DEPENDENCE BETWEEN MICROSCOPIC CHARACTERISTICS OF THE MATERIAL MR AND PARAMETERS OF PRESS FORMING

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In the work approximation of a solid medium is developed for the description of the material MR. The relationship between structure elements (microscopic parameters $\bar{x}$ and σ_d) and macroscopic parameters of the whole model N and Π. The "liquid drop model" of the material MR is constructed. The consecutive thermodynamic description of engineering process of the material MR manufacturing is offered. The dynamics of the material MR's characteristics in engineering space are researched. The distribution function of pores along dimensions is got. The evident dependence of an average pore size of the material MR on compaction pressure is received. Good fit of theoretic and experimental data is got.

Material MR, microscopic parameters, thermodynamic description, engineering process, compaction pressure, average pore size

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