ISO 9001:2015

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SOJAS TECHNO-POWER PVT. LTD.

Future of Green India
Sustainable & Efficient

- Clean Processes
- Improved Fuel Efficiency
- Reduced Maintenance
- Reduced Pollutant Gases



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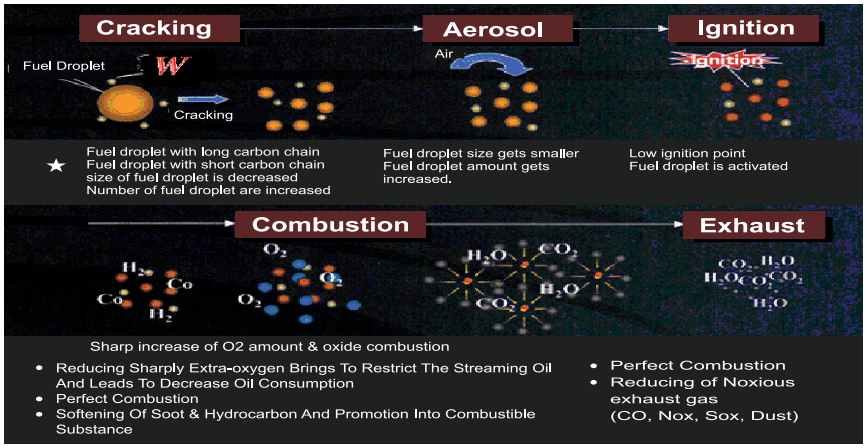
SPARK-81

A. It weakens bonds between the hydrogen and carbon atoms, so the dissociation takes place faster.
B. Rearrange the hydrocarbon molecules by attaching oxygen molecule to the weakened carbon structure.
C. Control of microbial contamination of wet fuel.

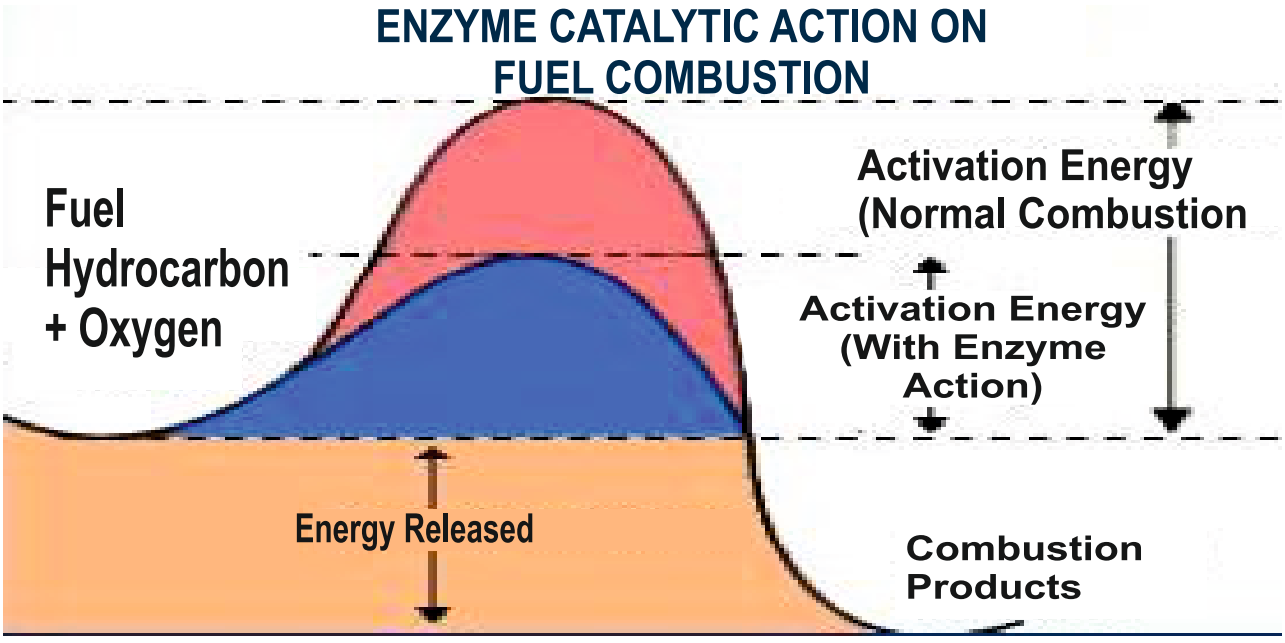


The effects of various enzymatic catalysis during the moment of combustion Following Three Basic Pathways.

