

$$\delta_{11}^* = \int \frac{I_0}{I} M_1^2 ds = \frac{4}{3} \cdot 1^2 = \frac{4}{3}$$

$$\delta_{12}^* = \int \frac{I_0}{I} M_1 M_2 ds = \frac{4}{6} \cdot 1^2 = \frac{2}{3}$$

$$\delta_{13}^* = \int \frac{I_0}{I} M_1 M_3 ds = 0$$

$$\delta_{22}^* = \int \frac{I_0}{I} M_2^2 ds = \frac{2 \cdot 4}{3} \cdot 1^2 = \frac{8}{3}$$

$$\delta_{23}^* = \int \frac{I_0}{I} M_2 M_3 ds = \frac{4}{6} \cdot 1 \cdot 1 = \frac{2}{3}$$

$$\delta_{33}^* = \int \frac{I_0}{I} M_3^2 ds = \frac{2 \cdot 4}{3} \cdot 1^2 = \frac{8}{3}$$

$$D = \begin{bmatrix} 1,3^\circ & 0,6^\circ & 0 \\ & 2,6^\circ & 0,6^\circ \\ & & 2,6^\circ \end{bmatrix} \cdot \frac{1}{EI_0}$$



$$\delta_{it} = \frac{1}{EI_0} \cdot \delta_{it}^* = \int M_i \Delta t \frac{ds}{n}$$

$$\left| \delta_{10}^* = 0 \quad \delta_{20}^* = 0 \quad \delta_{30}^* = \frac{4}{6} \cdot 1 \cdot 50 = 33,3^\circ \right|$$

$$\delta_{it} = EI_0 \int \left(M_i \Delta t \frac{\Delta t}{n} + N_i \Delta t \cdot \vec{t}^\circ \right) ds$$

$$= 10^6 \cdot 10^{-5} \cdot (-10) \cdot \int M_i ds$$

$$\pi - 180^\circ$$

$$\delta_{it}^* = -100 \int M_i ds$$

$$\delta_{1t}^* = -100 \cdot \frac{1 \cdot 4}{2} = -200$$

$$\delta_{2t}^* = -100 \cdot \frac{1 \cdot 4 \cdot 2}{2} = -400$$

$$\delta_{3t}^* = -100 \cdot 4 = -400$$

$$\delta_{ic}^* = -EI_0 \sum C_{g,i} \cdot C_g = -10^6 \cdot \left[C_{u,i} \cdot \frac{0,5}{60} \cdot \frac{\pi}{180} + C_{\phi,i} \cdot \frac{0,5}{100} \right]$$

$$\delta_{1c}^* = -10^6 \left[1 \cdot \frac{0,5}{60} \cdot \frac{\pi}{180} + 0 \right] = -10^6 \left[C_{u,i} \cdot \frac{0,5}{60} \cdot \frac{\pi}{180} + C_{\phi,i} \cdot 0,005 \right]$$

$$= -145,4441$$

$$\delta_{2c}^* = -10^6 \left[0 \cdot \frac{0,5}{60} \cdot \frac{\pi}{180} - \frac{1}{4} \cdot 0,005 \right] = -1250$$

$$\delta_{3c}^* = -10^6 \cdot \frac{1 \cdot 0,005}{2} = -2500$$

$$\delta \theta = \delta \theta + \delta t + \delta c$$

$$Dx + \delta \theta = 0 \quad x = -D^{-1} \cdot \delta \theta$$