CLAIMS

[Claim 1]

A method for inhibiting corrosion fatigue of an evaporation tube in a boiler, comprising:

controlling each of a chloride ion concentration and a sulfate ion concentration of water in a steam generator of the boiler (referred to as "water in the boiler" hereinafter) to 10 mg/L or less; and

adding a scale dispersant to the water in the boiler,

wherein the scale dispersant is at least one poly(meth)acrylic acid compound selected from the group consisting of polyacrylic acid having a weight-average molecular weight of more than 20,000 and 170,000 or less and a salt thereof, and polymethacrylic acid having a weight-average molecular weight of more than 1,000 and 100,000 or less and a salt thereof.

[Claim 2]

The method for inhibiting corrosion fatigue of an evaporation tube in a boiler according to claim 1, wherein the chloride ion concentration and the sulfate ion concentration of the water in the boiler are controlled by desalination-treating raw water used for feed-water for the boiler with an ion-exchanger, a reverse-osmosis membrane device, or an electrical deionizer, or by increasing a recovery rate of condensate water of the boiler.

[Claim 3]

The method for inhibiting corrosion fatigue of an evaporation tube in a boiler according to claim 1 or 2, wherein a concentration of the scale dispersant in the water in the boiler is 1 to 1,000 mg/L.

[Claim 4]

The method for inhibiting corrosion fatigue of an evaporation tube in a boiler according to any one of claims 1 to 3, wherein the boiler is a small-type once-through boiler.