



Amine Optimization

Specializing in Amine Unit Performance

Magnetic Filtration for Iron Sulfide & Iron Oxide Removal



Processing units in many facilities can be constantly exposed to corrosive environments. Thus, managing corrosion and solids to low levels is essential for maintaining performance and minimizing costs. Iron sulfide (FeS) and other iron components are a common by-product of H₂S corrosion, erosion and oxidation, and often causes equipment failures along with surface fouling. This is why eliminating FeS from the inlet to the plant and units is paramount for all sour gas processing facilities. A novel solution for this problem is to use magnetic filters. Iron sulfide and iron oxide are magnetic materials that can be removed using a magnetic filter.



Benefits:

- No consumables
- Simple maintenance
- Minimal waste
- High efficiency magnetic particle removal
- Long operational life
- Technical support

The iron sulfide and iron oxide magnetic filtration systems & total solutions by our partner BPS are designed for unloading the facility front end process of solids directly impacting vessels filled with solids. Each system is tailored for the specific facility for best cost and performance.

				
Petchem Feedstock <ul style="list-style-type: none">• 70,000 bpd of condensate feedstock• Expected 200 lbs./day of black powder• 53 lbs. after 2 days on magnetic separator due to non-uniform flows	Refinery (Kerosene) <ul style="list-style-type: none">• Houston ship channel facility• Downstream of CDU, upstream of kero pump• Replaced cone strainer & eliminated constant pump replacements	LPG Ship Loading <ul style="list-style-type: none">• Filters plug off during loading• Magnetic separator upstream of filters• ~\$450K savings per year in avoided filters & demurrage	Compressor Lube <ul style="list-style-type: none">• Flash vapor compressor system• Black powder gets past compressor seals• >\$300K p.a. savings in filters & pumps on single compressor	Pipeline Pigging <ul style="list-style-type: none">• Transportable system for use at pig trap for 7+ days post-pigging• Positioned upstream of conventional filters• All contamination caught by the system

For additional information on our magnetic filtration technologies please contact us today.

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