

Project [Project]
Object [Object]
Datum [Datum]

Versie
Status
Auteur

[Versie, versiedatum]
[Status]
[Auteur]



- TITEL -

```
UC (waarde) := || x ← Round (waarde, 0.01)
                || if x ≤ 1
                || || concat (num2str (x), “ < 1.00 --> OK”)
                || else
                || || concat (num2str (x), “ > 1.00 --> FOUT”)
kNm := kN · m
g := 9.81  $\frac{m}{s^2}$ 
```

$$L1 := 10000 \text{ mm}$$

$$E1 := 210000 \frac{N}{\text{mm}^2}$$

$$q1(x) := 10 \frac{N}{\text{mm}}$$

$$I1 := 42510000 \text{ mm}^4$$

$$EI1 := E1 \cdot I1$$

$$L2 := 10000 \text{ mm}$$

$$E2 := 210000 \frac{N}{\text{mm}^2}$$

$$q2(x) := 10 \frac{N}{\text{mm}}$$

$$I2 := 42510000 \text{ mm}^4$$

$$EI2 := E2 \cdot I2$$

Ограничительные приближения

$$EI1 \cdot w1''''(x) = -q1(x)$$

$$EI2 \cdot w2''''(x) = -q2(x)$$

$$w1(0 \text{ mm}) = 0 \text{ mm}$$

$$EI1 \cdot w1''(0 \text{ mm}) = 0 \text{ N} \cdot \text{mm}$$

$$w1(L1) = w2(L1)$$

$$w1'(L1) = w2'(L1)$$

$$w1''(L1) = -w2''(L1)$$

$$w1'''(L1) = -w2'''(L1)$$

$$w2(L1 + L2) = 0 \text{ mm}$$

$$w2''(L1 + L2) = 0 \text{ Nmm}$$

Решатель

$$\begin{bmatrix} w1 \\ w2 \end{bmatrix} := \text{odesolve} \left(\begin{bmatrix} w1(x) \\ w2(x) \end{bmatrix}, \begin{bmatrix} x \\ x \end{bmatrix}, \begin{bmatrix} L2 \\ L2 \end{bmatrix} \right)$$