

Leistung-Verzerrungsbeziehung der Gesamtstruktur

$$[k] \cdot \vec{U} = \vec{F} \quad \rightarrow \quad \left[\begin{array}{c|c} [k^{(1)}] & [k^{(2)}] \\ \hline [k^{(2)}] & [k^{(2)}] \end{array} \right] \cdot \left[\begin{array}{c} \vec{U}^{(1)} \\ \vec{U}^{(2)} \end{array} \right] = \left[\begin{array}{c} \vec{F}^{(1)} \\ \vec{F}^{(2)} \end{array} \right]$$

$$\rightarrow [k^{(21)}] \cdot \vec{U}^{(1)} + \underbrace{[k^{(22)}]}_0 \vec{U}^{(2)} = \vec{F}^{(2)}$$

$$\rightarrow \vec{F}^{(2)} = [k^{(21)}] \cdot \vec{U}^{(1)} \quad \text{"Layerkräfte"}$$