

Lehrgebiet : FEM (Finite Elemente Methode)

Aufgabe : Hausarbeit - Abgesetzter Stab (3 Elemente)

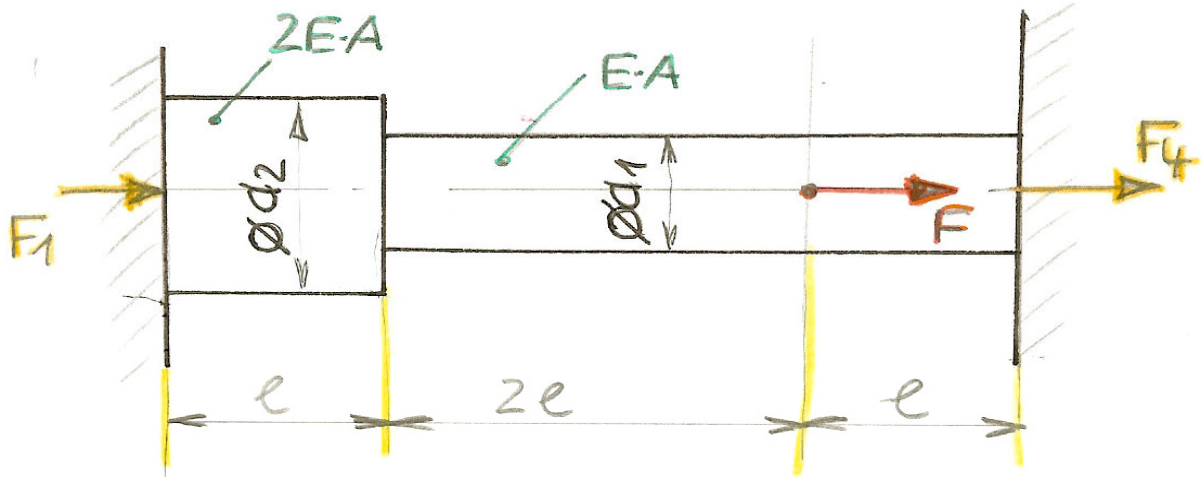
Hochschullehrer : Prof. Dr.-Ing. N. Miersch

Studienrichtung : Maschinenbau

Schwerpunkte : Theorie, Stabelemente, Steifigkeitsmatrix, FE-Denkweise

letzte Änderung : 01.02.2008

Hausübung



$$E = 2,1 \cdot 10^5 \text{ N/mm}^2$$

$$A = \frac{\pi}{4} d_1^2 = 660,5198 \text{ mm}^2$$

| Nr | F [kN] | l [mm] | u ₂ [mm] | u ₃ [mm] | F ₁ [kN] | F ₄ [kN] |
|----|--------|--------|---------------------|---------------------|---------------------|---------------------|
| 1 | 80 | 30 | | | | |
| 2 | 70 | 35 | | | | |
| 3 | 60 | 40 | | | | |
| 4 | 50 | 45 | | | | |
| 5 | 40 | 50 | | | | |
| 6 | 30 | 55 | | | | |
| 7 | 20 | 45 | | | | |
| 8 | 10 | 50 | | | | |
| 9 | 75 | 45 | | | | |
| 10 | 65 | 55 | | | | |
| 11 | 55 | 50 | | | | |
| 12 | 45 | 40 | | | | |
| 13 | 35 | 35 | | | | |
| 14 | 25 | 30 | | | | |
| 15 | 15 | 40 | | | | |
| 16 | 5 | 35 | | | | |
| 17 | 85 | 30 | | | | |
| 18 | 90 | 40 | | | | |
| 19 | 80 | 50 | | | | |
| 20 | 70 | 30 | | | | |
| 21 | 60 | 35 | | | | |
| 22 | 50 | 50 | | | | |
| 23 | 40 | 60 | | | | |