

A method of production of a coated steel substrate comprising of the steps to have a steel substrate; performing electroplating of the steel substrate with an electroplating solution having a pH of from 2 to 6 and containing 100g/l to 500g/l of NiSO_4 and 1 g/l to 15g/l of MoS_2 , by applying a current density from 15 A/dm^2 to 45 A/dm^2 during 30 seconds to 300 seconds to generate a layer of Ni-MoS₂ coating; thereafter, rinsing the steel substrate and drying it to obtain a coated steel substrate.