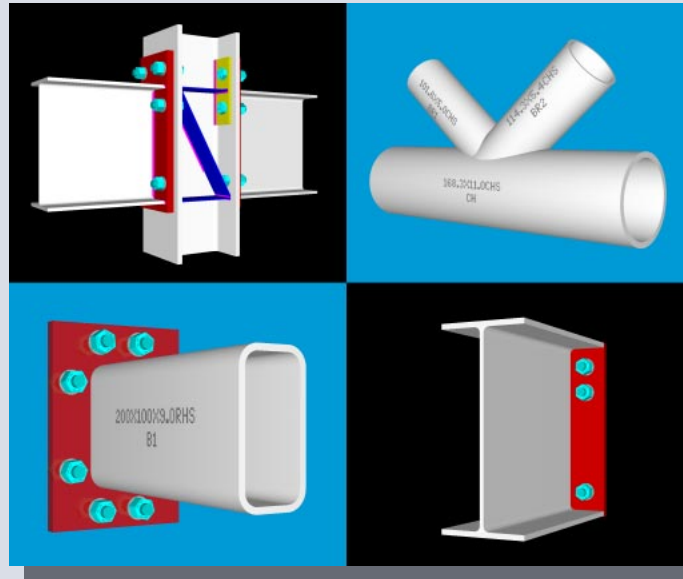# LIMCON

Limit States Design of Steel Connections

Limcon V3 is a powerful design aid for a range of steel connection types. Features include:

- ❑ Checking to AISC LRFD, BS 5950, or AS 4100.
- ❑ Shear, moment, HSS connections and splices.
- ❑ AISC multiple-row moment end plate connections.
- ❑ Bolt and weld groups.
- ❑ Virtual reality view of connections.
- ❑ Integrated detailing with DXF output.
- ❑ SI metric or US customary units.
- ❑ Professional support.

Connection types available include single plate (also called fin plate or web side plate), flexible end plate, angle cleat, welded beam/column, bolted moment end plate, haunched beam end plate, bracing cleat, bolted and welded splice, pinned column base plate, welded HSS truss connections, RHS bolted end plate, and AISC flush and extended end plate connections. Bolt and weld groups may also be checked.
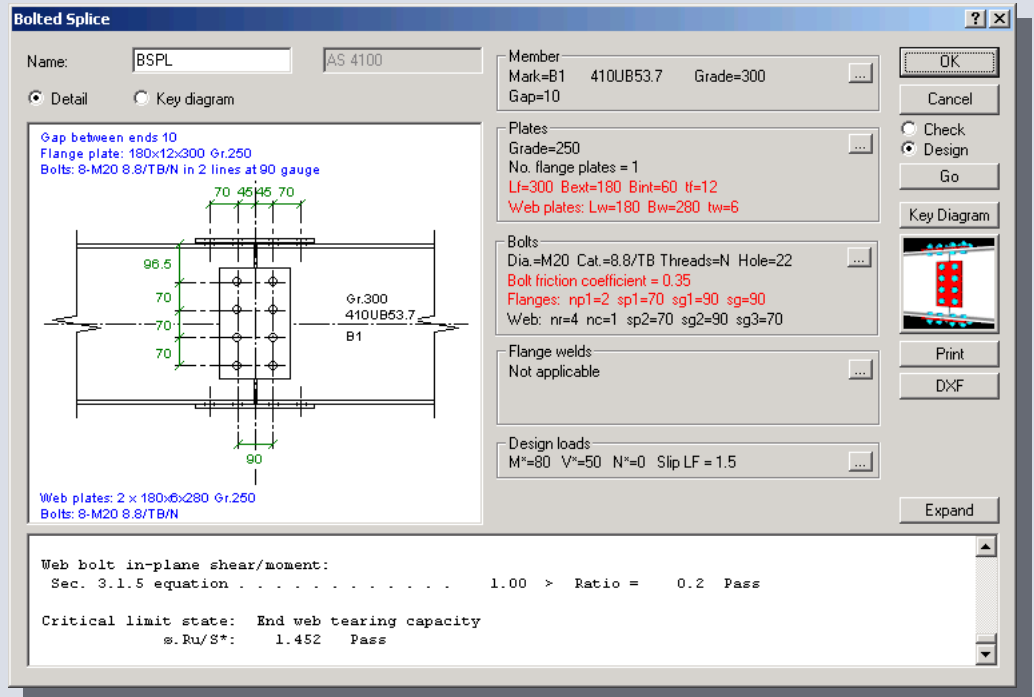

