

AlMgMn alloy product with improved corrosion resistance

Abstract

5 The invention relates to a method for manufacturing an aluminium alloy sheet,
wherein an aluminium alloy is prepared with the following composition, in wt%: Mg: 4.0 -
5.2, Mn: 0.40 - 1.0, Zn: 0.15 - 0.40, at least one element selected from Ti, Cr, Cu and Zr, the
content of the element, if selected, being 0.01 - 0.15 for Ti, 0.05 - 0.25 for Cr, 0.02 - 0.25 for
Cu, 0.05 - 0.25 for Zr, Fe: < 0.40, Si: < 0.40, other elements or impurities < 0.05 each and <
10 0.15 in total, the remainder being aluminium. A rolling plate is cast by vertical semi-
continuous casting, and said optionally homogenised plate is hot-rolled in two successive
stages to obtain a sheet. The sheets obtained by the method according to the invention are
advantageous, in particular for shipbuilding, since they demonstrate, after being exposed for
7 days to a temperature of 100°C, a weight loss of less than 15 mg/cm² during a corrosion
15 test according to the ASTM G67 standard.

[No Suitable Figure]