

LPG Slip Stream Test

Gulf Coast Refinery, USA / 2016

Problem

Petromax Refining Company is a new refinery in Houston that is experiencing high levels of black powder contamination in its' incoming product streams. Black powder in the LPG product stream on the outlet of the cracker column lowered its quality and product value.

Solution

A BPS magnetic separator was installed on a slip stream downstream of the cracking tower, and downstream of traditional filters to compare filtration efficiencies.

Results

The test was successful; the magnetic separator element captured significant amounts of ferrous and non-ferrous contamination missed by the conventional filters.

Test Data	
BPS Magnetic Separator	1" OD x 3 ½" L
Slip Stream Size	1/2"
Slip Stream Flow Rate	5 gph
Temperature	145° F
Test Duration	14 days
Black Powder Collected	18 g
Sample Size	9.58 g
Particulate Size	1-100 microns
Particuate Composition	50,5% Iron 23% Iron Sulphate 21,5 Sulfer 5% Magnesium, Calcium, Silica, and Aluminum.

Magnetic Separator Location



Contamination collected after 10 days

