may be the same storage location as the storage location of the treatment device 21 described above.

[0042]

In the inert gas supply device installation step (step S23), the inert gas supply devices 20 corresponding to the number selected in the inert gas supply device selection step (step S22) are installed on the floating body 1. In the present embodiment, the inert gas supply device 20 is installed in the dedicated space 16 on the upper deck 9 of the floating body 1. In addition, in a case where a plurality of inert gas supply devices 20 are installed, other treatment devices 21 may be installed to be stacked on the inert gas supply devices 20 installed on the upper deck 9. Further, the inert gas supply device 20 may be stacked on the treatment device 21, or the treatment device 21 may be stacked on the inert gas supply device 20. In addition, in a case where a plurality of inert gas supply devices 20 are installed, the plurality of inert gas supply devices 20 are connected in parallel with respect to the gas fuel tank 6.

[0043]

In the supply step (step S24), the inert gas is supplied to the gas fuel tank 6 of the floating body 1 by using the inert gas supply device 20 installed in the inert gas supply device installation step (step S23). Since the exhaust gas is discharged from the gas fuel tank 6 after the start of the inert gas supply work by the supply step (step S24), this exhaust gas is treated in the treatment step (step S14) described above.

[0044]

In the inert gas supply device removal step (step S25), the inert gas supply device 20 is removed from the floating body 1 after the supply step (step S24) is completed. Here, the supply step (step S24) is completed at a point in time at which the floating body in which the regular inspection or the like has been completed replaces air

connection part 32 and the second external pipe connection part 41 are connected to each other by the second connection pipe 43. In a case where a plurality of the inert gas supply devices 20 are installed on the other floating body 200, the plurality of supply lines 38 are connected to the merging connection part 32. In this way, the plurality of inert gas supply devices 20 are connected in parallel with respect to the gas fuel tank 6.

[0073]

In the supply step (step S24), as with the first embodiment, the inert gas is supplied to the gas fuel tank 6 of the floating body 101 by using the inert gas supply device 20 installed on the other floating body 200 in the inert gas supply device installation step (step S123). That is, the gas inside the gas fuel tank 6 is replaced with the inert gas that is supplied from the inert gas supply device 20.

[0074]

In the inert gas supply device removal step (step S125), the inert gas supply device 20 is removed from the other floating body 200 after the supply step (step S24) is completed. Here, the supply step (step S24) is completed, for example, at a point in time at which the floating body 101 leaves the dock in a regular inspection or the like and the air in the gas fuel tank 6 is replaced with the inert gas.

[0075]

Thereafter, in the inert gas supply device storage step (step S26), as with the first embodiment, the inert gas supply device 20 removed in the inert gas supply device removal step (step S125) is stored. That is, the inert gas supply device 20 removed from the floating body is transported and stored in the predetermined storage location described above together with a large number of other inert gas supply devices 20. In the transportation from the other floating body 200 to the storage location, the inert gas supply device 20 and the treatment device 21 may be transported together.

treatment devices 21 in accordance with the amount of the exhaust gas that is discharged in one floating body 1 or 101, from among the plurality of treatment devices 21 prepared in the treatment device preparation step (step S11); a treatment device installation step (step S13, S113) of installing the treatment devices 21 corresponding to the number selected in the treatment device selection step (step S12) on at least one of the floating body 1 or 101 and another floating body 200 different from the floating body 1 or 101; and a treatment step (step S14) of treating the exhaust gas of the floating body 1 or 101 by using the treatment devices 21 installed in the treatment device installation step.

As an example of the floating body 1 or 101, a marine vessel such as a liquefied gas transport ship, a ferry, a RORO ship, an automobile transport ship, and a passenger ship, a floating storage unit (FSU), a floating storage and regasification unit (FSRU), or the like are exemplary examples.

[0093]

In this way, for example, only when it is necessary to make the gas tank 6 gas-free during a regular inspection or the like, the treatment devices 21 corresponding to the number in accordance with the amount of the exhaust gas that is discharged from the gas tank 6 are installed on the floating body 1 or 101 or the other floating body 200 different from the floating body 1 or 101 and the exhaust gas of the floating body 1 or 101 can be treated. Therefore, it is not necessary to always provide the floating body 1 or 101 with a large-sized treatment device for treating the exhaust gas that is discharged from the gas tank 6. In addition, it is not necessary to occupy onshore equipment provided with treatment equipment or a bunker ship provided with treatment equipment. In addition, since the treatment device 21 may be installed only when used, the weight of the floating body 1 or 101 and the other floating body 200 can be reduced, and for example, the fuel consumption when moving the floating body 1 or 101 and the other floating body 200

