Title (en)

METHOD FOR MONITORING THE COMPRESSIVE RESIDUAL STRESSES OF COMPONENTS IN A SHOT-PEENING MACHINING PROCESS

Title (de)

VERFAHREN ZUR ÜBERWACHUNG DER DRUCKEIGENSPANNUNGEN VON BAUTEILEN EINES KUGELSTRAHLBEARBEITUNGSPROZESSES

Title (fr)

PROCÉDÉ DE SURVEILLANCE DES CONTRAINTES RÉSIDUELLES DE COMPRESSION D'ÉLÉMENTS LORS D'UN PROCESSUS D'USINAGE PAR GRENAILLAGE DE PRÉCONTRAINTE

Publication

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Application

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Abstract (en)

[origin: WO2021245074A1] The invention relates to a method for monitoring the resulting compressive residual stresses of components (18) in a shot-peening machining process. According to the invention, the method comprises the steps of: introducing (A) test specimens (22) into the shot-peening machining process, which test specimens are machined in addition to the components (18); measuring (B) the magnetic characteristics of the test specimens (22) after the shot-peening machining process; and determining (C) the absolute measurement values of the compressive residual stresses stored in association with the magnetic characteristics, on the basis of calibration data.

IPC 8 full level

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