

POLYTE® 30A Liquid degreaser

1. Product Feature

- POLYTE® 30A is a liquid product that is rapidly vaporized and sprayed evenly in the furnace
- Easy to use and operate, no need for equipment modification;
- Can be used when the boiler shut down or operating
- Dosage is easy to control and accurate as liquid product
- Suitable for different grades of coal-fired boilers
- Has the ability to protects the boiler



2. Physical Property

Appearance	Blue-violet liquid	Freezing point	-15
Density (20)	1.120±0.05g/cm ³		
pH Value(1%)	4.0-7.0	Corrosive	Non-corrosive equipment
Flammability	Nonflammable	Explosive	No explosive

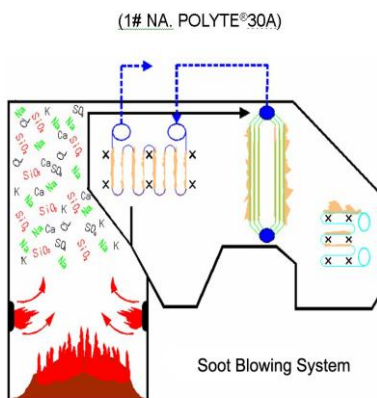
3. Product Performance

The coking, deposition and corrosion on the fire side were controlled by increasing the melting point and looseness of the ash components through chemical reactions generated by the mix of POLYTE®30 degreaser and coal during combustion heating. Promote increased coal combustion, expand combustion volume, increase heat transfer area and improve thermal efficiency.

4. Package & Storage

25kg/ sealed barrel, store in room temperature and protected from light. Please refer to MSDS (Material Safety Data Sheet) and COA(Certificate of Authenticity) for this product. Expire date: 3 years.

5. Dosing Process, Dosage & Attentions



- Dosing Point

The selected dosing point has a great influence on the decoking effect. Generally, it is necessary to select an area where the flue gas has good fluidity, so that the degreaser can be fully atomized and mixed in a short time. Generally, it is selected near the top of the burner, where the airflow is good and the temperature is high, which helps the degreaser to fully evaporate and mix. POLYMER will assist you in selecting the dosing point.

- Dosing Process

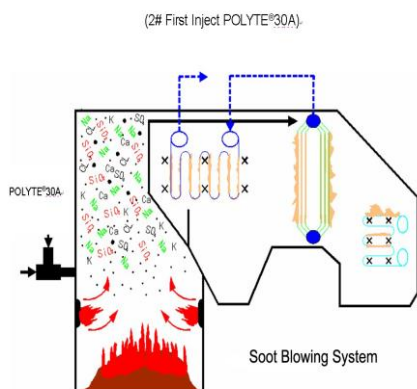
- Dosing at normal operation

According to the degree of coking, different dosing frequencies and dosage is determined, and the degreaser can be sprayed from the observation hole of the furnace through the special equipment to the flame zone. In order to better disperse and atomize the activator, the observation hole or the coking hole in the burner layer is generally selected.

The part where coking occurs can be sprayed separately, and degreaser can be sprayed by the proper amount through the observation hole to clean the coke block in the superheater.

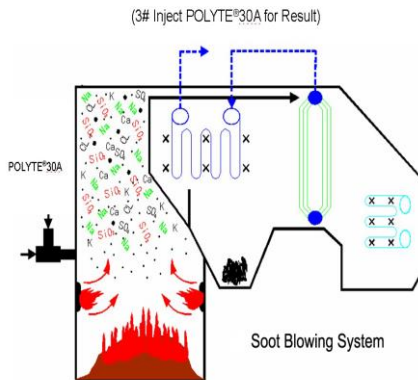
- Dosing when boiler shut down

Before the furnace is shut down for ash blowing and furnace maintenance, the syrup is directly sprayed on the surface of the furnace wall, the screen superheater, the wall superheater, the surface of the economizer wall evenly and focuses on the coking area that cannot be removed. (Wear protection clothing when spraying)



