resin chemistry. TK-900 resists mechanical damage normally experienced in high abrasion applications, such as rod pumping and wireline intervention, while still retaining a high level of corrosion resistance.

Recommended Services

- CO₂ Injection WAG
- Oil / Water / Gas Production
- Brine Injection / Disposal
- Flow Lines
- Line Pipe

Benefits

- Excellent Adhesion
- Excellent Flexibility
- Moderate Acid / Caustic Resistance
- Enhanced Abrasion Resistance

Specifications

Type	Novolac (Powder)
Color	Dark Green
Temperature	300°F (149°C)
Pressure	To yield strength of pipe
Applied Thickness	7–15 mils (178–381 μm)
Primary Applications	New and used Tubulars
Primary Service	Production tubing, injection wells, disposal wells containing oil, natural gas, fresh and salt water, CO ₂ , mild H ₂ S and alkaline fluids to pH 12
Limited Service	Maximum operating temperature and H ₂ S level will be dependent on total operating environment.

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

