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EFFECT OF MODIFICATION ON THE FORMATION OF NONMETALLIC INCLUSIONS IN KP-T WHEEL STEEL

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This paper is concerned with the effect of the components of a multipurpose modifier on the formation of nonmetallic inclusions in KP-T wheel steel. The aim of this work is to study the effect of multipurpose modifiers on the morphology and arrangement of nonmetallic inclusions and on the stabilization and improvement of mechanical properties. It is found that doping the melt of this metal with multipurpose modifies increases the stability of its chemical composition, thus improving its mechanical properties. System thermodynamic studies are conducted into the possible effect of the components of special modifiers under their interaction with the melt. The key thermodynamic parameters of compounds that can be formed in the melt when doping it with special modifiers are determined. It is proved that multipurpose modification improves the morphology of nonmetallic inclusions, which also contributes to the improvement of mechanical properties.

Keywords: *stabilization, wheel steel KP-T, nonmetallic inclusions, thermodynamic and mechanical characteristics*

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