

PRODUCT DESCRIPTION

OXYGEN CONTROL is a catalysed liquid hydrazine oxygen scavenger for condensate, feed water, boiler and steam line corrosion protection. As an additional benefit it will neutralise the acid effects due to dissolved carbon dioxide in the condensate system.

DIRECTION FOR USE:

This product is often used in conjunction with other treatments. .
OXYGEN CONTROL can be used for all boiler systems, from low to high pressures and in conjunction with mechanical deaeration systems.
The treatment combines with dissolved oxygen to form water in inert nitrogen gas, so effectively removing O from the water. No solid materials are produced, so there is no contribution to the increase in total dissolved solids - a critical factor in high pressure boilers. The removal of dissolved oxygen is vital in preventing oxygen pitting and corrosion in boiler.
OXYGEN CONTROL reacts with ferrous and non-ferrous oxides to reverse the oxygen related corrosion. For instance, ferric oxide (red rust) is converted to magnetite, which is a tough corrosion resistant oxide, which seals the metal surface, so that they are protected from further corrosion.
As well as assisting in reversing the effects of corrosion, OXYGEN CONTROL is able to prevent the build up of fresh oxide deposits and gradually remove existing accumulations. The deposits removed are held in suspension so that they can be removed by blowdown.
OXYGEN CONTROL will be incorporated with the steam and protect steam, condensate pipe work and boiler water feed lines. The whole system is then treated.

The treatment will create an alkaline condition in the condensate and so neutralize the carbonic acid produced by dissolved carbon dioxide.

DOSAGE:

The objective is to maintain a hydrazine concentration of between 0.05 and 0.2 ppm depending on operation pressure and boiler design. Normal dosage is in the region of 1 litre per day to the system.

DOSING METHOD:

for optimum protection, OXYGEN CONTROL should be fed continuously into the boiler water feed line, after the feed pump recirculating line, using a metering pump.

For steam turbine systems, OXYGEN CONTROL can be dosed into the cross over between the H.P and L.P turbines or the storage section of the deaerator for full protection.

In low pressure systems, it is possible to dose OXYGEN CONTROL into the hot well, at least one metre below the water line, close to the feed pump suction, (to avoid product reacting with atmospheric oxygen and being wasted).

PRODUCT PROPERTIES

Appearance: Clear Liquid
Specific Gravity: 1.0 @ 20°C
Odour: Faint
Flash Point: None

FEATURES AND BENEFITS

- § OXYGEN CONTROL is a liquid product, easy to feed.
- § As a liquid it does not contribute to TDS, hence reduced blowdown and risk of foaming.
- § Protects boiler, steam lines, condensate lines and feed water lines from corrosion.
- § As the product is catalysed it will be faster acting.
- § Protects ferrous and non-ferrous metals.
- § Acts as an aid to mechanical deaeration.
- § Neutralises the carbonic acid produced by dissolved CO₂
- § Simple test to determine level of treatment.
- § Can be used in conjunction with other water treatment chemicals

APPLICATION:

- § Used for protection of boiler water side, steam lines, condensate areas and feed lines from the effects of dissolved oxygen and CO₂
- § Oxygen control can be used to condition the water used for laying up the boiler in a wet condition.