

Magnetic Filtration

Iron Sulfide Removal | Iron Oxide Removal | Solids Removal



Processing units in many facilities can be constantly exposed to corrosive environments. Therefore, managing corrosion and solids to low levels is essential for maintaining performance and minimizing costs. Iron sulfides (FeS) and other iron-based materials are a common by-product of H₂S corrosion, erosion and oxidation. These often causes equipment failures along with equipment 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 for iron sulfide and iron oxide removal.



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.

				
<p>Petchem Feedstock</p> <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 	<p>Refinery (Kerosene)</p> <ul style="list-style-type: none"> • Houston ship channel facility • Downstream of CDU, upstream of kero pump • Replaced cone strainer & eliminated constant pump replacements 	<p>LPG Ship Loading</p> <ul style="list-style-type: none"> • Filters plug off during loading • Magnetic separator upstream of filters • ~\$450K savings per year in avoided filters & demurrage 	<p>Compressor Lube</p> <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 	<p>Pipeline Pigging</p> <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