

oder ausführlich: (I) - (II)

$$E_{\text{max}} - E_{\text{min}} = \sigma_{\text{max}} - \nu \sigma_{\text{min}} - (\sigma_{\text{min}} - \nu \sigma_{\text{max}})$$

$$\begin{aligned} E(\epsilon_{\text{max}} - \epsilon_{\text{min}}) &= \sigma_{\text{max}} - \nu \sigma_{\text{min}} - \sigma_{\text{min}} + \nu \cdot \sigma_{\text{max}} \\ &= \sigma_{\text{max}} + \nu \sigma_{\text{max}} - \sigma_{\text{min}} - \nu \cdot \sigma_{\text{min}} \end{aligned}$$

$$= (1 + \nu) \sigma_{\text{max}} - (1 + \nu) \cdot \sigma_{\text{min}}$$

$$E(\epsilon_{\text{max}} - \epsilon_{\text{min}}) = (1 + \nu) (\sigma_{\text{max}} - \sigma_{\text{min}})$$

$$\rightarrow \underbrace{\sigma_{\text{max}} - \sigma_{\text{min}}}_{2 \cdot \sigma_{\text{max}}} = \frac{E}{1 + \nu} \underbrace{(\epsilon_{\text{max}} - \epsilon_{\text{min}})}_{\delta_{\text{max}}}$$