

Analyzing the Heat Treatment Flaws in Carbon Steel

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Abstract:

Heat treatments are considered as one of the most important topics that arise in the field of Mechanical Engineering, which aims to produce some new properties for the metal, in order to use in several industries. Through this research, the types of carbon steel were identified, which included three types with the percentage of carbon that ranges in it. It accompanies the heat treatment of carbon steel, through which we got acquainted with the defects that accompany the heat treatment process of the metal, and the types of heat treatments were discussed, and each type was detailed through it. In this research work, the importance of heat treatment emerged, which is necessary for the development of existing metals, and the defects in the heat treatments of carbon steel were studied .it was shown from this study that there are some defects which must avoided in the heat treatments of steel.

Keywords:

Heat Treatment, Carbon Steel, Flaws.