

YEAR:

2009

PROJECT:

Shaybah - 16" x 8.5km crude line to GOSP-2

DESCRIPTION:

There was internal refurbishing of a buried crude oil pipe line, which was used for 10 years, by extrusion/wiping (the steel was showing some slight pitting corrosion in some areas). After mechanical and chemical cleaning, using solvents and acids in multiple runs, the specified dry film thickness of 200µm was applied in four coating runs, with approximately one or two hours between each.

A coating run could contain up to 1800L of mixed paint (10 sets of 135 liters of base and 45 liters of hardener). Part of that has to be pumped out after arriving at the end to ensure the entire 8.5km length is coated.

OWNER:

Saudi Aramco

LOCATION / COUNTRY:

Shaybah, Saudi Arabia

SIZE (Sqm):

 11,000 m²
CONTRACTOR:

1. Al Gosaibi Oil Field Services
2. Mining, Oil and Gas Services (South Africa)

COATING SYSTEM:

In-situ (extrusion or wiping) application.

System sheet 2307: "pipe line systems - in-situ cleaning and coating"

Information sheet 1493: "internal chemical cleaning of steel pipes - in-situ application"

SigmaLine 415 (5415), >200µm in 4 coats

Benefits of in-situ application:

- Postpones the need for pipeline renewal or replacement.
- Allows for a fast and cost effective extension of the lifetime of existing pipeline.
- Can also be used for change of transport medium (oil to water for instance).

Sigma also has a phenolic in-situ lining available SigmaLine 445 for higher temperatures or more aggressive media Sigma has a 30 year track record in in-situ application and has worked with the main contractors in this field (there are only a few world wide, capable of using this technology).

After a 38km project with KOC in Kuwait with SigmaLine 445 and a project in Hong Kong, this was Sigma Paints Saudi Arabia's 3rd supply of in-situ coating projects in as many years.

