

Redox-Hg

Mercury Control Technology

Enhances mercury removal capabilities of wet FGDs

Lowers Hg⁰ across the scrubber and total stack mercury emissions by over 95%

Redox-Hg is a suspension of highly amorphous iron sulfide particles used to enhance the total mercury removal capabilities of wet FGD scrubber systems. Through a combination of adsorption, chemical reduction, precipitation, and conversion to stable sulfide and iron-sulfide precipitates, *Redox-Hg removes oxidized and elemental mercury from liquid and gaseous streams.*

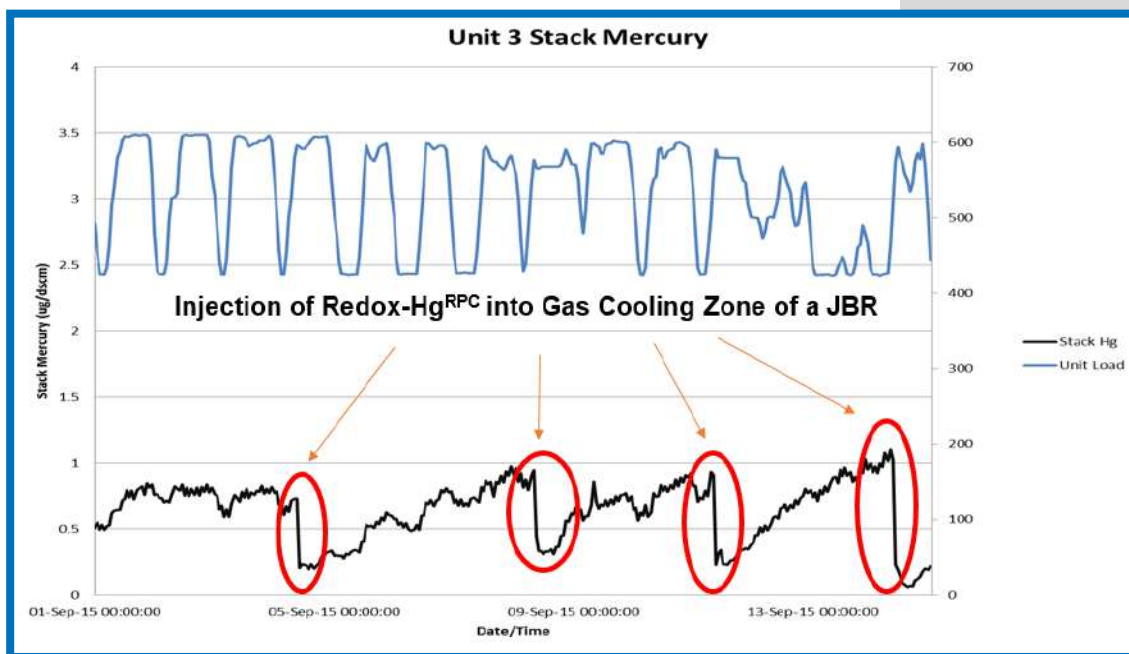
Redox-Hg is used as a stand-alone reagent added to scrubbers, or may be used in conjunction with a mercury oxidant when higher mercury removal rates are required.

Cost effective alternative to wet scrubber additives (WSA)

Redox-Hg enhances the mercury removal capabilities of wet FGDs and is employed as the mercury control chemical of choice at plants generating over 9,000MW of power.

Advantages

- Works within existing scrubber conditions
- Reduces arsenic and selenium in water
- Eliminates the potential of leachable heavy metals in solids
- Does not effect quality of fly ash or gypsum
- Non Toxic / Non Hazardous and simple to handle



Benefits

- Effective over a wide range of ORP (-200 to +700 mV) and pH (pH 4.5-7)
- Fast-acting during startup, ORP, and SCR excursions
- Removes selenium and arsenic from scrubber and/or WWTP
- Cost effective alternative to other wet scrubber additives

Dosage and feeding options

A fast response means that Redox-Hg can be fed on-demand during startup/shutdown or excursion events (batch or emergency feed mode) or at a continuous low feed rate to maintain compliant Hg emissions. Continuous feed rates range are often between 0.005% (v/v) and 0.03% (v/v).

Fuel Tech can provide a full service Redox-Hg program if minimal intervention by plant personnel is desired.



Fuel Tech, Inc. is an authorized distributor of Redox-Hg