

Title (en)

METHOD AND APPARATUS FOR PROVIDING A LAYER OF COMPRESSIVE RESIDUAL STRESS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BEREITSTELLUNG EINER RESTDRUCKSPANNUNGSSCHICHT

Title (fr)

PROCEDE ET APPAREIL D'APPLICATION D'UNE COUCHE DE CONTRAINTE EN COMPRESSION RESIDUELLE

Publication

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Application

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Abstract (en)

[origin: WO03080877A1] The shot peening method and apparatus (Fig. 13) of the present invention utilizes control of the shot peening coverage to provide higher surface compression and comparable depth of compression to conventional 100% coverage peening but with reduced cold working providing improved thermal stability and reduction in shot peening time and cost. A preferred embodiment of this invention employs x-ray diffraction (Fig. 13) residual stress and percent cold work determined by line broadening to establish the optimal degree of coverage for a given material and shot peening intensity.

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CPC (source: EP)

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Citation (search report)

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