

[ABSTRACT]

An exemplary embodiment of the present disclosure relates to a selective catalytic reduction and catalytic regeneration system, and the selective catalytic reduction and catalytic regeneration system includes: a main exhaust flow path along which exhaust gas containing nitrogen oxide moves; a reactor which is installed on the main exhaust flow path and includes a catalyst for reducing nitrogen oxide in the exhaust gas; a bypass exhaust flow path which branches off from the main exhaust flow path, bypasses the reactor, and merges with the main exhaust flow path again; an ammonia injection unit which is installed on the main exhaust flow path, and injects ammonia to the exhaust gas which is to flow into the reactor; a hydrolysis chamber which is supplied with urea, and produces ammonia to be supplied to the ammonia injection unit; an ammonia supply flow path which connects the ammonia injection unit with the hydrolysis chamber; a branch flow path which branches off from the main exhaust flow path at a front side of the reactor; a recirculation flow path which branches off from the main exhaust flow path at a rear side of the reactor, and merges with the branch flow path; and a multifunctional flow path which connects the hydrolysis chamber with a point where the branch flow path and the recirculation flow path merge together.