

ProPure O2 EC-2H (OXYGEN CONTROL)

Anti-corrosive for boiler and steam lines

Description

ProPure O2 is an amine-based based efficient boiler and condensation line oxygen scavenger to prevent oxygen corrosion from forming in the boilers and steam lines. When it reacts with the melted oxygen within the boiler water, it increases pH by condensing in the condensate return line. It generates an oxide layer on copper, iron and non-iron surfaces. Discontinuous usage and/or wrong dosage control of hydrazine concentration will not provide proper protection for the boiler system.

Directions For Use/Applications & Dosage Rates General Cleaning

For the low and medium pressure systems, ProPure O2 anti-corrosive has to be added to the feeding pump inlet or outlet port, hot well or any other suitable place with the pumping system continuously.

When a tank/flow meter device is used, to avoid evaporation of the product, the chemical feeding line must be at least 1 meter (3 feet) under the water level.

For the high-pressure boiler systems of 60 kg/cm² (850 psi) and more, ProPure O2 anti-corrosive must be added to the outlet of the hot well or feeding pump inlet.

ProPure O2 anti-corrosive can also be added to the high-pressure/low-pressure turbine passage. The ideal dosing amount for the first application –i.e. to saturate the boiler with the substance is 250 g ProPure O2 for 1 ton of water, subsequently 100-150 g ProPure O2 for 1 ton of water.

If 10 tons of dosing is performed daily, 1.0-1.5 Kg/day must be fed to the boiler.

When ProPure O2 anti-corrosive additive is started to be dosed to a system where no de-oxidiser has been used or sodium sulfide was used previously, it is recommended to deep bluff the system at least 2 times (for 3-5 seconds) in a day during the first two months.

This cleaning process provides cleaning of the iron oxides in the feeding water system, which is caused by ProPure O2 anti-corrosive. ProPure O2 converts rust to iron oxide for cleaning.

Test Method

HYDRAZINE TEST:

In low-pressure boilers (0-20 atm), 0.1-0.3 ppm hydrazine is sufficient.

In medium-pressure boilers (20-40 atm), 0.1-0.2 ppm hydrazine is sufficient.

In high-pressure boilers (40-100 atm), 0.05-0.1 ppm hydrazine is sufficient.

When values below or over these values are observed, dosing can be stopped and partial bluffing can be made or the dosage can be increased respectively.

NOTE: Since, purified water is used during the production of ERTEK ProPure O2, you'll have significant advantages like no extra chloride and hardness will be added to the system with the dosage of ProPure O2.

Boiler Water Treatment

Summary

- In regular use, it ensures maximum physical life of both lines and condensate stops by preventing corrosion and perforation within condensate lines (steam lines) and therefore provides significant energy savings. (1 mm corrosion debris causes 15-18% dissipation, which means more consumption of oil.)
- ProPure O2 prevents abrupt stops, explosions, perforations, blocking and provides both time and cost savings without the requirement of an extra cleaning process in periodical maintenance with regular use.
- In regular use, as it will inhibit oxygen transfer to the steam lines, it provides the most effective output from the steam by keeping the steam quality at maximum and prevents pitting in the condensate lines.
- In regular use, it provides maximum efficiency from the steam by keeping the steam quality at maximum.

A) Organic Properties

Appearance

Physical State (20°C): Liquid

Color : Transparent liquid
Odor : Acrid odor

B) Physical Properties

pH : 11.0 – 13.0
Molecular weight : -
Explosion Limit : None
Flash point : None
Relative Density : 1.02 – 1.10 g/cm³
Solubility : Completely soluble in water.

Storage Conditions

Packed in original plastic jerry cans of 25L. Storage period is 3 years.

Approvals & Certificates



Product No : SP-KS-004