

Design Exercise 4
1.050 Solid Mechanics
Fall 2004

A hollow aluminum shaft, two meters long, must transmit a torque of 20 *KNm*. and bear a compressive load of 100 KN. The total angle of twist over the full length of the shaft is not to exceed 2.0° , and of course, we do not want the shaft to yield. Size the outside and inside diameters of the shaft striving to keep the volume of material a minimum.

Due at the start of class on Monday, 8 November.