CLAIMS

1. A water treatment system to treat raw water with a hollow fiber membrane bundle having one end that is not fixed, characterized in that the water treatment system comprises:

a turbidity measuring unit to measure turbidity of raw water compared with a turbidity of one degree (kaolin) which is an index indicating the degree of turbidity of water specified in JIS K 0101 before the raw water is subjected to filtration treatment with the hollow fiber membrane bundle; and

a flocculant adding unit to add inorganic flocculant in an amount adjusted based on the measured turbidity, and

in that when the turbidity measured by the turbidity measuring unit is X degrees, the flocculant adding unit adds the inorganic flocculant such that concentration becomes Y (ppm) determined by the following formula:

$$Y = 0.45 \times X + 5.$$

2. The water treatment system according to claim 1, characterized in that

the hollow fiber membrane bundle is microfiltration membrane or ultrafiltration membrane.

3. The water treatment system according to any one of claim 1 or 2, characterized in that

aluminum sulfate is used as the inorganic flocculant.

4. The water treatment system according to any one of claims 1 to 3, which comprises:

in order to clean the hollow fiber membrane bundle, a compressed air supply source for introducing compressed air at a pressure of 0.1 MPa or more.

5. A water treatment method to treat raw water with a hollow fiber membrane bundle having one end that is not fixed, characterized in that the water treatment method comprises:

a turbidity measuring process to measure turbidity of raw water compared with a turbidity of one degree (kaolin) which is an index indicating the degree of turbidity of water specified in JIS K 0101 before the raw water is subjected to filtration treatment with the hollow fiber membrane bundle; and

a flocculant adding process to add inorganic flocculant in an amount adjusted based on the measured turbidity, and

in that when the turbidity measured by the turbidity measuring process is X degrees, the flocculant adding process adds the inorganic flocculant such that concentration becomes Y (ppm) determined by the following formula:

$Y = 0.45 \times X + 5$.

6. A water production method comprises:

a turbidity measuring process to measure turbidity of raw water compared with a turbidity of one degree (kaolin) which is an index indicating the degree of turbidity of water specified in JIS K 0101;

a flocculant adding process to add inorganic flocculant in an amount adjusted based on the measured turbidity; and

the raw water subjecting process to filtration treatment with the hollow fiber membrane bundle having one end that is not fixed, and

in that when the turbidity measured by the turbidity measuring process is X degrees, the flocculant adding process adds the inorganic flocculant such that concentration becomes Y (ppm) determined by the following formula:

$$Y = 0.45 \times X + 5.$$