

ABSTRACT

An exhaust gas treatment device is an exhaust gas treatment device for treating exhaust gas generated by combusting fuel, including: 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 ($C_{\text{NH}_3_FSCR}/C_{\text{N}_2\text{O_SYS}}$) of an ammonia concentration ($C_{\text{NH}_3_FSCR}$) at an outlet of the first denitration catalyst to a dinitrogen monoxide concentration ($C_{\text{N}_2\text{O_SYS}}$) at an outlet of the at least one catalyst unit is not less than 10.0.