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Effect of heat treatment conditions on tensile properties of a low alloy steel

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Abstract

In this research, the effect of tempering parameters on the mechanical properties of a Cr-Mn-Si low alloy steel (AISI 4130) was investigated. Temperature/time of austenitizing, first tempering and second tempering were selected 880 °C/20 min, 480 °C/120 min and 430 °C/60 min, respectively. The fracture surfaces of the heat treated samples under different conditions were observed using a scanning electron microscope (SEM).

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