

CONTRIBUTIONS TO OPTIMIZING THE TECHNOLOGICAL PROCESSING PROCEDURE OF THE BENCH DRAUGHT BAR FOR THE ROLLING MATERIAL

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The paper is conceived in conditions of elaboration of a research grant realised between University "Politehnica" and SC MEVA SA regarding the optimization of the processing procedure of the bench draught bar and hook draught according to the stipulation from STAS 3135-76. The draught bars for a force by 300kN are manufactured in different variants, having different utilizations; the central draught bar type C (figure 1.1) is made by quality carbon steel which, after normalization, presents a tensile strength $R_m = 49-59$ daN/mm² and hardness a by 144-175 HB.

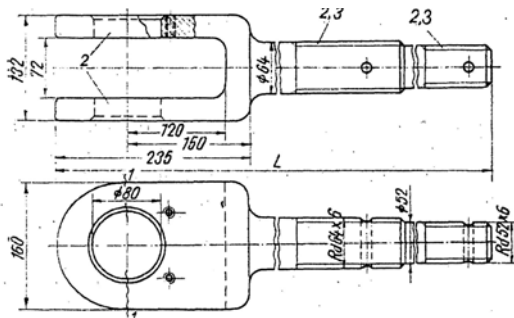


Fig.1.11. Constructive solution for the draught bar

The type of the hook C, as well as the type of the draught bar, are verified in conditions of elongation, squash and shearing. The elaboration of paper has as goal and objective the integration of the knowledge into the model of the product.

The product can be defined as an industrial assembly destined to the utilization of the production systems which are in continuous changing. The motto which stays at the basis of realization of new products is the

following: to realize high quality products with lower costs, more performant, without pollution. In the paper it is considered that the model of product is defined as a simplification of the real object that is desired to be realized. With other words, the modelling languages are software tools which allow to create programs and sub-programs in order to apply the concepts which stay at the basis of models realization. For the model of product that will be realized, it is necessary to be assured and accomplished the minimal conditions of the information expected in the manufacturing process: geometrical information, technological information, information in order to assure the required processing precision, information regarding the material, managerial information. The methodology of integrated engineering tends to bring in upstream the knowledge of the professions which interfere downstream of projection (manufacturing preparation, production, marketing), and takes in consideration the restrictions generated by these.

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