CorTrol* OS5300
Oxygen Scavenger

- Controls oxygen corrosion
- Promotes passivation
- Improves boiler reliability
- Organic oxygen scavenger — contributes no inorganic solids to feedwater

Description and Use

CorTrol* OS5300 is designed for the control of corrosion caused by dissolved oxygen in makeup and feedwater systems. The resulting absence of oxygen and feedwater conditioning contributes to iron passivation.

CorTrol OS5300 is an aqueous organic oxygen scavenger which does not contribute inorganic solids to boiler feedwater.

This product is accepted for use in paper mills where paper or paperboard products may contact food (21 CFR 176.170 and 21 CFR 176.180). It is not acceptable for use in systems with direct food contact with steam (21 CFR 173.310) or for systems with steam humidification.

Typical Applications

Even with good deaerating heater operation, sufficient dissolved oxygen can remain in the feedwater to damage the boiler system. Even low levels of dissolved oxygen are critical to high pressure (high temperature) systems. Oxygen in water produces pitting which is particularly severe because of its localized nature. Economizers and feedwater heaters are especially susceptible to oxygen attack.

While CorTrol OS5300 can effectively be used in low pressure boiler systems, it was developed as an oxygen scavenger for higher pressure applications where boiler water solids are a major concern.

When feedwater containing an inorganic oxygen scavenger is used for attemperation, harmful deposits on superheater tubes and/or turbines may result. Because CorTrol OS5300 contributes no inorganic dissolved solids, it is preferable to other inorganic scavengers when feedwater is used for attemperation.

CorTrol OS5300 is also suitable in petrochemical plants because it will not affect sulfur-sensitive catalysts. The use of CorTrol OS5300 results in a negligible impact on steam purity and cation conductivity in condensate.

Treatment and Feeding Requirements

Feed Point - Preferably to the drop leg between the deaerator scrubbing section and the storage section or the deaerator storage section; can be fed to the feedwater line.

Feedrate - Proper treatment levels of CorTrol OS5300 depend on many factors specific to a given installation. The product should be used in accordance with the control procedures that GE establishes for a specific application.

Dilution - Use good quality condensate, demineralized water, or deaerated feedwater to make a convenient feeding strength. The material may be diluted in a covered day tank in any proportion and may be mixed with neutralizing amines in the day tank. Mild agitation should be provided for initial mixing only. A covered day tank should be used to maintain product efficacy.
**Equipment** - Chemical feed tanks and storage tanks should be polyolefin. Mild steel pumps, valves, and chemical feedlines are acceptable. This product is suitable for use with PaceSetter* automated chemical feed control equipment.

**General Properties**

Physical properties of CorTrol OS5300 are shown on the Material Safety Data Sheet, a copy of which is available on request.

**Packaging Information**

CorTrol OS5300 is a liquid blend, available in a wide variety of customized containers and delivery methods. Contact your GE representative for details.