



FIND:

- 1) Sketch diagrams showing the internal loads (bending and torsion) acting on the rotating shaft.
- 2) Identify the critical cross-section of the shaft.
- 3) For a point on the circumference of the shaft at the critical cross-section, sketch the bending stress as a function of time.
- 4) For a point on the circumference of the shaft at the critical cross-section, sketch the torsional shear stress as a function of time.
- 5) The factor of safety for infinite life using the Goodman criterion.
- 6) The factor of safety for yielding.