

HW 5

Reading:

Read AISC 14th Ed Spec Section J

Read AISC 14th Ed Design Examples - Spec Ch J

Problem 1

What is the difference between N, X, and SC bolts?

Problem 2

What are the four methods of tightening a bolt to the correct pretension?

Problem 3

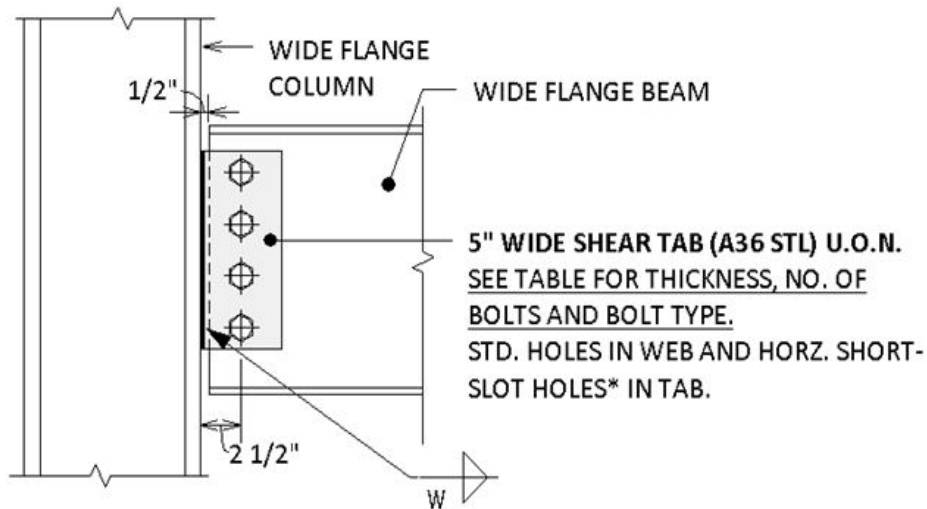
What is the size of a STD, OVS, and SSL holes for a 3/4" bolt?

Problem 4

Draw a beam to beam bolted shear connections. Draw the rupture and block shear failure of a wide flange beam to wide flange beam connection (show the pieces of the failure)

Problem 5

Assuming four 3/4" Dia A325N bolts, W18x35 beam and 3/8" shear tab below - what is the bolt shear capacity? What is the bolt bearing/tearout capacity?



BEAM TO WF COL FLANGE SHEAR TAB

Problem 6

After reading "A Complete Fabrication" PDF, how does Cives make sure the bolts are taken good care of in the shop? What is "fitting"?