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INFLUENCE OF THE HEATING TEMPERATURE ON THE PROPERTIES OF STEEL

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ABSTRACT

The article analyzes the methods of heat treatment of iron-carbon alloys. In particular, the modes of heat treatment of steel grade 45 and 40X were studied. The essence of unconventional modes is that by means of preliminary high-temperature HT, a high level of defectiveness of the crystal structure of steel is achieved. Thus, it has been shown that with significant heating of steel, extreme temperatures are observed at which, after cooling, structures with an increased (after normalization) dislocation density or with a high level (after quenching) are formed.

KEYWORDS: Austenitic Steel, Iron, Steel 40X, Melting, Low-Carbon Martensitic Steels

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