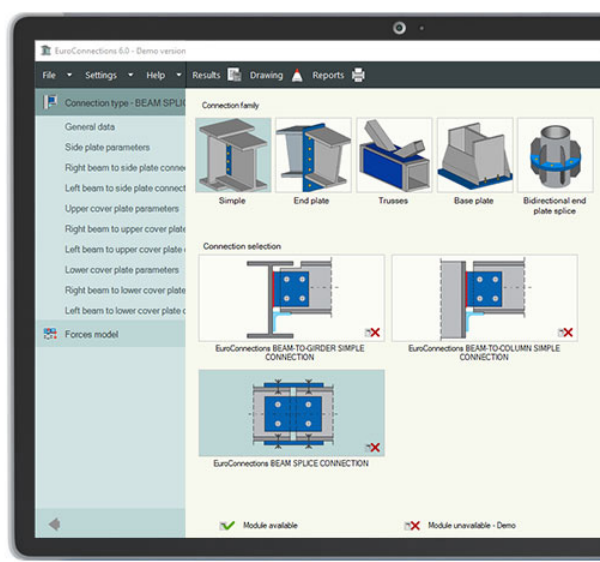
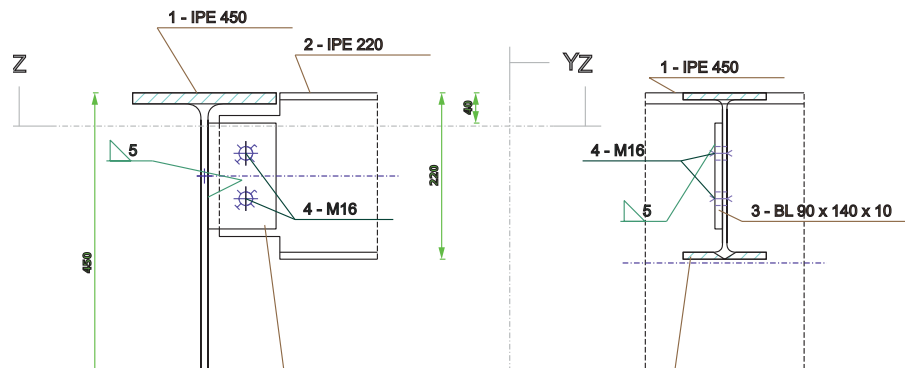


A collection of programs for steel connections design.



Design and verify the capacity of typical uniplanar frames & lattice connections in steel structures according to PN-EN 1993-1-8:2006 standard. Welded or bolted connections in various joints types.

Possibility to create a model for a rigid, semi-rigid or nominally pinned joint. Various additional connection components can be used, depending on specific connection type: side plate, fin plate, flange cover plate, landing cleat, end plate, base plate, stiffener plate, haunch, shear nib, gusset plate, etc.

The program operates in a standalone mode, or as a design module for steel connections calculations in ArCADia-RAMA program.

The program creates a bill of materials for connectors and other components used in connection.

The program creates an advanced and dynamic sketch of the designed connection model, which can also be saved to an editable file in the DXF format. Reports with verification result in RTF or PDF format can be created in four different detailed levels with the option of customizing their scope by the user.

The following types of connections are supported:

SIMPLE group:

- BEAM-TO-GIRDER simple connection +DXF
- BEAM-TO-COLUMN simple connection +DXF
- BEAM SPLICE connection +DXF

END PLATE group:

- BEAM-TO-COLUMN END PLATE connection +DXF
- BEAM-TO-BEAM END PLATE connection +DXF

TRUSSES group:

- TRUSS GUSSET PLATE connection +DXF
- WEDLED TUBULAR TRUSS node +DXF

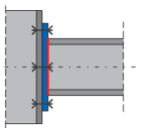
BASE PLATE group:

- I-BEAM COLUMN BASE +DXF
- DOUBLE-BRANCH COLUMN BASE +DXF
- RECTANGULAR HOLLOW SECTION COLUMN BASE +DXF
- CIRCULAR HOLLOW SECTION COLUMN BASE +DXF

BIDIRECTIONAL END PLATE SPLICE group:

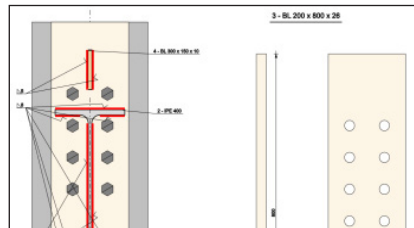
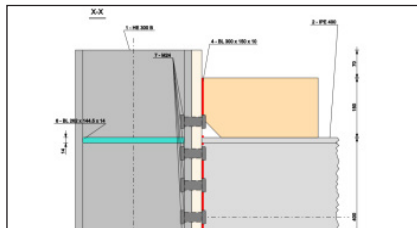
- END PLATE I-BEAM JOINT
- END PLATE DOUBLE-BRANCH PROFILE JOINT
- BIDIRECTIONAL END PLATE SPLICE FOR RECTANGULAR PIPES
- BIDIRECTIONAL END PLATE SPLICE FOR ROUND PIPES

BEAM-TO-COLUMN END PLATE connection



Connection type BEAM-TO-COLUMN END PLATE connection, with plate stiffeners and haunches, welded or bolted, verification for sets of uniplanar internal forces, or the full bearing capacity of members.

The algorithm for verification of a connection in which both main members are connected via the end plate or by means of direct welding. The connection is one-sided (for one beam from one side of the column), with various possible configurations.



General:

- advanced and dynamic sketch of the designed connection model in an editable DXF format, which includes bill of materials
- cross-sections for the beam and column are I-beam sections
- beam connected to column flange
- beam connected to the column also at an angle other than 90°
- it is possible to use the column web stiffener: the upper stiffener (on the extension of the upper beam flange), the lower stiffener (on the extension of the lower beam flange) or the supplementary web plate

Stiffeners:

- stiffeners reinforcing beam flange bottom and/or top
- haunches (modelled as a standard tee profile, 1/2 I-beam section or welded haunch) or plate stiffener
- the stiffener-to-end plate connection can be realized using fillet or butt weld
- if haunches are used, it is possible to use additional transverse column web stiffeners: top plate stiffener (on the extension of the upper haunch flange) and bottom plate stiffener (on the extension of the lower haunch flange)