CLAIMS

WHAT IS CLAIMED IS:

1. A corrosive anion removal device having an anion exchange resin configured to replace a corrosive anion included in water supplied in a pipeline with an anticorrosive anion and then generate an anion exchange treatment water, the device comprising:

a treatment water tank configured to preserve the anion exchange treatment water;

a pH measuring instrument configured to measure pH of water in the treatment water tank;

an air exposure circulating path configured to circulate the anion exchange treatment water in the treatment water tank while bringing into contact with air until the pH measured by the pH measuring instrument has become 7 or more;

a water supply path configured to supply the anion exchange treatment water in the treatment water tank into the pipeline if the pH measured by the pH measuring instrument has become 7 or more; and

a regeneration path configured to bring only a $NaHCO_3$ water solution diluted by tap water, into contact with the anion exchange resin at a time of regeneration of the anion exchange resin.

2. The corrosive anion removal device according to claim 1, comprising a treatment water tank configured to preserve the anion exchange treatment water and to allow $NaHCO_3$ to be charged therein at the time of regeneration of the anion exchange resin, wherein from the treatment water tank, only the $NaHCO_3$ water solution diluted by the

tap water is supplied to the anion exchange resin through the regeneration path.

3. The corrosive anion removal device according to claim 1 or claim 2, comprising a chloride ion concentration measuring instrument configured to measure a chloride ion concentration in water in the treatment water tank, wherein the device is controlled so as to notify a regeneration period of time of the anion exchange resin, based on the chloride ion concentration that is measured by the chloride ion concentration measuring instrument.

4. The corrosive anion removal device according to any one of claims 1 to 3, comprising a dissolved oxygen measuring instrument configured to measure dissolved oxygen in water in the pipeline, wherein the device is controlled so as to output alerting in a case where the dissolved oxygen measured by the dissolved oxygen measuring instrument is 0.5 mg/L or more.

5. The corrosive anion removal device according to any one of claims 1 to 4, further comprising a flushing facility configured to carries out flushing while the solid precipitated in water in the pipeline is removed by a filter.

6. The corrosive anion removal device according to claim 5, wherein the filter has a filtration precision of 1 to 10 microns.

7. The corrosive anion removal device according to claim 5 or claim 6, comprising at least one measuring

instrument configured to measure pH, dissolved oxygen, and turbidity of water in the pipeline, wherein the device is controlled to stop flushing operation by the flushing facility in a case where the pH measured by the at least one measuring instrument is 9 or more, the measured dissolved oxygen is less than 1.0 mg/L, and the measured turbidity is less than 4.

8. An anion exchange resin regeneration method for regenerating an anion exchange resin configured to replace a corrosive anion included in water supplied into a pipeline with an anticorrosive anion and then generate anion exchange treatment water, the method comprising:

circulating the anion exchange treatment water in the treatment water tank while bringing into contact with air until the pH of water in a treatment water tank configured to preserve the anion exchange treatment water has become 7 or more;

supplying the anion exchange treatment water in the treatment water tank into the pipeline if the pH has become 7 or more; and

being brought only the $NaHCO_3$ water solution diluted by tap water into contact with the anion exchange resin when regenerating the anion exchange resin.