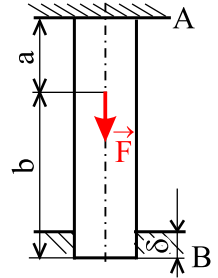

Problem 418

The bar in the figure is produced by δ longer than is the distance between the two plates of the base (assembly interference). It is welded to the base on both of its ends and loaded by the force \vec{F} . Evaluate the safety factor against the limit state of elasticity. The geometry, loads and material characteristics (yield stress σ_K and Young's modulus E) are known. Gravitational forces can be neglected.



Solutions

simple tension loaded bars

support parameters