

Title (en)  
STEEL WIRE FOR MECHANICAL STRUCTURAL PARTS

Title (de)  
STAHLDRAHT FÜR MECHANISCHE BAUTEILE

Title (fr)  
FIL D'ACIER POUR PIÈCES DE CONSTRUCTION MÉCANIQUE

Publication  
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Application  
**EP 16772311 A 20160316**

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Abstract (en)  
[origin: EP3279355A1] An object of the present invention is to provide a steel wire for mechanical structural parts that is reduced in deformation resistance and improved in crack resistance during cold working, and thus exhibits excellent cold workability. The steel wire for mechanical structural parts of the present invention is a steel wire containing, in mass%, 0.3 to 0.6% of C, 0.05 to 0.5% of Si, 0.2 to 1.7% of Mn, more than 0% and 0.03% or less of P, 0.001 to 0.05% of S, 0.005 to 0.1% of Al, and 0 to 0.015% of N, the balance being iron and inevitable impurities, wherein steel of the steel wire has a metal structure formed of ferrite and cementite, and the number proportion of cementite particles present in ferrite grain boundaries is 40% or more based on the total number of cementite particles.

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Citation (search report)  
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