

TOPIC

Strength of Materials – Section VIII – Question 4

QUESTION

A hollow cylinder of length 6", and inner and outer radii 1.5" and 3", respectively is twisted by a torque of 2000 lb-in. Given the shear modulus, $G = 11000$ psi, Poisson's ratio, $\nu = 0.3333$, the angle of twist in degrees most nearly is

(A) 0.0873

(B) 0.524

(C) 1.048

(D) 1.397

CONTRIBUTOR

Autar Kaw