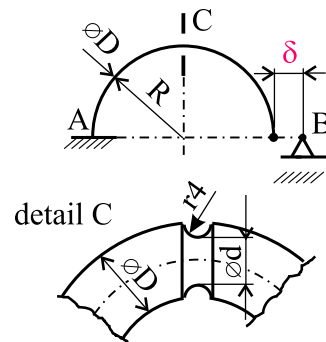


### Problem 626

The body in the figure having character of a curved beam with semicircular centreline is supported by a pin and a fixed supports. During the assemblage the production inaccuracy according the figure was found. Check the safety factor against the limit state of elasticity after the assemblage. The body is made of the steel according the Czech standard CSN 411373 ( $\sigma_K = 195\text{MPa}$ ).

Input values:  $R = 1000\text{ mm}$ ,  $\phi d = 30\text{ mm}$ ,  $\delta = 10\text{ mm}$ ,  
 $E = 2 \cdot 10^5\text{ MPa}$ ,  $\sigma_K = 195\text{ MPa}$



Solutions      curved beams