CLAIMS

[Claim 1]

A method for operating a membrane distillation apparatus that distills a liquid-being-processed using a membrane distillation apparatus comprising:

a membrane module of which an inside of a casing is divided into a primary side and a secondary side by a membrane;

a feed-water tank and a feed-water pump for supplying a liquid-being-processed to the primary side of the membrane module; and

a pressure reduction device that depressurizes the secondary side of the membrane module,

wherein a precipitate removal process is performed in which a gas is introduced to the secondary side of the membrane module to generate condensate water on the secondary side and a precipitate on the secondary side is removed by being dissolved in the condensate water, and

wherein the precipitate removal process is performed by stopping the pressure reduction device in a state where the feed-water pump is operating, and thus creating a positive pressure on the secondary side.

[Claim 2]

The method for operating a membrane distillation apparatus according to claim 1, wherein a pipe branches from a path connecting the secondary side and the pressure reduction device to each other and a valve is provided on this branch pipe, and a positive pressure is created on the secondary side by opening this valve.

[Claim 3]

The method for operating a membrane distillation apparatus according to claim 1 or 2, wherein the precipitate removal process is performed on a regular basis or when distillation performance has degraded below a predetermined value.

[Claim 4]

The method for operating a membrane distillation apparatus according to claim 3, wherein the distillation performance is obtained based on a pressure on the secondary side or generation speed of condensate water.

[Claim 5]

The method for operating a membrane distillation apparatus according to any one of claims 1 to 4, wherein a communication part that allows communication between the secondary side of the membrane module and the feed-water tank is provided, and in the precipitate removal process, a solution in which the precipitate has dissolved flows into the feed-water tank through the communication part.