

COMPARATIVE ASPECTS CONCERNING DIFFERENT SUPERFICIAL COLD PLASTIC DEFORMATION PROCESSES

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Abstract: Superficial cold plastic deformation materialised in the technological process and the finishing-hardning keeps an interest for the researchers in the field whose performance remained in the history of technology.

This paper proposes comparative analysis between two methods of cold plastic superficial deformation, more precisely, finishing by rolling and vibro-rolling surfaces. The arising differences from the two processes starting from the input parameters, the rolling of the technological process, the output parameters can stand out, pointing out the resulting advantages and disadvantages. Although it is a comparative method, the analysis of the two finishing processes and particularly the highlighting of the advantages they present, will outline it`s utility in machine manufacturing.

Key words: cold forming, burnishing, rolling, vibro-burnishing, ball-burnishing.