

# KL04

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### **Microstructure Control of a Medium Manganese Steel by Combined Interrupted Quenching and Intercritical Annealing**

Fe-5Mn-0.1C alloy was subjected to interrupted quenching to a temperature between  $M_s$  and  $M_f$  followed by intercritical annealing in the ferrite and austenite dual-phase region. As a result, a core-shell type second phase, which consisted of a fresh martensite core surrounded by a film-like retained austenite shell, was formed. Characteristics of the microstructure and mechanical properties of the medium Mn steel with core-shell type second phase will be introduced.

