

H₂S Removal Media

Choosing FerroSorp, the **industry leading** iron based H₂S removal media, will maximize process efficiency and **save you time and money.**

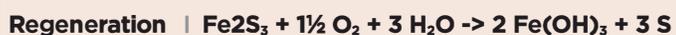
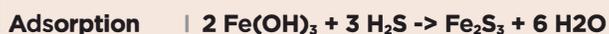
Advantages of FerroSorp

| Feature | Benefit |
|---|--|
| High loading rates | Capable of > 40% by weight |
| Iron-Hydroxide based media | Iron-Hydroxide is highest purity iron for H ₂ S removal |
| Low bulk density vs competitors | Need less weight to fill your tank, lower freight costs |
| Outlet H ₂ S concentration < 1 ppm | Meets strict regulations |
| Less caking/clumping | Easier to change out, reduced maintenance cost |
| Environmentally non-hazardous | Easy, low-cost disposal |
| Low pressure drop | Does not clump - Saves electricity |
| No daily water spraying needed | No water disposal or treatment needed |

How Can FerroSorp Achieve 40% + Loading Rates

FerroSorp with its Iron-Hydroxide base ingredient captures H₂S and with a small amount of oxygen it will convert the captured H₂S to elemental sulfur. This chemical conversion will free up more adsorption space in the pellets. That is how it can obtain much higher loading rates than all other iron-based products.

The removal of H₂S from various gas streams can be described through the following chemical reactions:



More Advantage - Non Clumping

No clumping during change outs

FerroSorp does not typically clump making it much easier to remove during change-outs. H₂S is absorbed to the inside of the pellet pores so the pellets do not grow in size and cause clumping and higher pressure drop.



Used FerroSorp free flowing during change out



Spent FerroSorp can be vacuumed out of vessel

PROVIDE US YOUR PROCESS CONDITIONS AND WE WILL PROVE IT!

INDUSTRY LEADING LOW PRESSURE DROP

Pressure drop costs money

Pressure drop is very low when using FerroSorp due to the non clumping effect.

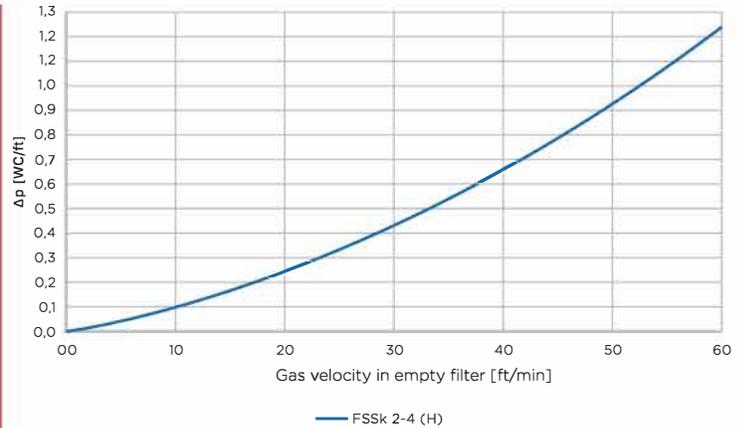
Comments from site managers using FerroSorp:

"Pressure drop improved greatly, it was 25" WC when using iron sponge and now it is 2" to 3" water column under the same conditions"

"After 5 months run time the pressure drop of 2 psig has not changed it was 6 to 7 psig with iron sponge and the pressure drop kept getting worse over time."

"We saw an added benefit of improved parasitic load of other equipment like vacuum pumps and compressors due to the improved pressure drop"

Pressure Drop Curve



FerroSorp works best when gas velocity is less than 30 feet per minute

Bulk density and loading - Why is it so important?

The density of FerroSorp is significantly lower than the leading competitor. This results in much fewer lbs needed to fill the vessel.

| | Competition | FerroSorp | Difference |
|--------------|-----------------------|-----------------------|------------|
| Bulk density | 70 lb/ft ³ | 40 lb/ft ³ | -49% |
| Loading rate | 12% | 25% | +52% |

Example: If a vessel/tank holds 500 Cubic feet it would hold 35,000 lbs of the leading competitor vs. 18,000 lbs of FerroSorp

FerroSorp Factory

FerroSorp's active ingredient is Iron-Hydroxide which is a high grade iron which is found in Germany derived as a by product from their lignite coal mining operations.



Due to the high demand for FerroSorp in North America the factory has expanded to triple the production capacity.