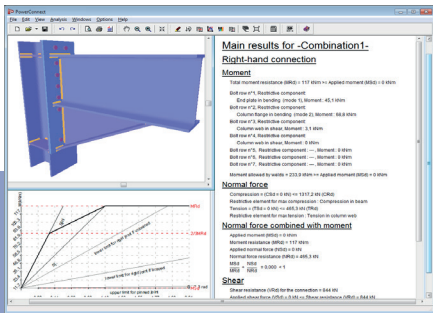


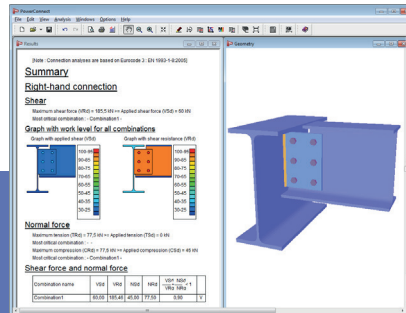
PowerConnect

STEEL CONNECTION SOFTWARE



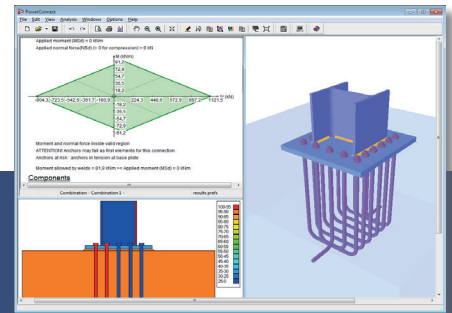
Moment

You have a wide choice of stiffening elements such as end plate, gusset, backing plate, web plate, haunch, horizontal stiffener, diagonal stiffener ... With just one mouse click, you optimize the bolts positions, taking into account all the design code requirements. PowerConnect calculates the resisting moment, normal force, shear force and effective rotational stiffness for rigid and semi-rigid connections.



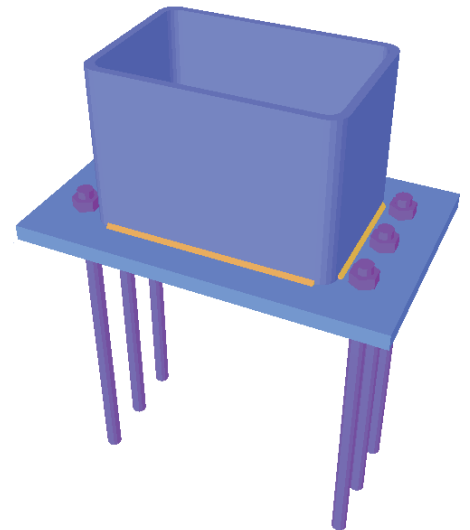
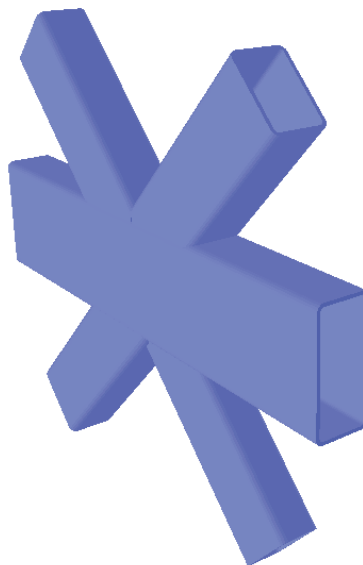
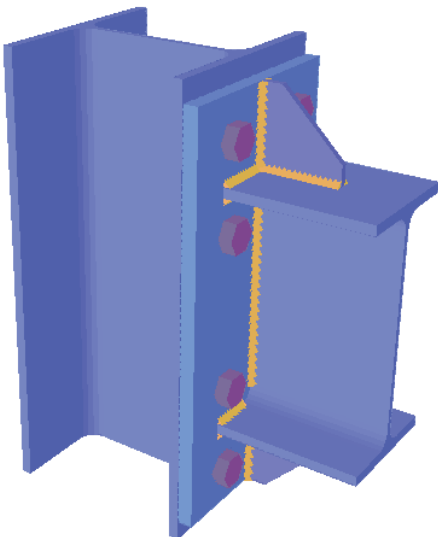
Shear

For hinged joints, PowerConnect calculates the shear and normal force resistance. Thanks to the colored working level of each component in the connection, you can quickly locate under- and oversized elements. PowerConnect makes it possible to optimize each component of node, resulting in a more economic connection.



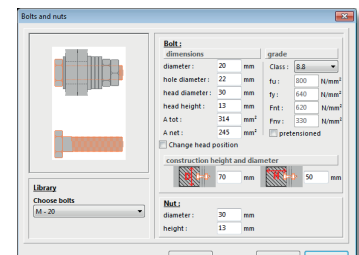
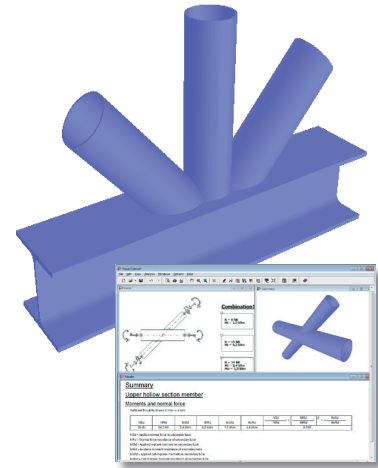
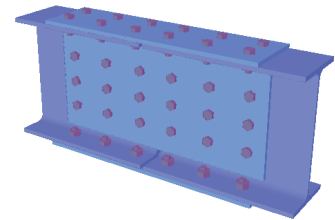
Column base

You easily design bolted column bases with I or H sections, RHS or SHS tubular section. Anchors can be straight, with or without plate or curved. You calculate the area of resisting moment and normal force, the resisting shear force and actual rotational stiffness. The stiffness diagram represents the real rotation capacity, taking into account the different node elements.



Features

- Easy and fast definition of connections from an extensive library of typical connection designs.
- Unlimited number of loads combinations.
- **Moment and shear connections with H- or I- sections**
 - Extensive range of connection types: beam-column, beam-column-beam, beam-beam, column base, beam and column splices.
 - Connections on the weak axis.
 - Double non-symmetrical connections.
 - Choice between wide range of stiffeners: end plate, end plate stiffener, web stiffener, backing plate, web plate, haunch, ...
 - Bolted or welded connexions with end plate, connection angles, base plate with cramps, bolted plate on beam flange or web, fin plate, transverse plate.
 - Optimisation of bolt positions.
 - Calculation of connection design resistance (bending, shear and compression/tension) according to EN 1993-1-8, IS 800 and AISC-LRFD.
 - Fast identification of undersized and oversized components through colour-coding on connection geometry of each component's level of exhaustion.
- **Hollow structural section connections**
 - Analysis of tubular connections of type T, Y, DY, X, K, N, KT & DK (all circular, square & rectangular cross-section or with H- and I- sections).
 - Calculation of axial force resistance and in-plane and out-of-plane bending moment resistance, according to Eurocode EN 1993-1-8 and AISC-LRFD.
 - Creation of plan views including annotation. Export capability to DXF, allowing for further elaboration in CAD environment.
 - Automated creation of design analysis report with preview capability. Report can be saved as RTF file.



In numbers

- **2000** customers use BuildSoft software in more than 50 different countries
- **25+** years of experience in structural design analysis and design codes
- **4000** BuildSoft licenses in use with customers
- **75%** of the customers have a maintenance or subscription contract
- **2200** student registrations every year for a free educational license

Our customers

- Engineering offices & consultants
- General contractors
- Construction companies
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- Universities & colleges

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