CLAIMS

[Claim 1]

An abatement device equipped with a deposited material removing means for removing deposited material produced during abatement of exhaust gas,

wherein the deposited material removing means comprises:

a storage unit that stores a small amount of water causing a sharp temperature change to the deposited material;

a gas supply unit that supplies pressurized gas to the storage unit; and

a valve that sprays a mixed fluid of the water stored in the storage unit and the gas supplied by the gas supply unit on the deposited material, wherein,

the abatement device further comprises a control unit controlling the opening and closing operation of the valve, and

the control unit opens the valve and sprays the mixed fluid stored in the storage unit.

[Claim 2]

An abatement device according to claim 1, further comprising:

a pressure sensor that detects the pressure at the inlet for the exhaust gas,

wherein the control unit opens the valve when the pressure at the inlet exceeds a threshold value.

[Claim 3]

An abatement device according to claim 2, wherein the control unit keeps the valve open for a predetermined period of time after the valve has been opened.

[Claim 4]

An abatement device according to claim 3, wherein the predetermined period of time is a period of time exceeding the time at which all of the water stored in the storage unit has been sprayed.

[Claim 5]

An abatement device according to any one of claims 2 to 4, wherein the control unit

keeps the valve closed while the abatement device is abating the exhaust gas.

[Claim 6]

A deposited material removing means, applied to an abatement device for abating exhaust gas, for removing deposited material produced during abatement of exhaust gas,

wherein the deposited material removing means comprises:

a storage unit that stores a small amount of water causing a sharp temperature change to the deposited material;

a gas supply unit that supplies pressurized gas to the storage unit; and

a valve that sprays a mixed fluid of the water stored in the storage unit and the gas supplied by the gas supply unit wherein,

the valve opens by a command from control unit of the abatement device and the valve and sprays the mixed fluid stored in the storage unit.

[Claim 7]

A deposited material removing method for removing deposited material produced by an abatement device for abating exhaust gas, the method comprising:

a first step of storing a small amount of water causing a sharp temperature change to the deposited material;

a second step of supplying pressurized gas to the water stored in the first step; and

a third step of spraying the mixed fluid of the water and the gas produced in the second step on the deposited material to remove the deposited material.