Assignment 7

Q1: The existing welded swing bracket as shown in Figure 18-45 on Page 676 has cracked in service due to cycle loading. You need to redesign the swing bracket to prevent future cracking. In your design, use as many standard parts as possible. The loads in the bracket will not change.

Make a working drawing with dimensions, welding specifications and a part list with identification labels.

Problem (page 676)

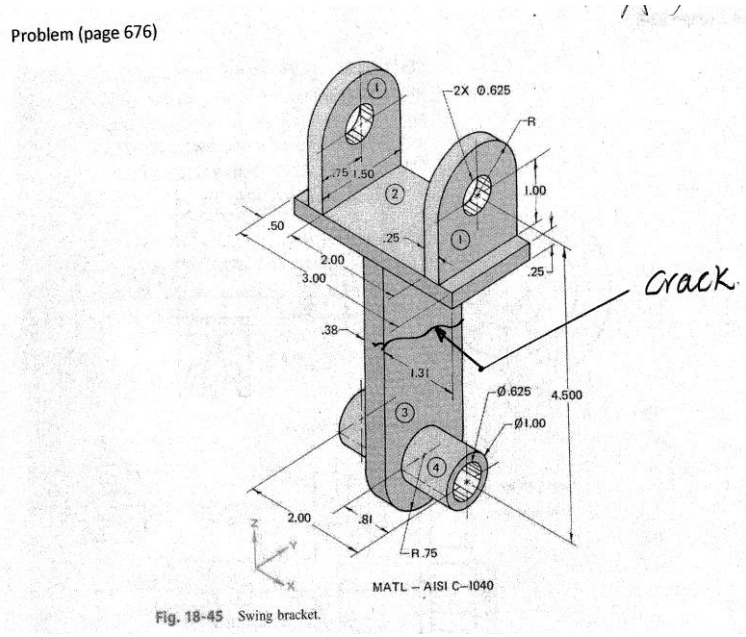
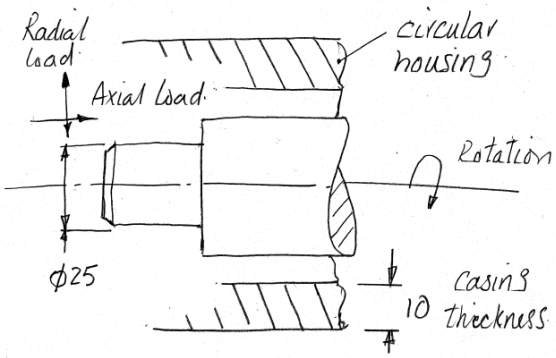


Fig. 18-45 Swing bracket.

Q2: Design and complete the assembly drawing of a portion of the shaft bearing system as shown in the sketch. The shaft is positioned in the bearing using a rolling element bearing which can withstand both radial and axial loads.
Complete the internal design of the housing to properly locate and support the bearing.
The end of the bearing housing needs to be sealed with a cover plate, which must be easily assembled and disassembled .
Dimensions in mm.