

HOMEWORK GLITCHES

Problem	Issue
6.8	Sigma3 = -13.13 MPa
6.29	Add note referring to Table 6.1
7.5	This is a zero to max to zero loading, so it has a mean stress and is not a Section 7.5 S-N problem.
7.8	This problem obviously has a mean shear stress, so is also not an S-N problem of Section 7.7.
9.13	Using the AISC equivalent length, for a) Pcr = 35.5 kN and for b) Pcr = 355 kN.
9.13	Text in the Notes paragraph is repeated twice. In Solution, says $I = ir^4/4$
10.13	Note that the shaft is also steel.
10.19	The interference is 50 microns, not 50mm.
11.1	Ignore the mass of the shaft.
12.18	c) The angle is $\sim 18^\circ$, not 76° .
12.18	d) The flow is $7.83E-6$, not $8.12E-6$.
12.18	The solution manual uses 25° instead of 35° as inlet temperature. It gives viscosity of 0.07 instead of 0.04, and says Fig. 8.13 instead of Fig. 8.17 for viscosity.
12.21	This is a bizarre problem, because the temperature rise comes out to about 195°C , making it difficult to get a mean oil temperature of 40°C .
12.23	Radial clearance is not given in the problem, but the solution manual gives it as 31.5 microns.
16.16	Sketch f shows the bolt shank length as 1.2 and thread length as 1.0, which is not consistent with a standard bolt. This confuses students.
16.24	The material of the first member should say "nodular" cast iron.
16.36	Sketch r should have arrowheads at end of weld callouts. Callouts are "other side", when they probably should be "arrow side."
16.37	Sketch s should have arrowheads at end of weld callouts. Upper callout is "other side", when it probably should be "arrow side."
16.38	Sketch t should have arrowheads at end of weld callouts.
17.3	Add clarification that "fully compressed" means bottomed.
17.9	For part b), just say that the shear stress should be less than S_{sy} instead of the obscure "without causing a permanent set in excess of 2%." It should probably have been 0.2%, anyway.
17.16	If the 22 coils are active and not total, then say so. Also, add a note that says "assume that max load bottoms the spring."
17.31	Numbers in Equations for N_a and Θ_{Revs} are mixed up in solution manual.
18.4	Why does it say "The wear of the disks is proportional to the contact pressure multiplied by the sliding distance."?
19.18	The belt length is 1.54 m, not 1.32 m.