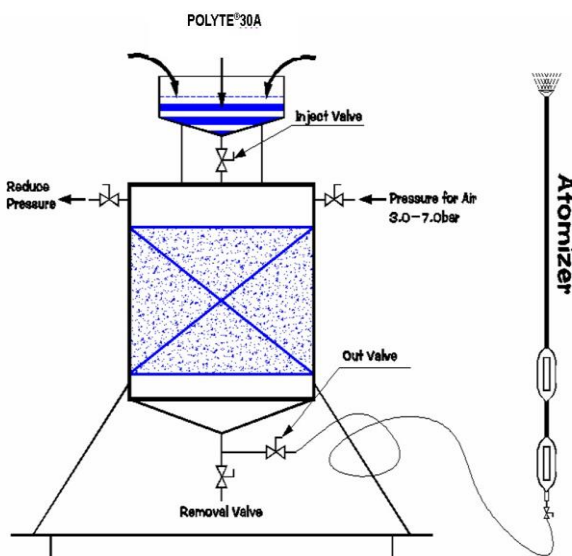
- Attentions

- We recommend use special equipment and nozzles of POLYMER in order to ensure the spray effect of the drug.
- It is recommended to increase the initial dosage or spray the agent on the heated surface and coke block during overhaul for boilers with severe coking.
- Different thicknesses coke block will be slowly removed and the coal consumption of the boiler will be significantly reduced which will lead to the significantly improved of thermal efficiency of the boiler. The original thicker coke layer can be basically removed after 2–6 months continuous dosing. Normal dosing ensures the boiler is no longer coking and the boiler operates safely and efficiently.
- This product can also be used as an emergency decoking agent. It can increase the dosage and spray on the coke block directly for sudden severe coking.



- Dosing Equipment

In order to achieve the best dispersion effect of the degreaser, special dosing equipment equipped with POLYTE[®] 30A flame side treatment agent, so that the degreaser can be atomized in the furnace, evenly dispersed in the flame, and fully mixed with the pulverized coal powder. Achieve the best decoking combustion effect.



- Selection of Dosage

Furnace Type	Recommend Dosage	Dosing Frequency
200-600	25-75	Light Coking 1-3 times/Day; severe coking 2-4 times/Day
600-1000	75-100	Light Coking 2-3 times/Day; severe coking 3-5 times/Day
1000-1500	100-200	Light Coking 2-4 times/Day; severe coking 3-6 times/Day
1500-2500	200-400	Light Coking 3-5 times/Day; severe coking 4-6 times/Day

Note: Within 3 months of the initial use for medium and severe coking, it is recommended to increase the dosage and frequency appropriately. The dosage can be adjusted according to the coal quality and the degree of coking of the boiler

POLYTE[®] 30B Boiler Flame Side Activator

1. Product Performance

POLYTE[®] 30B is a highly efficient boiler flame side activator. It is a non-toxic and non-corrosive liquid with catalytic component which can promote the full combustion of coal, increase the furnace temperature, reduce the exhaust gas temperature, increase the melting point and looseness of the ash component to control the coking, deposition and corrosion of the flame side. It can be applied to coal-fired boilers such as power plant boilers, smelter furnaces, hot water boilers and steam boilers of various other factories.

2. Product Feature

Improve combustion conditions, save fuel, improve combustion efficiency, reduce standard coal consumption; reduce carbon content of fly ash and cinder, save energy, reduce air pollution; remove ash and slag from boiler heating surface to ensure stable operation of boiler; It can inhibit the corrosion phenomenon in the system; it can remove the deposit without stopping the boiler; it can effectively improve the heat exchange between the flue gas and each work room, reduce the exhaust gas temperature; extend the service life of the equipment, reduce the number of equipment maintenance, and clean without stopping the operation.

3. Physical Property

Appearance	Purple liquid	Freezing point	-15
Density (20)	1.06±0.05g/cm ³		
pH(1%)	5.0-7.0	Corrosive	Non-corrosive to equipment

4. Dosage

The dosage is 150-300g generally for one ton of coal , and the specific dosage is determined according to the coal quality index (low calorific value, ash content, volcanic), moisture, and else.

5. Package and Storage

25kg/ sealed barrel, store at room temperature and protected from light. Please refer to MSDS (Material Safety Data Sheet) and COA (Certificate of Authenticity) for this product.

6. Dosing Process and Attentions

- Dosing Process

Spray evenly on the coal by a portable spray gun for small boiler.

The raw material coal of medium and large hearth boilers is conveyed by continuous coal conveying belt and is generally sprayed on the coal by spraying equipment above the coal conveying belt. The dosage of the activator is precisely controlled by adjusting the flow meter.

The delivery of Pulverized coal for power boiler (pulverized coal furnace) is through high-temperature compressed air. After long-term high-temperature baking, the agent will affect the dispersing atomization effect of the activator. In general, we spray it into the flame through special equipment in the boiler furnace.

