

$$\varepsilon_{st.Max} := 0.0028$$

$$\varepsilon_{c.Max} := -0.0009$$

Given

$$\varepsilon_{c.Max} = -0.0035$$

$$\varepsilon_{st.Max} < 0.01$$

$$K3 := \text{Minimize}(N_{Ed}, \varepsilon_{st.Max}, \varepsilon_{c.Max}) = \begin{pmatrix} -0.002640347913306 \\ -0.00349999711990356 \end{pmatrix}$$

$$N_{Ed}(K3_1, K3_2) = -21043.076 \text{ kN}$$

$$M_{Ed}(K3_1, K3_2) = 513.932 \text{ kN}\cdot\text{m}$$

Given

$$-1\varepsilon_{cu2} \leq \varepsilon_{c.Max} \leq 0$$

$$\varepsilon_{st.Max} = 0.01$$

$$K4 := \text{Maximize}(M_{Ed}, \varepsilon_{st.Max}, \varepsilon_{c.Max}) = \begin{pmatrix} 0.009999999999335153 \\ -0.00349964200117696 \end{pmatrix}$$

$$M_{Ed}(K4_1, K4_2) = 2146.186 \text{ kN}\cdot\text{m}$$

$$N_{Ed}(K4_1, K4_2) = -5371.88 \text{ kN}$$

Note: The Highlighted Box Should be Zero