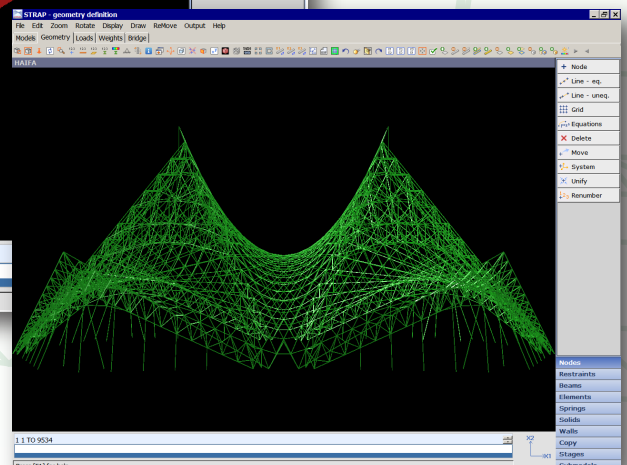
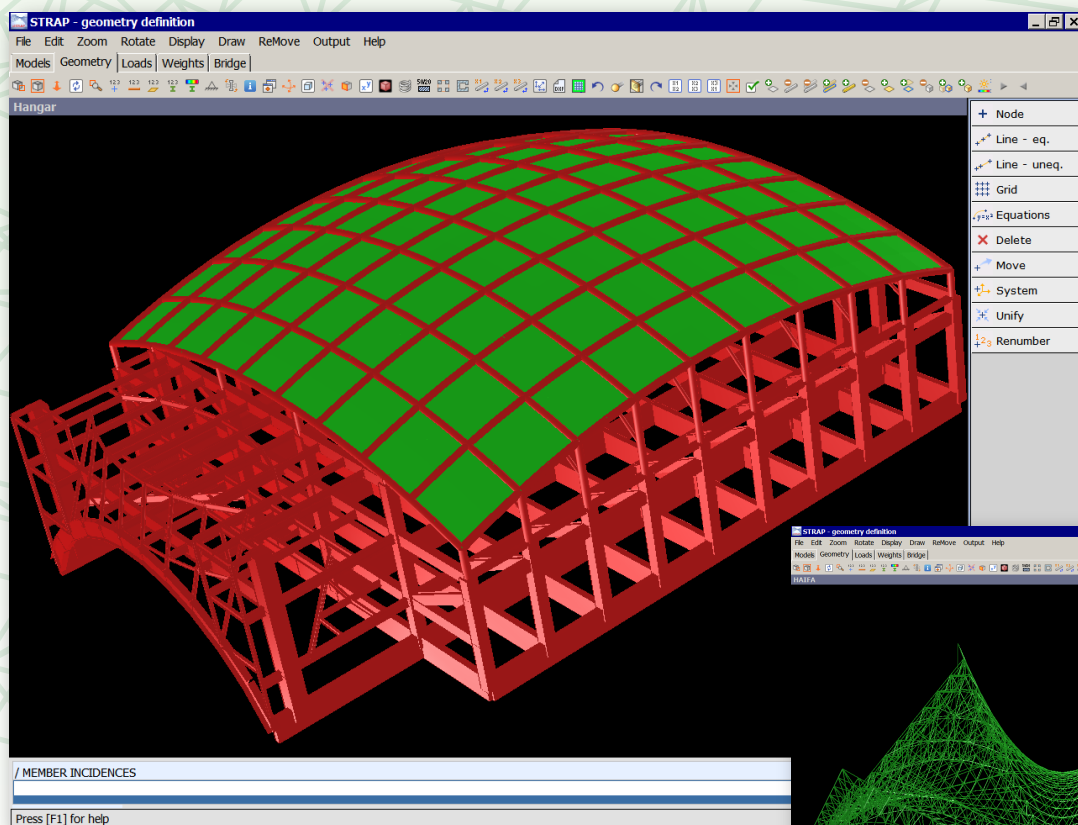


Steel

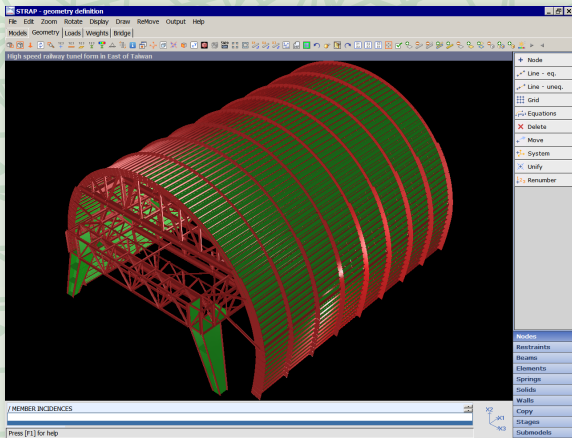
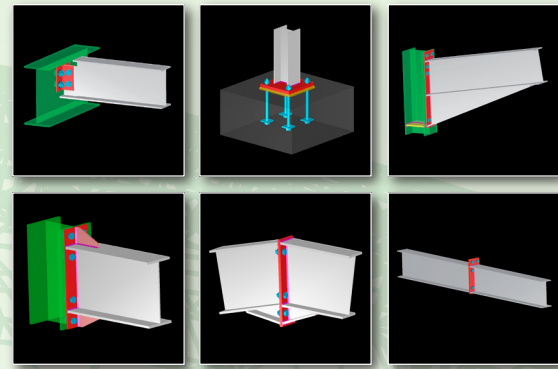
Working inside the STRAP package, STEEL is the most versatile and comprehensive steel design program available today. Once analysis is complete the engineer can easily design steel structures, from the simplest to the most complex, with very little additional data input.

The structure may consist of standard hot rolled sections, cold formed (light gauge) sections, composite sections or any combination of section types. Whilst the program includes tables of standard section types, the user may also define sections by inputting basic dimensions. The program calculates all properties required for the design, e.g. section area, moments of inertia, warping constant, etc. Tapered or slender sections may be defined.

A very powerful feature of the program allows the user to constrain the automatic member selection to achieve an economic but practical design. The constraints include limits on section dimensions, identical members, permitted section types, etc. Data input is fully graphical and at any stage the user may review and revise such items as the steel grade, allowable deflection, intermediate supports, etc.



In steel structures, deflections often govern the design. In STEEL, the user may define different deflection criteria for different beams or different loading combinations. A powerful optimization facility enables the user to limit the deflection of certain nodes or the drift between adjacent nodes. The program selects the sections that give the most economic solution according to the user's constraints.



STEEL offers the user a variety of features that save time when reviewing results. A color-coded graphic display of each member capacity gives an instant indication of structural performance. Brief tabular results give an overview for the whole structure and may be sorted by section type if required. Detailed results for selected members include all factors and code formulas used by the program.

Steel Connections may be automatically designed using the CONNECT module.

