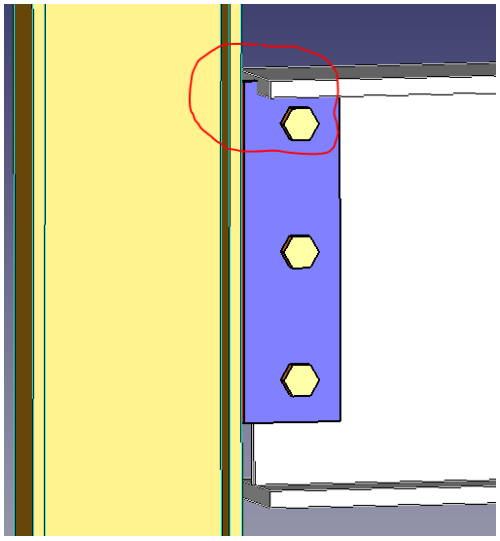
Reviewer: Amar Gajjam

Thanks for inviting us for review of the software. It is a good initiative to create open source software in connection design. This software needs some technical improvement to make it as correct. Since there are many comments and need snaps for better understanding, I am listing those in pdf file with snaps where ever required.

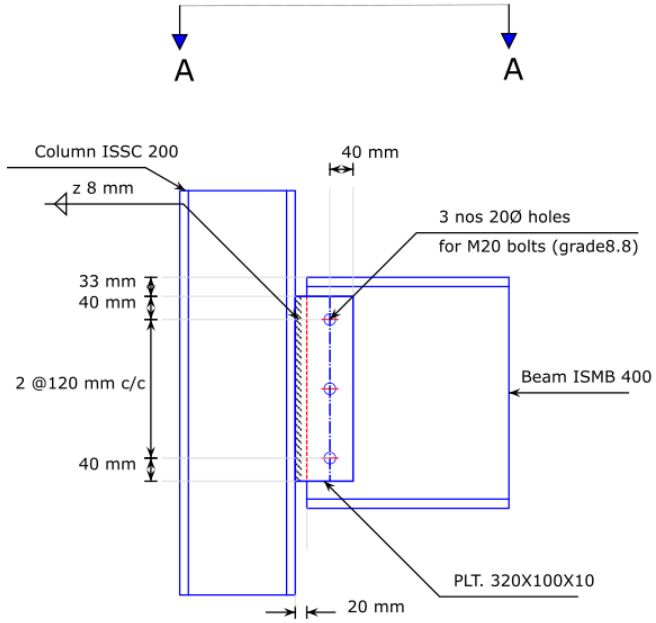
Following are my comments on Set1.1 Fin plate shear connection.

Comments on Set1.1:

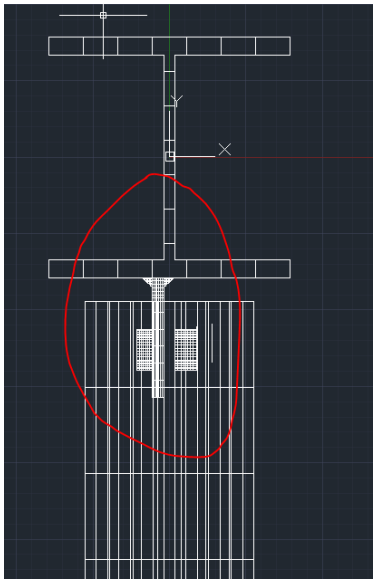
1. Not able to save (/save as) Osdag design file. This will enable us to open the same file, change some parameter and rerun.
2. From Error clause "Weld thickness is not sufficient [cl. 10.5.7; Insdag Detailing Manual, 2002]", it is not clear that "cl. 10.5.7" is from IS800 and the rest part is from Insdag manual. Also the particular clause reference shall be given from Insdag manual.
3. The weld size required is increasing with fin plate thickness. What we feel, the reference for weld size increase from Insdag is just guide line and not mandatory to increase the thickness if it passes for force.
4. In Column section, if we choose ISMC column, the graphics won't change.
5. There should be an option to enter the location of first top bolt from top flange .In current program the fin plate is entering in flange part of beam. It should start below the flange excluding radius of curvature. Also bolt are closer to curve part



6. The gap between the beam and column should be 10-15mm or should be given an option to enter user value. Also the bolt from face of column shall be located in drawing.



7. In Autocad output the fin plate is not in line with column web. It should be in line.



8. If we increase the diameter of bolts, the number of bolt should be reduced as per design capacity. The same is not reflected.
9. Practically minimum two bolts are sufficient for fin plate connection instead of three bolts. There should be provision to select number of bolts. If minimum three numbers to be followed, please give reference of the clause.
10. Please note that while calculating bearing capacity, lowest thickness of fin plate and web of beam shall be chosen. Here the thickness of fin plate (10mm) is chosen instead of beam web (8.9mm).

11. There will be more flexibility to designer if you provide following as input options. If input values are not within limits, you can display warning and stop design.