The present disclosure is based on the fact that an excellent corrosion-preventing effect can be obtained in an initial treatment of a circulation cooling water system by using a tartaric acid compound and using a slime control agent in combination.
[0010]

That is, the present disclosure provides the following [1] to [8].

[1] An initial treatment agent for circulation cooling water, containing one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates and a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide.

[2] An initial treatment method for a circulation cooling water system, having a step (1) of adding one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates and a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide into a circulation cooling water system.

[3] The initial treatment method for a circulation cooling water system according to [2] described above, in which a concentration of the tartaric acid compound added in the circulation cooling water system is 30 to 100 mg/L in terms of tartaric acid.

[4] The initial treatment method for a circulation cooling water system according to [2] or [3] described above, in which, in the step (1), a pH of the circulation cooling water system is adjusted to 6.0 to 9.0.

[5] The initial treatment method for a circulation cooling water system according to any one of [2] to [4] described above, in which, in the step (1), the circulation cooling water system is circulate for 20 to 30 hours in a state where no thermal load is applied.

[6] The initial treatment method for a circulation cooling water system according to any one of [2] to [5] described above, further having, after the step (1), a step (2) of adding one or more zinc compounds selected from the group consisting of zinc and zinc salts into the circulation cooling water system.

[7] The initial treatment method for a circulation cooling water system according to [6] described above, in which a concentration of the zinc compound added in the circulation cooling water system is 3 to 20 mg/L in terms of zinc.

[8] The initial treatment method for a circulation cooling water system according to [6] or [7] described above, in which, in the step (2), the circulation cooling water system is circulated for 20 to 30 hours in a state where no thermal load is applied.
[0010a]

In one aspect, the present disclosure refers to an initial treatment agent for circulation cooling water, comprising one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates, and a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide, wherein the total content of the tartaric acid compound and the slime control agent in 100% by mass of the initial treatment agent is 90 to 100% by mass. In another aspect, the present disclosure refers to an initial treatment method for a circulation cooling water system, comprising a step (1) of adding one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates and a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide into a circulation cooling water system, wherein a concentration of the tartaric acid compound added in the circulation cooling water system is 30 to 100 mg/L in terms of tartaric acid.

CLAIMS

[Claim 1]

An initial treatment agent for circulation cooling water, comprising

one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates, and

a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide,

wherein the total content of the tartaric acid compound and the slime control agent in 100% by mass of the initial treatment agent is 90 to 100% by mass.

[Claim 2]

An initial treatment method for a circulation cooling water system, comprising

a step (1) of adding one or more tartaric acid compounds selected from the group consisting of tartaric acid and tartrates and a slime control agent containing at least one selected from the group consisting of halogen-based oxidants, stabilized halogen-based oxidants, and carbohydrazide into a circulation cooling water system,

wherein a concentration of the tartaric acid compound added in the circulation cooling water system is 30 to 100 mg/L in terms of tartaric acid.

[Claim 3]

The initial treatment method for a circulation cooling water system according to claim 2,

wherein, in the step (1), a pH of the circulation cooling water system is adjusted to 6.0 to 9.0.

[Claim 4]

The initial treatment method for a circulation cooling water system according to claim 2 or 3,

wherein, in the step (1), the circulation cooling water system is circulated for 20 to 30 hours in a state where no thermal load is applied.

[Claim 5]

The initial treatment method for a circulation cooling water system according to any one of claims 2 to 4, further comprising, after the step (1):

a step (2) of adding one or more zinc compounds selected from the group consisting of zinc and zinc salts into the circulation cooling water system.

[Claim 6]

The initial treatment method for a circulation cooling water system according to claim 5,

wherein a concentration of the zinc compound added in the circulation cooling water system is 3 to 20 mg/L in terms of zinc.

[Claim 7]

The initial treatment method for a circulation cooling water system according to claim 5 or 6,

wherein, in the step (2), the circulation cooling water system is circulated for 20 to 30 hours in a state where no thermal load is applied.