1. Enzyme weakens bonds between the hydrogen and carbon atoms, so that disassociation takes place faster.

2. Rearrange the hydrocarbon molecules by attaching oxygen atoms to the weakend carbon structure.

3. Control of microbial contamination of wet fuel.



REDUCE CARBON EMISSIONS:

SPARK-81 Reduces the carbon emissions through several measures

1. Optimizing Combustion : SPARK-81 ensure efficient combustion by maintaining stable and control flame with proper air to fuel ratio, also it reduces the maintenance in combustion equipment to minimize carbon buildup.
2. Improved Insulation : Many times the unburnt fuel particles hit the walls and damages the walls, SPARK-81 improve the fuel quality and it reduces the sparkling, thus it enhance insulation in furnaces to minimize heat loss, which can lead to more efficient combustion and reduced the carbon emissions.
3. Utilizing Advanced Control Systems : To control the flame (Operating Temperatues) in desired way is difficult for the control systems while using the 'C' grade fuels, SPARK-81 improves the fuel properties so that systems can control the flame in a better way, it allows more precise control and reduces the carbon emissions.
4. Cleaner Fuels: It is ideal to use fuels with lower carbon content, to reduce the carbon emissions, but higher grade fuels like LDO are more expensive fuels, SPARK-81 brings the properties of 'C' grade fuels close to LDO which gives cost benefits and reduces the carbon emissions.
5. Maintenance : SPARK-81 reduce the maintenance issues drastically, and tune-ups the furnace and associated equipment to ensure optimal performance and combustion efficiency, it leads to reduce the carbon emissions.
6. Energy Efficient Technologies: SPARK-81 ingest small amount of oxygen inside the fuel which enriched combustion and it improves furnace efficiency and reduce carbon emissions.

With Regular use of SPARK-81 industries can significantly reduce carbon emissions associated with Oil fired furnaces while improving efficiency and sustainability.

Major Benefits of SPARK-81:-

- Sludge formation is prevented.
- Existing sludge is broken into minute particles and burnt.
- Clogging of fuel lines and filters is prevented.
- Atomization of fuel is improved.
- Deposits on burner nozzles are eliminated.
- Flame is stable, hotter and in the required direction.
- Combustion is catalytically improved.
- Soot formation is reduced.
- Fireside deposits are eliminated.
- Heat transfer is improved.
- Vanadium and sodium in the fuel are neutralized.
- Formation of sulphur trioxide is prevented and corrosion is inhibited.
- Stack temperature is reduced.
- Carbon monoxide, oxygen and unburnt hydrocarbons in the stack gases are minimized while carbon dioxide in stack gases is increased.
- Frequent cleaning, maintenance and overhaul are not required.
- Furnace oil can also be used for low temperature application i.e. at 490 degrees application.
- Reduce carbon emissions



SPARK-SLUDGE BLUSTER

M/S Sojas Techno Power Pvt. Ltd. the manufacturers and developers of SPARK -SLUDGE BLUSTER which is the only specialized product for managing coal sludge.

During the operations of coal gasifier it generates large amount of sludge which causes severe problems in operations of gasifier and results in production loss till date there was no solution found which can remove the sludge in online process, considering the severity of the problem, M/s Sojas Techno Power Pvt. Ltd. who are the pioneers and offering the end-to-end solutions on the coal sludge management has developed in house a product branded as SPARK -SLUDGE BLUSTER

Observations :
It was observed that the water tanks were deposited with hardened settled coal tar sludge, which already led to chocking and reduction in pipeline size due to soot formation. The sludge present in both the semi-liquid and rock-solid forms. Due to this deposition, it was badly affecting the pressure parameters of coal gas which were leading to temperature drop in reheating furnaces.

As the manual cleaning processes are time-consuming and labour-intensive, requiring several hours and significant manpower and if not attended the consequences may lead to production losses.

Working Principles / Methodology of **SPARK - SLUDGE BLUSTER**
SPARK - SLUDGE BLUSTER works by weakening the molecular bonds within the sludge, thereby reducing its density, However the effectiveness of **SPARK - SLUDGE BLUSTER** need a small modification in the tanks.

Completely eradicate the deposition problem :
The goal is to change the semi solid and solid forms of coal tar sludge effectively as it enters the water seal and can be removed periodically in liquid form, thereby improving the efficiency of sludge management and reducing manual cleaning efforts and saving the downtime and production losses.

Before using Sludge Bluster



After using Sludge Bluster



FACTORY ADDRESS

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