Limcon V3 is based on the latest reference material for AISC LRFD, BS 5950, and AS 4100. Published design models are used for each connection but specific code provisions take precedence.
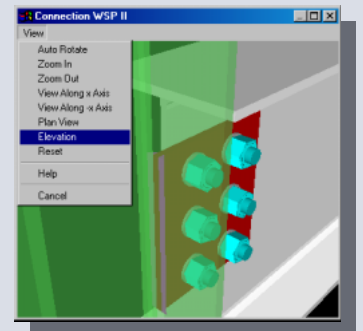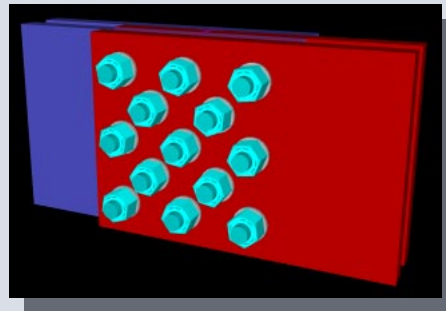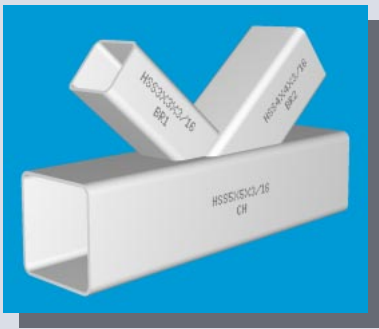
Limcon V2 continues to be available as an entry-level program for checking open section connections to AS 4100. Upgrades to Limcon V3 are available from previous versions of Limcon.

For each connection type a specific dialog box shows a diagram of the connection and offers logically grouped data input. The connection diagram may be switched between a detail of the connection and an input parameter key diagram. All connection details including steel section, plate dimensions and grade, bolting configuration, and weld details are accessible through the connection dialog box. A *virtual reality view* of the connection may be displayed as an additional aid for checking input data.
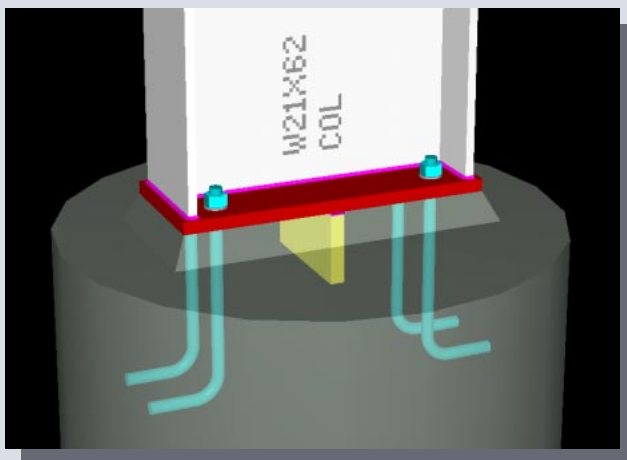
Results of capacity checks are displayed in the lower window of the dialog box. The dialog box also provides options to generate a CAD DXF detail and print a full report with results of checks for all possible failure modes.

Section properties are extracted from a library file containing standard steel sections. A number of libraries are available for sections originating in countries including Australia, UK, US, Japan, and New Zealand. You may change any library or create a new one using the Section Library Manager.
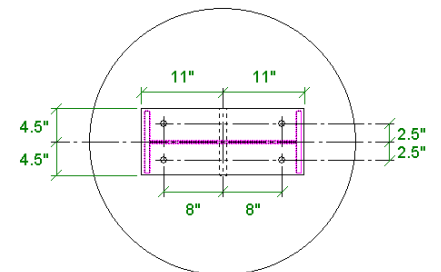

Limcon is easy to use with many advanced Windows features, such as HTML Help, pop-up Help, tooltips, and data tips. The full manual is available on-line with table of contents, index, and a text-search facility.

Clicking the DXF button in a connection dialog box creates an AutoCAD DXF file with a detail of the current connection. The Print button generates an analysis report with a dimensioned detail diagram.

Professional support is available to users with a current version of the software. Minor program updates may be downloaded from the internet.