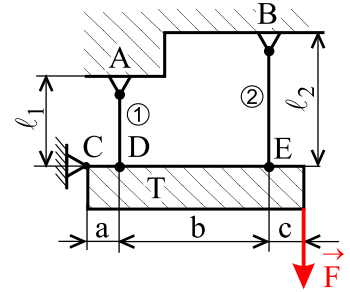

Problem 435

The body T is loaded by the force \vec{F} and supported according the figure. Evaluate the safety factor against the limit state of elasticity. The geometry, loads and material characteristics (cross section areas S_1, S_2 , yield stresses σ_{K1}, σ_{K2} , length of the bars l_1, l_2 and Young's moduli E_1, E_2) are known. Gravitational forces can be neglected. Deformations of the body T („rigid body“) are negligible against the deformations of the bars.



Solutions

systems with bars

Castigliano's theorem