

Title (en)

IRON-NICKEL ALLOY WITH CREEP RESISTANCE AND LOW THERMAL EXPANSION

Title (de)

KRIECHBESTÄNDIGE WÄRMEUSDEHNUNGSARME EISEN-NICKEL-LEGIERUNG

Title (fr)

ALLIAGE FER-NICKEL RESISTANT AU FLUAGE ET A FAIBLE DILATATION

Publication

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Application

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Abstract (en)

[origin: WO0107673A1] The invention relates to iron-nickel alloys with creep resistance and low thermal expansion, which contain (% by mass) no more than about 0.2 % C, no more than 0.3 % Mn, no more than 0,3 % Si, from 0.05 to 3.0 % Al, 0.1 to 3.0 % Ti, no more than 1.0 % Nb, from 39.0 to 45.0 % Ni, wherein the rest is composed of iron and impurities that can be generated during the fabrication process. The inventive alloys have a thermal expansion coefficient $<6.0 \times 10^{-6} / \text{K}$ in a temperature range between 20 and 100 DEG C.

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