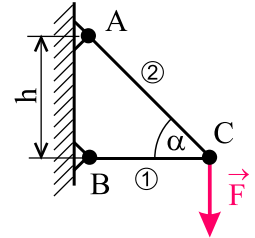

Problem 422

The structure in the figure is made of bars of circular cross section and loaded by the force \vec{F} . Evaluate the safety factor against the limit state of elasticity and the displacement of the point C. The geometry, loads and material characteristics (cross section areas S_1, S_2 , yield stresses σ_{K1}, σ_{K2} and Young's moduli E_1, E_2) are known. Gravitational forces can be neglected.



[Solutions](#)[systems with bars](#)[Castigliano's theorem](#)