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(54) Title: WARM ROLLING OF STEELS CONTAINING METASTABLE AUSTENITE

(57) Abstract: Warming a metastable steel before or during cold rolling suppresses the transformation of austenite to martensite, res-
ulting in lower mill loads and higher amounts of reduction at similar loads. As-warm rolled steel has enhanced mechanical properties
when compared to steel reduced the same amount by cold rolling. Warm rolling followed by subsequent annealing also results in
better mechanical properties than those achieved in material cold rolled the same amount and then annealed. Metastable steel that
has been warm rolled, on subsequent room temperature rolling (cold rolling), also shows enhancement in both strength and ductility.