CLAIMS

1. An exhaust gas treatment device for treating exhaust gas generated by combusting fuel, the exhaust gas treatment device comprising:

a first denitration catalyst for reducing a nitrogen oxide in the exhaust gas; and

at least one catalyst unit each including an ammonia decomposition catalyst for decomposing ammonia in the exhaust gas, the ammonia decomposition catalyst being disposed downstream of the first denitration catalyst in an exhaust gas flow, and a second denitration catalyst for reducing the nitrogen oxide in the exhaust gas, the second denitration catalyst being disposed downstream of the ammonia decomposition catalyst in the exhaust gas flow, wherein

a ratio (C_{NH3_FSCR}/C_{N2O_SYS}) of an ammonia concentration (C_{NH3_FSCR}) at an outlet of the first denitration catalyst to a dinitrogen monoxide concentration (C_{N2O_SYS}) at an outlet of the at least one catalyst unit is not less than 10.0.

2. The exhaust gas treatment device according to claim 1, wherein

the ratio (C_{NH3_FSCR}/C_{N2O_SYS}) is not more than 100.0.

3. The exhaust gas treatment device according to claim 1 or 2, wherein

the ammonia concentration (C_{NH3_FSCR}) at the outlet of the first denitration catalyst is not more than 150 ppmvdc.

4. The exhaust gas treatment device according to any one of claims 1 to 3, comprising:

a reducing agent supply unit for supplying a reducing agent capable of reducing the nitrogen oxide to the exhaust gas; and

a reducing agent supply amount adjusting unit configured to adjust a supply amount of the reducing agent from the reducing agent supply unit, on the basis of a nitrogen oxide concentration or the ammonia concentration at the outlet of the first denitration catalyst and the dinitrogen monoxide concentration at the outlet of the at least one catalyst unit.

5. An exhaust gas treatment method for treating exhaust gas generated by combusting fuel, the exhaust gas treatment method comprising:

a step of treating the exhaust gas using an exhaust gas treatment device, the exhaust gas treatment device comprising:

a first denitration catalyst for reducing a nitrogen oxide in the exhaust gas, and

at least one catalyst unit each including an ammonia decomposition catalyst for decomposing ammonia in the exhaust gas, the ammonia decomposition catalyst being disposed downstream of the first denitration catalyst in an exhaust gas flow, and a second denitration catalyst for reducing the nitrogen oxide in the exhaust gas, the second denitration catalyst being disposed downstream of the ammonia decomposition catalyst in the exhaust gas flow, wherein

in the step of treating, the exhaust gas is treated so that a ratio (C_{NH3_FSCR}/C_{N2O_SYS}) of an ammonia concentration (C_{NH3_FSCR}) at an outlet of the first denitration catalyst to a dinitrogen monoxide concentration (C_{N2O_SYS}) at an outlet of the at least one catalyst unit is not less than 10.0.