

## eBook Information

# Physics of Strain Hardening of Structural Steels

Yu.F. Ivanov, V.E. Gromov, N.A. Popova, Yu.A. Shliarova,  
M.A. Porfiriev, M.D. Starostenkov, A.P. Semin

Monograph / PDF eBook DRM Free

The book reviews new research in the area of deformation mechanisms of structural steels and the possibilities to control the process of strain hardening.

*Keyword:* Structural Steels, Strain Hardening, Uniaxial Compression, Martensite Structure, Pearlite Structure, Bainite Structure, Plasticity, Fracture Toughness, Tribological Properties, Wear Resistance, Strength Properties, Corrosion Resistant Steel, Impact Strength, Dislocation Density, Weldability

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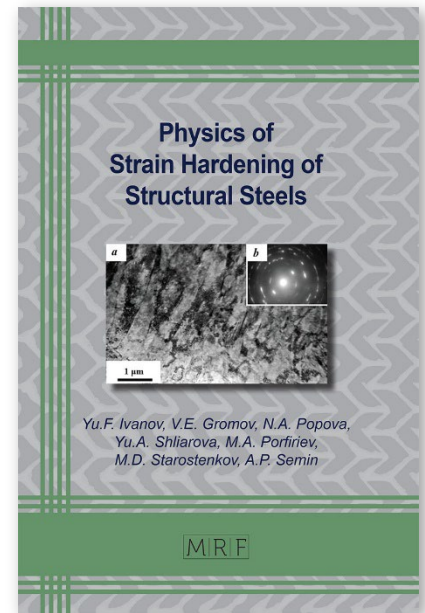
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Summary:

The book reviews new research in the area of deformation mechanisms of structural steels and the possibilities to control the process of strain hardening. Topics covered include: The bainite, martensite and pearlite structure of these steels; the strengthening mechanisms of quenched steel; the evolution of phase composition and defect sub-structure of bainitic steel under deformation; the hardening mechanisms of bainitic steels; and the strain hardening of structural steels with pearlite structure.



## Full Color Print Book Information

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