- Select Dosing point

The selection of the dosing point is negotiated by the relevant personnel of POLYMER and the personnel of the on-site unit. Generally, the selected dosing point is after the crush of pulverized coal and before places it into the furnace

- Attentions

- Use special nozzles of POLYMER is recommended in order to ensure the spray effect of the drug,
- For boilers with severe coking, it is recommended to increase the amount of initial dosing or spray activator at the coking point during overhaul
- For industrial boilers: Coal saving effect of the POLYTE® 30B flame side activator will reach the best performance, and the carbon content of fly ash and cinder is also significantly reduced after the general operation of dosing for about 7-10 days. After a long period of pharmacy, the effect will get better and better;
- For power boilers: After continuous dosing for 1-6 months, different thicknesses coking will be slowly removed, the coal consumption of the boiler will be significantly reduced and the boiler thermal efficiency will be significantly improved.

Solid Decoction Agent POLYTE® 30C

1. Product Feature

- The deodorizer is a powdery solid with a particle size of not more than 5-6 mm.
- Decoction agent is light color near white, slightly soluble in water.
- Chemically stable, no chemical reaction occurs at normal temperature, non-flammable and non-explosive.
- Content of impurities in the decoction agent meets environmental protection standards; it does not cause secondary pollution to the environment.
- Decoction agent does not corrode the boiler.

2. Product Use

The dosage is determined according to the boiler capacity, the daily coal consumption, the coal blending quality, and the coking degree. The addition is measured in daily and monthly. Generally, the dosage is 3-8 ‰ of the fuel amount.

- Dosing Method

Dosing in coal, coal fuel: 1-3 times daily (mechanical / manual / semi-automatic dosing)

Dosing in in flame: 1-3 times daily (mechanical / manual / semi-automatic dosing)

- Decoction Effect

Dosing after new furnace (or after repair) is started. In the operation of the decoking agent, there shall be no obvious boiler coking; The visible coke block thickness shall not be more than 500mm observed by the flame observation hole, the area of coke block shall not exceed 1-2m² and not exceed 2-3 pieces; A large number of coke blocks with a length greater than 500 mm at the slag removal port of slag remover; the slag discharge is friability and bring no affect to the normal operation of the slag machine or the slag discharge pump.

Dosing in the operating boiler, and the coke block should be removed in 10-20 days after the boiler is lightly coke (30-60mm). The visible coke block thickness shall not be more than 500mm observed by the flame observation hole, the area of coke block shall not exceed 1-2m² and not exceed 2-3 pieces; A large number of coke blocks with a length greater than 500 mm at the slag removal port of slag remover; the slag discharge is friability and bring no effect to the normal operation of the slag machine or the slag discharge pump.

Dosing in the operating boiler, and the coke block should be removed in 20-30 days after the boiler is lightly coke (60-120mm). The visible coke block thickness shall not be more than 500mm observed by the flame observation hole, the area of coke block shall not exceed 1-2m² and not exceed 2-3 pieces; A large number of coke blocks with a length greater than 500 mm at the slag removal port of slag remover; the slag discharge is friability and bring no effect to the normal operation of the slag machine or the slag discharge pump.

After using the degreaser POLYTE[®] 30A ,there will be no obvious coking during the operation of the boilers and the visual coke can not be slit and coke thickness is no more than 50mm ; the coke area is no more than 1-2m² ; the amount of coke is no more than 2-3 pieces. The slag removal outlet of slag dredger should not have a large number of coke blocks longer than 500 mm, and the slag removal brittleness does not affect the normal operation of slag dredger or slag pump.

Decoction agent should be used after the furnace is overhauled for boilers with severe coking (100mm or more).

3. Transportation and Storage

POLYTE[®] 30C products are double-layer waterproof paper-plastic packaging, which should be closed in transport or covered with simple canvas. Handle gently during handling to prevent sealing bag from tearing and cause scattering. Lifting should be carried out with pallets or cages. When directly tying and hoisting, it should not be too much and no more than 10 bags. Should not exceed the maximum load of the hoisting machinery to prevent the happen of safety accident.

A special person shall be responsible for keeping the number of the inventory counted and registration for good storage, and make a record of the receipt of the goods. The storage location of the goods should be close to the place of use. It should be stored in a closed or semi-closed factory. If it is stored for a long time, it needs to be protected from rain, moisture and sun. Store away from heat and fire, no smoking and flames. (Paper-plastic packaging is combustible)

4. Attentions

- Operators should wear goggles and masks to avoid agent inhaling or entering the eyes during operation.
- When dosing directly to the furnace, ensure that the furnace is in negative pressure combustion state to prevent burning of human body caused by positive pressure flame.

Continuously dosing without interruption is required. The supplier should be notified in time to make corresponding adjustments when the coal quality changes greatly.