

Title (en)

IRON-NICKEL ALLOY WITH LOW THERMAL EXPANSION COEFFICIENT AND EXCEPTIONAL MECHANICAL PROPERTIES

Title (de)

WÄRMEAUSDEHNUNGSARME EISEN-NICKEL-LEGIERUNG MIT BESONDEREN MECHANISCHEN EIGENSCHAFTEN

Title (fr)

ALLIAGE FER-NICKEL A FAIBLE DILATATION THERMIQUE, PRESENTANT DES PROPRIETES MECANQUES PARTICULIERES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0121848A1] The invention relates to creep-resistant iron-nickel alloys with a low expansion coefficient that contain (in weight %), in addition to 0.02 to 0.3 % C, a maximum of 1 % Mn, and a maximum of 1 % Si, an Mo content of 0.1 to 2.5 % and/or a Cr content of 0.1 to 2.5 % </=1.0 % Nb, as well as an Ni content of 31.0 to 45.0 %, remainder iron and production-related impurities. The inventive alloy has a thermal expansion coefficient of 6.0×10^{-6}/K in the temperature range of 20 to 100 DEG C.

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IPC 8 full level

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