

Title (en)
ALUMINIUM-SILICON ALLOY SHEET FOR MECHANICAL, AIRCRAFT AND SPACE APPLICATIONS

Title (de)
BLECH AUS EINER ALUMINIUM-SILIZIUM-LEGIERUNG FUER MACHINEN- ODER FLUGZEUGBAU UND DIE RAUMFAHRT

Title (fr)
TOLE D'ALLIAGE ALUMINIUM-SILICIUM DESTINEE A LA CONSTRUCTION MECANIQUE, AERONAUTIQUE ET SPATIALE

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Application
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Abstract (en)
[origin: WO9534691A1] An aluminium alloy sheet, for mechanical, naval, aircraft and space applications, is subjected to solution heat treatment, quenching, and optionally tempering, to obtain an elastic limit > 320 MPa. Said alloy has the following composition by weight: Si: 6,5-11 %, Mg: 0,5-1,0 %, Cu: < 0,8 %, Fe: < 0,3 %, Mn: < 0,5 % and/or Cr: < 0,5 %, Sr 0,008-0,025 %, Ti: < 0,02 %. The total of the other elements is < 0,2 %, the remainder being aluminium. The alloy sheet of the invention has a high modulus of elasticity and low density and is designed, in particular, for lower wing surfaces and fuselage skins as well as for rocket cryogenic tanks.

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Citation (search report)
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Cited by
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