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Surface treatment by using granular flexible particles as working environment

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Actually, without constant increase in productivity and improvement of products quality are difficult to get a development in mechanical engineering field. These preventions can be avoided by introducing new processes, which include a surface treatment by vibration to result a superficial plastic deformation by granular flexible particles. Recently, these procedures are useful and reliable in different stages of industries when high surface quality requirements. Present work focused and based on an experimental model can be used for strengthening and in surface finishing process by granular flexible particles, which enhance the quality of the surface layer for the test pieces. The resulting model allows representing each index as a function of initial data setting, which are: material properties and controlling process parameters. These relationships give as an initial step to determine the optimum process parameters. During production series, the surface finishing process and strengthening treatment for granular test pieces are presented, about calculations results also approbated industrially.

Biography

K Hamouda has completed his PhD at aged of 30 years from University of Sciences and Technology of Algiers Algeria and Postdoctoral studies from Don State Technical University Rostov on don Russia. He is the Head of Department of Mechanics Building and has published 7 papers in reputed and is serving as an editorial member of vibration.

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