

Title (en)

Method and steel alloy for producing high-strength hot forgings.

Title (de)

Verfahren und legierter Stahl zum Herstellen hochfester Schmiedestücke.

Title (fr)

Procédé et acier allié pour la fabrication d'une pièce de forge à résistance élevée.

Publication

EP 0191873 A1 19860827 (EN)

Application

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Priority

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Abstract (en)

This invention concerns a method and a steel alloy for producing high-strength hot forgings, the forging billet being cold-sheared from cast or hot-rolled steel and the finished forging being immediately quenched from the forging temperature, machined and used without tempering. The forgings can also be assembled by fusion welding a number of parts together. For manufacturing the forging, a steel is used with the following composition: <IMAGE> the remainder being iron and the usual impurities. The tensile strength of the forgings when quenched and without tempering is at least 900 N/mm<2>, 0.2-proof stress at least 700 N/mm<2> and the impact toughness at room temperature is at least 25 J measured on a V-notched impact test-piece. The hardness of steel, when air cooled, is at most 225 HB.

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C21D 1/02; **C22C 38/18**

IPC 8 full level

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Citation (search report)

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