

Petrochemical Facility - Feedstock

South Korea / 2016

Problem

A petrochemical facility in South Korea needs to protect their facility from condensate feedstock loaded with black powder contamination. The contamination was coming from the refinery and tank farm upstream.

Solution

Install and operate a magnetic separator system on the inlet feed stream to remove black powder from product flowing at ~70,000 bopd. For maximum holding capacity, the magnetic separator system is oversized for this application.

Result

Collection of up to 200 lbs/day of black powder was expected; however, during the 1st 48 hour period, over 50 lbs of black powder contamination was captured. If that data is extrapolated over 1 year, over 9,600 lbs (4.8 ton) of contamination would have been captured.

Application Data	
Operating Fluid	Condensate
Operating Temperature	463.7° F

Magnetic Separator	
Vessel	48" OD x 100" L
Magnetic Elements	32 x (2" OD x 74" L)

