

## Title (en)

AlMgMn alloy product for welded structures with improved corrosion resistance

## Title (de)

Produkt aus AlMgMn-Legierung für Schweissstrukturen mit verbesserter Korossionsbeständigkeit

## Title (fr)

Produit pour construction soudée en alliage AlMgMn à tenue à la corrosion améliorée

## Publication

**EP 0823489 A1 19980211 (FR)**

## Application

**EP 97420125 A 19970723**

## Priority

FR 9610085 A 19960806

## Abstract (en)

A preformed component for building of welded structures, is made of aluminium alloy containing by weight 3.0-6.5% magnesium, 0.2-1.0% manganese, 0.05-0.6% silicon and less than 0.8% iron and 1.3% zinc, also possibly up to 0.15% chromium and up to 0.30% each of copper, titanium, silver, zirconium and vanadium, with other elements and impurities up to 0.05% each and 0.15% total. It comprises 150-2000, preferably 300-1500, particles per square mm. of Mg<sub>2</sub>Si of size between 0.5 and 5 microns. Also claimed are a hot-rolled band of the alloy, but containing less than 0.4% Fe, at least 2500, preferably at least 3300 mm. wide, use of the alloy, with up to 0.5% Zn, in naval construction, or with over 0.5% Zn as a coating to protect welded joints in naval construction and use of the alloy in industrial vehicles.

## Abstract (fr)

L'invention concerne un produit laminé ou filé en alliage d'aluminium AlMgMn pour construction mécanique soudée de composition (% en poids): 3,0 < Mg < 6,5 0,2 < Mn < 1,0 Fe < 0,8 0,05 < Si < 0,6 Zn < 1,3 éventuellement Cr < 0,15 et/ou un ou plusieurs des éléments Cu, Ti, Ag, Zr, V, à une teneur < 0,30 chacun, autres éléments et impuretés inévitables < 0,05 chacun et < 0,15 au total, dans lequel le nombre de particules Mg<sub>2</sub>Si de taille comprise entre 0,5 et 5 µm est compris entre 150 et 2000 par mm<sup>2</sup>, et préférentiellement compris entre 300 et 1500 par mm<sup>2</sup>. Les produits selon l'invention présentent une bonne résistance à la corrosion et sont utilisés pour des applications structurales comme par exemple les bateaux, les constructions offshore ou les véhicules industriels

## IPC 1-7

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## IPC 8 full level

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## CPC (source: EP US)

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## Citation (search report)

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