

Download File PDF Mechanical Engineering Design 8th Edition Solutions Manual

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

70 Solutions Manual • Instructor's Solution Manual to Accompany Mechanical Engineering Design

Roots are: 9, 0, 0 kpsi



$r_{12} = 0$, $r_{13} = r_{23} = r_{max} = \frac{d}{2} = 4.5$ kpsi. Ans.

4-20 (a) $R_1 = \frac{c}{r} F$, $M_{max} = R_1 r = \frac{c}{r} F r$
 $\sigma = \frac{\Delta M}{\Delta I} = \frac{6}{32} \frac{c}{r} F \Rightarrow F = \frac{32 \sigma r}{6c}$ Ans.

(b) $\frac{F_{c1}}{F} = \frac{(c_{c1}/r)k_b(b_1)(h_c)/k_f(L_c/L_f)}{(c_c/r)k_b(b_c)(h_c)/k_f(L_c/L_f)} = \frac{11(9)(2)}{1(9)} = 2$ Ans.

For equal stress, the model load varies by the square of the scale factor.

4-21 $R_1 = \frac{W}{2}$, $M_{max(x)=L/2} = \frac{W}{2} \left(\frac{L}{2} \right) = \frac{WL}{4}$
 $\sigma = \frac{\Delta M}{\Delta I} = \frac{6}{32} \frac{W}{8} = \frac{3W}{400} \Rightarrow W = \frac{400 \sigma}{3}$ Ans.

$\frac{W_c}{W} = \frac{(c_{c1}/r)k_b(b_1)(h_c)/k_f(L_c/L_f)}{(c_c/r)k_b(b_c)(h_c)/k_f(L_c/L_f)} = \frac{11(9)(2)}{1(9)} = 2$ Ans.

$\frac{W_c L_c}{W L} = 2 \Rightarrow \frac{W_c}{W} = \frac{L}{L_c} = 2$ Ans.

For equal stress, the model load w varies linearly with the scale factor.

4-22 (a) Can solve by iteration or derive equations for the general case:

Find maximum moment under wheel W_1 : $W_2 = \sum W$ at centroid of W 's

$$R_A = \frac{L - s_2 - d_2}{L} W_1$$

[Download PDF version of :](#)
Mechanical Engineering Design 8th Edition Solutions Manual