

RESULTS ON MICRO-HARDNESS MODIFICATIONS IN THE SURFACE LAYER AT INTERNAL GRINDING

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Abstract: Some experimental results and some related conclusions, regarding the micro-hardness modifications in the surface layer resulted at internal grinding process are presented in the paper. The experimental research planning, the methodology of experimenting and measuring, the methodology of experimental data processing and interpretation, together with some obtained mathematical models and their graphical presentation are included and analyzed in the paper. The results discussed in the paper and also some similar others are considered as being useful in the process of optimization of the internal grinding process, as part of the manufacturing processes. The scientific content of the paper is the result of an extended collaborative research approach developed, both in laboratory and in industrial conditions, by specialists coming from a Romanian technical university and from a Romanian technical highschool.

Key words: experimental research, manufacturing process, internal grinding, micro-hardness, surface layer.