

TK™ -70XT

TK-70XT™ is a tough, flexible, thick-film coating that has been modified for enhanced abrasion resistance. Laboratory testing has shown it to be 11x more abrasion resistant than standard TK-70. This thermoset coating is suitable for CO₂ injection, oil and water service, including rod pumping applications where excellent mechanical performance is required. Hydrocarbons can cause problems with certain corrosion control solutions in water handling. TK-70XT is hydrocarbon resistant and provides outstanding protection during systematic acidizing. This coating can be applied to new or used pipe, holiday free, which results in a smooth surface that provides increased hydraulic efficiency and deposit mitigation.

Specifications

Type	Epoxy (Powder)
Color	Dark Red
Temperature	225°F (107°C)
Pressure	To yield strength of pipe
Applied Thickness	10–20 mils (254–508 µm)
Primary Applications	New and used tubular goods
Primary Service	Subsurface CO ₂ and water handling systems, salt solutions, crude oil production (rod pumping), and mild mineral acids
Limited Service	Should be limited to low concentrations of H ₂ S

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

