Process of predicting the hardness of welded joints detail

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Abstract

The possibility of predicting the mechanical properties of welded joints of metal materials at the weld hardness example. Identified according to the quality of the images on the results of the parameterization of microstructures. The nature of the influence of defects of welded joints on the parameters of order and uniformity of structure. A probabilistic prediction algorithm based on the mechanical properties of the structure and characteristics of the calculation by calculating the temperature change during welding. The study conducted adaptation of the method of parameterization of microstructures applied to welded joints of austenitic steels, to establish the relationship between the conditions of preparation, structural defects and the results of parameterization.

Keywords

Forecasting, Hardness, Metal, Regularity, Structure, Uniformity, Welded joints