

Title (en)

PROCESS FOR PRODUCING ITEMS MADE FROM AN ALUMINIUM ALLOY RETAINING A GOOD FATIGUE RESISTANCE AFTER A PROLONGED STAY AT A HIGH TEMPERATURE

Publication

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Application

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Priority

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Abstract (en)

[origin: US4963322A] The invention relates to a process for the production of aluminum alloy components retaining a good fatigue strength when used hot. This process consists of producing an alloy containing by weight 11 to 26% silicon, 2 to 5% iron, 0.5 to 5% copper, 0.1 to 2% magnesium, 0.1 to 0.4% zirconium and 0.5 to 1.5% manganese, subjecting the alloy in the molten state to a fast solidification means, bringing it into the form of parts or components and optionally subjecting the latter to a heat treatment at between 490 DEG and 520 DEG C., followed by water hardening and annealing at between 170 DEG and 210 DEG C. These components are used more particularly as rods, piston rods and pistons.

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