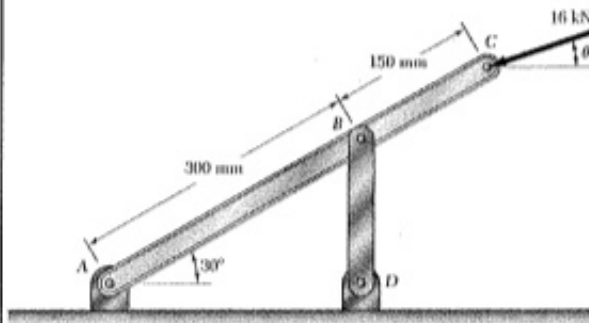

DOWNLOAD



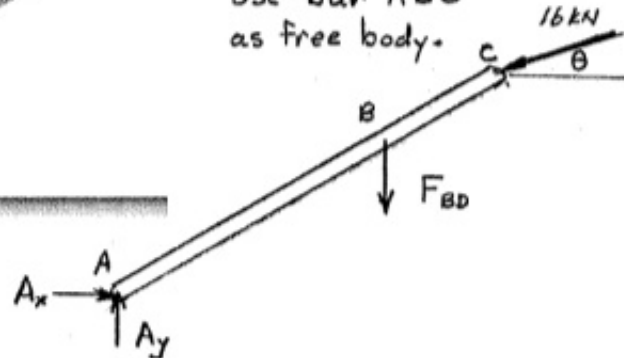
[Mecanica Vectorial Para Ingenieros Dinamica 9 Edicion F.p.beer](#)

Problem 1.59

1.59 Link BD consists of a single bar 24 mm wide and 12 mm thick. Knowing that each pin has a 9 mm diameter, determine the maximum value of the average normal stress in link BD if (a) $\theta = 0^\circ$, (b) $\theta = 90^\circ$.



Use bar ABC as free body.



(a) $\theta = 0^\circ$.

$$+\circlearrowleft \sum M_A = 0 = (0.45 \sin 30^\circ)(16) - (0.3 \cos 30^\circ) F_{BD} = 0$$

$$F_{BD} = 13.856 \text{ kN} \quad (\text{tension})$$

$$\text{Area for tension loading: } A = (b - d)t = (24 - 9)(12) = 180 \text{ mm}^2$$

$$\text{Stress: } \sigma = \frac{F_{BD}}{A} = \frac{13.856 \times 10^3}{180 \times 10^{-6}} \quad \sigma = 77 \text{ MPa} \quad \blacktriangleleft$$

(b) $\theta = 90^\circ$.

$$+\circlearrowleft \sum M_A = 0 = -(0.45 \cos 30^\circ)(16) + (0.3 \sin 30^\circ) F_{BD} = 0$$

$$F_{BD} = -24 \text{ kN} \quad \text{i.e. compression.}$$

$$\text{Area for compression loading: } A = bt = (24)(12) = 288 \text{ mm}^2$$

$$\text{Stress: } \sigma = \frac{F_{BD}}{A} = \frac{-24000}{288 \times 10^{-6}} \quad \sigma = -83.3 \text{ MPa} \quad \blacktriangleleft$$

Proprietary Material. © 2009 The McGraw-Hill Companies, Inc. All rights reserved. No part of this Manual may be displayed, reproduced, or distributed in any form or by any means, without the prior written permission of the publisher, or used beyond the limited distribution to teachers and educators permitted by McGraw-Hill for their individual course preparation. A student using this manual is using it without permission.

DOWNLOAD



[Movie torrents free downloads El atardecer del instituto \[hdv\]](#)
[Good movie downloads site free Episode 1.17 \[avi\]](#)
[English movie downloading links The Reveal by none \[4k\]](#)
[Movie hd download pc none by none \[720x594\] http://kinglandzugsnis.ddns.net/11125.html](#)
69278ba13c

[descarga descompresor winrar para nokia e5 gratis zip](#)
[F1 2012 - Patch 2-Changelog](#)
[mastery pdf robert greene](#)
[Good horse fuck cum inside.mpeg](#)
[free dota map 7.75 ai.rar](#)