

Title (en)
PROCESS FOR MANUFACTURING A METAL PART REINFORCED WITH CERAMIC FIBRES

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES KERAMIKFASERVERSTÄRKTEN METALLTEILS

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PIÈCE MÉTALLIQUE RENFORCÉE DE FIBRES CÉRAMIQUES

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Abstract (en)
[origin: WO2009083572A1] The present invention relates to a process for manufacturing a metal part reinforced with ceramic fibres, in which: a housing is formed for an insert in a main metal body (2) having an upper face (21); an insert (3) formed from a bundle of fibres with a metal matrix is placed in the housing; a metal cover (4) is placed on the main body (2) so as to cover the insert (3); the cover is welded onto the metal body; a hot isostatic pressing operation is carried out; and the part obtained is machined to the desired shape. The process is characterized in that the housing has the shape of a notch of L-shaped cross section with a face (23P) perpendicular to the upper face (21) and a face (23S) parallel to the upper face (21), the cover (4) having an internal notch (43) of L-shaped cross section, this having a shape complementary to that of the metal body with said insert, the cover (4) being shaped on the outside so that the pressure forces are exerted perpendicular to said faces of the notch (23).

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