Pengaruh heat treatment terhadap struktur mikro dan kekerasan baja CrMoV dengan media Quench yang berbeda

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Abstrak

Heat treatments had been tested to enhance the hardness of CrMoV alloy steel. Heat treatments designed was heating at 1000ÂºC, holding time 1 hour then quenched at water, oil and air respectively. From any cooling media used, water cooling media (rapid cooling) to produce highest hardness number ~ 909 HV. It was seen from microstructure test, the effect of solute atom carbon in ferro atom in martensite structure as a result of rapid cooling while in an initial specimen which was not yet hardened, the hardness number ~ 278 HV. So, it resulted almost 2,3 times the initial
hardness number. In this paper the hardening mechanism for alloy steel is discussed.