

Title (en)

A SPHEROIDAL GRAPHITE IRON FOR CYLINDER HEADS AND METHOD FOR MANUFACTURING IT

Title (de)

KUGELFÖRMIGES GUSSEISEN FÜR ZYLINDERKÖPFE UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

FORGE A GRAPHITE SPHÉROÏDAL POUR CULASSES ET SON PROCÉDÉ DE FABRICATION

Publication

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Application

EP 15702298 A 20150126

Priority

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Abstract (en)

[origin: WO2015114210A1] A spheroidal graphite iron for cylinder head of an internal combustion engine, the spheroidal graphite iron having a tensile strength in the range 350 – 480 Mpa and a thermal conductivity in the range 38 – 45 W/(K*m), and the composition in percentage by weight: 3,0 to 4,5% of carbon (C), 0,9 to 1.75% silicon (Si), less than 0,8% manganese (Mn), less than 0,3% copper (Cu), 0,03 to 0,25% Vanadium (V), and 0,01 to 0,1% niobium (Nb), the rest being iron (Fe) and unavoidable impurities. The spheroidal graphite iron comprises a microstructure of at least 75 vol-% ferritic, which is precipitation hardened.

IPC 8 full level

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CPC (source: CN EP)

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