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#### Symbol Description

С	fatigue ductility exponent
b	fatigue strength exponent
е	engineering strain
$e_{ m pf}$	plastic strain to fracture/ elongation up to fracture
$e_{\rm pn}$	necking plastic strain/ elongation up after necking
e <sub>pu</sub>	uniform plastic strain/ elongation up to ultimate tensile strength
Е	true strain
$\mathcal{E}_{c}$	critical plastic strain for the onset of serrations
Ė	strain rate
$\mathcal{E}_{\mathrm{O}}$	pre-strain existing in the material
$\Delta \varepsilon_{\rm e}$	elastic strain range
$\Delta \varepsilon_{ m e}/2$	elastic strain amplitude
$\Delta \epsilon_p$	plastic strain range
$\Delta \varepsilon_{\rm p}/2$	plastic strain amplitude
$\Delta \epsilon_t$	total strain range
$\Delta\epsilon_{\text{t}}/2$	plastic strain amplitude
$\Delta H$	degree of hardening;
$\mathcal{E}_{f}^{\prime}$	fatigue ductility coefficient
K	strength coefficient
$K_1$	additional constant defined in Ludwigson equation
K	cyclic strength coefficient
т	strain rate sensitivity exponent
n	strain hardening exponent
$n_1$	additional constant defined in Ludwigson equation
n'	cyclic strain hardening exponent
Ν	number of cycles
$N_{ m i}$	number of cycles to crack initiation

$N_{ m f}$	number of cycles to failure
Q	activation energy
R	universal gas constant
$S_{\rm UTS}$	ultimate tensile strength
$S_{ m YS}$	yield strength
σ	true stress
$\sigma_{a}$	stress amplitude
$\sigma_b$	back stress
$\sigma_{\rm f}$	friction stress
$\sigma_{\mathrm{T}}$	tensile stress amplitude at half-life
$\sigma_{ m s}$	saturation stress
$\sigma'_{\rm f}$	fatigue strength coefficient
θ	work hardening rate
$\Delta W_e$	elastic strain energy per cycle
$\Delta W_p$	average plastic strain energy per cycle
$\Delta W_t$	total plastic strain energy per cycle