

A stainless steel of Al-Mn-Si-N series essentially not containing Cr and Ni consists of (wt%) 0.06-0.12% C, 4-5% Al, 16-18% Mn, 1.2-1.5% Si, 0.15-0.30% N, 0.1-0.2% REM and balance iron. Its corrosion-resistant and mechanical properties can further be increased by adding small amount of Cr, Ni, Co, Ti, Nb, Cu, Mo, Zr, Hf etc. The stainless steel according to the invention has good press workability and weldability and may be manufactured into variety of steel materials and may widely be used for applications.