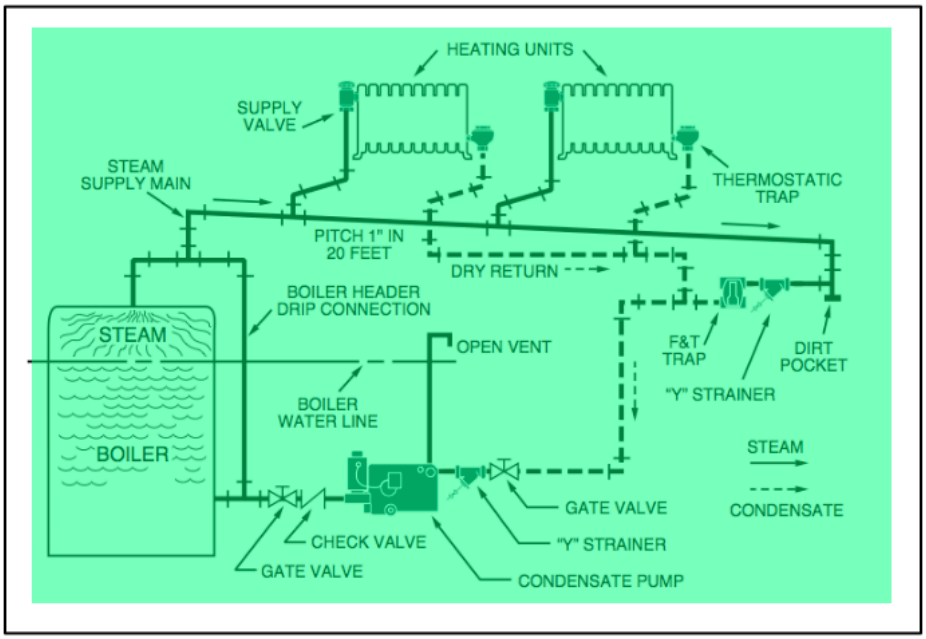
The Best Way ... # 11

… to protect the entire steam system - sulfite (oxygen scavenger).

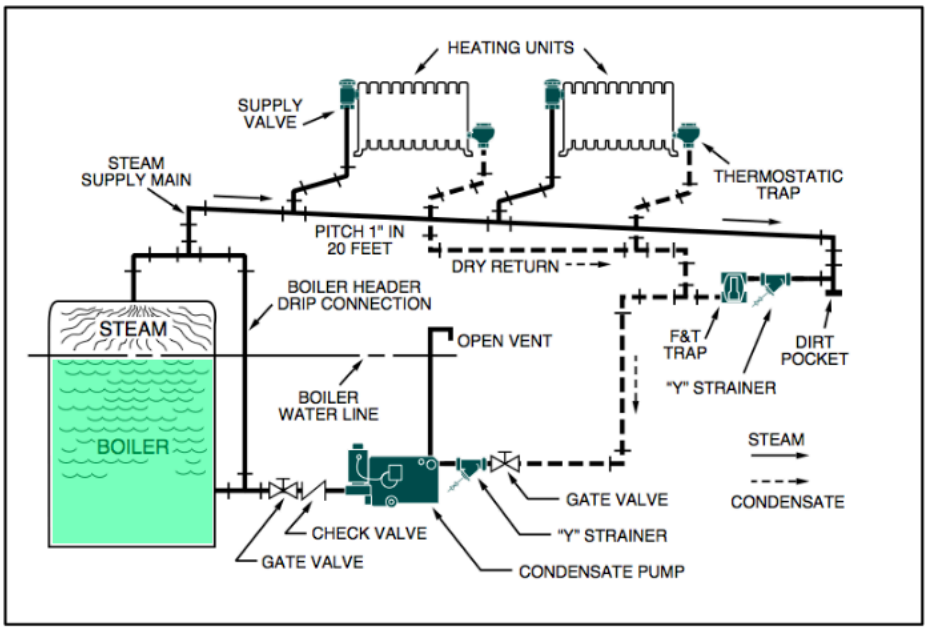


An oxygen scavenger (e.g. sodium sulfite) soaks up oxygen from boiler water, steam and condensed steam.

Oxygen in the gas phase dissolves in water and becomes dissolved oxygen which is removed from solution as it reacts with sulfite ion.

$O + SO_3^{=} > SO_4^{=}$

Sodium Nitrite (an Oxidizer) Protects Only Submerged Boiler Metal



An iron oxidizer (e.g. sodium nitrite) forms an oxide film (Fe_3O_4 or "magnetite") on the submerged boiler surfaces composed of iron alloys.

Gas-phase oxygen and dissolved oxygen are unaffected and are able to corrode the rest of the steam system.

