

Pustovoit V.N., Dolgachev Yu.V.

Formation of the Abnormal Morphology Pearlite in Sintered Powder Steels

Abstract: The features of forming the abnormal morphology pearlite in sintered steels have been analysed. Possible pearlite colony growth mechanisms have been studied. The role of oxygen, oxide compounds and porosity in formation of pearlite, as well as their influence on formation of the structure of interphase boundaries have been investigated. It has been found that dissolved oxygen plays a decisive role in formation of the abnormal morphology of pearlite.