(3) further including: an inert gas supply device preparation step (step S21) of preparing a plurality of inert gas supply devices 20 capable of supplying an inert gas into the gas tank 6; an inert gas supply device selection step (step S22) of selecting at least one or more inert gas supply devices 20 in accordance with the amount of the inert gas required in one floating body 1 or 101, from among the plurality of inert gas supply devices 20 prepared in the inert gas supply device preparation step (step S21); an inert gas supply device installation step (step S23, S123) of installing the inert gas supply devices 20 corresponding to the number selected in the inert gas supply device selection step (step S22) on at least one of the floating body 1 or 101 and another floating body 200 different from the floating body 1 or 101; and a supply step (step S24) of supplying the inert gas to the gas tank 6 by using the inert gas supply devices 20 installed in the inert gas supply device installation step (step S23, S123).

In this way, for example, only when it is necessary to make the gas tank 6 gas-free during a regular inspection or the like and to supply an inert gas, the inert gas supply devices 20 corresponding to the number in accordance with the amount of the inert gas required are installed on the floating body 1 or 101 or the other floating body 200 different from the floating body 1 or 101 and the inert gas can be supplied to the inside of the gas tank 6 of the floating body 1 or 101. Therefore, it is not necessary to always provide the floating body 1 or 101 with the inert gas supply device 20. In addition, it is not necessary to occupy onshore equipment provided with the inert gas supply device 20 or a bunker ship provided with the inert gas supply device 20. In addition, since the weight of the floating body 1 or 101 and the other floating body 200 can be reduced, for example, the fuel consumption when moving the floating body 1 or 101 and the other floating body 200 can be reduced.

[0097]

[CLAIMS]

What is claimed is:

[Claim 1]

A method for treating a gas of a floating body, which detoxifies an exhaust gas that is discharged when replacing an inside of a gas tank provided on the floating body with an inert gas, the method comprising:

a treatment device preparation step of preparing a plurality of treatment devices configured to detoxify the exhaust gas;

a treatment device selection step of selecting at least one or more treatment devices in accordance with an amount of the exhaust gas that is discharged in one floating body, from among the plurality of treatment devices prepared in the treatment device preparation step;

a treatment device installation step of installing the treatment devices corresponding to the number selected in the treatment device selection step on at least one of the floating body and another floating body different from the floating body; and

a treatment step of treating the exhaust gas of the floating body by using the treatment devices installed in the treatment device installation step.

[Claim 2]

The method for treating a gas of a floating body according to Claim 1, wherein in the treatment device installation step, in a case where the plurality of treatment devices are selected in the treatment device selection step, the plurality of treatment devices are connected in parallel to the gas tank.

[Claim 3]

The method for treating a gas of a floating body according to Claim 1 or 2, further comprising:

a treatment device removal step of removing the treatment device from the floating body after the treatment step is completed; and

a treatment device storage step of storing the treatment device removed in the treatment device removal step.

[Claim 4]

The method for treating a gas of a floating body according to any one of Claims 1 to 3, further comprising:

an inert gas supply device preparation step of preparing a plurality of inert gas supply devices configured to supply an inert gas into the gas tank;

an inert gas supply device selection step of selecting at least one or more inert gas supply devices in accordance with an amount of inert gas required in one floating body, from among the plurality of inert gas supply devices prepared in the inert gas supply device preparation step;

an inert gas supply device installation step of installing the inert gas supply devices corresponding to the number selected in the inert gas supply device selection step on at least one of the floating body and the other floating body different from the floating body; and

a supply step of supplying the inert gas to the gas tank by using the inert gas supply devices installed in the inert gas supply device installation step.

[Claim 5]

The method for treating a gas of a floating body according to Claim 4, further comprising:

an inert gas supply device removal step of removing the inert gas supply device from the floating body after the supply step is completed; and

an inert gas supply device storage step of storing the inert gas supply device

removed in the inert gas supply device removal step.

[Claim 6]

A floating body comprising:

a floating body main body;

a gas tank provided on the floating body main body and configured to store a liquefied gas; and

a plurality of treatment devices that are installed to be detachable with respect to the floating body main body and detoxify an exhaust gas that is discharged from the gas tank,

wherein the plurality of treatment devices are connected in parallel with respect to the gas tank, and

the treatment device is accommodated in a container configured to be stacked and loaded on the floating body main body.

[Claim 7]

A floating body comprising:

a floating body main body; and

a plurality of treatment devices that are installed to be detachable with respect to the floating body main body and detoxify an exhaust gas that is discharged from a gas tank configured to store a liquefied gas and provided on another floating body,

wherein the plurality of treatment devices are connected in parallel with respect to the gas tank.

[Claim 8]

The floating body according to Claim 7, wherein the treatment device is accommodated in a container configured to be stacked and loaded on the floating body main body.