TK™-216

TK™-216 is a flexible coating for extremely corrosive environments. It is a unique coating material utilizing specific epoxy resins with phenolic curing agents to produce a material suitable for general production environments and water handling systems. This formulation results in a material with improved adhesion over standard epoxy systems and offers a useful pH range from 4 to 11. The good abrasion and high impact resistance makes TK-216 an excellent coating for erosive fluids and is a primary choice for chemical disposal wells and flowlines. Since the surface finish of the coating is typically less than 5 microns in roughness, TK-216 will improve the hydraulic efficiency of piping system and protect the pipe against organic and inorganic incrustations.

Specifications

Type	Epoxy *(Powder)*
Color	Brown
Temperature	203˚F *(95˚C)*
Pressure	To yield strength of pipe
Applied Thickness	6–20 mils *(152–508 µm)*
Primary Applications	Injection/Production tubing and casing, downhole accessories, flow-lines, well heads, valves pumps and other custom items.
Primary Services	Surface and sub-surface, water handling systems, crude oil, mild caustic and mineral acids, chemical disposal wells, and potable water service.

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

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