

$$\boldsymbol{P} = \frac{\partial \psi}{\partial \boldsymbol{F}} + \boldsymbol{P}_{\text{a}}$$

$$\boldsymbol{P} = \det(\boldsymbol{F}_{\text{a}}) \frac{\partial \psi}{\partial \boldsymbol{F}_{\text{e}}} \boldsymbol{F}_{\text{a}}^{-\text{T}}$$