

عنوان مقاله:

Effect of intercritical annealing time on microstructure and deformation mechanism of high bainite dual phase steels

محل انتشار:

شانزدهمین کنفرانس سالانه بین المللی مهندسی مکانیک (سال: 1387)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Mohammad Reza Akbarpour - *Materials & Energy Research Center, Karaj, Iran*

Mohammad Farvizi - *Materials & Energy Research Center, Karaj, Iran*

خلاصه مقاله:

In this study, Ferrite-Bainite dual phase structure steels were produced using appropriate heat treatment and according to intercritical annealing holding time dual phase steels with different ferrite volume fraction (V_f) were produced. Samples of these steels with dual phase structure were tensile tested at room temperature. Results showed that the yield strength and work hardening decrease linearly with increasing V_f whilst ductility decreases. It was ascertained that during deformation of these steels at studied V_f range two stage of work hardening take place. Finally variation of mechanical properties and Hollomon equation parameters with differing V_f have been used to rationalize deformation mechanisms activated at different stages of deformation.

کلمات کلیدی:

Dual phase steels, ferrite, bainite, intercritical annealing, Deformation

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/41515>

