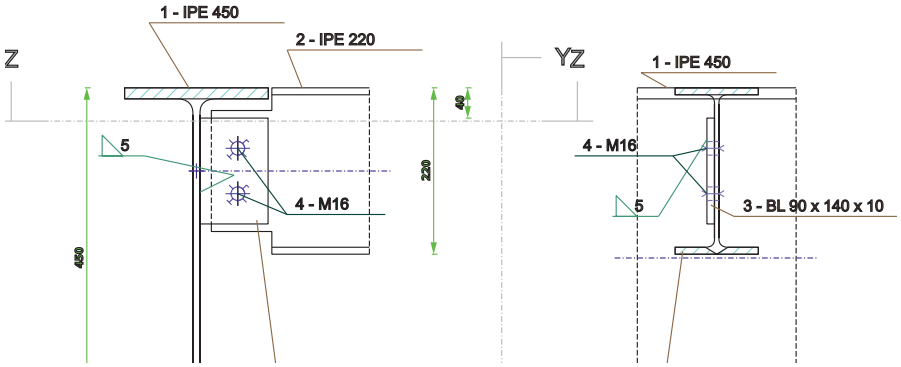
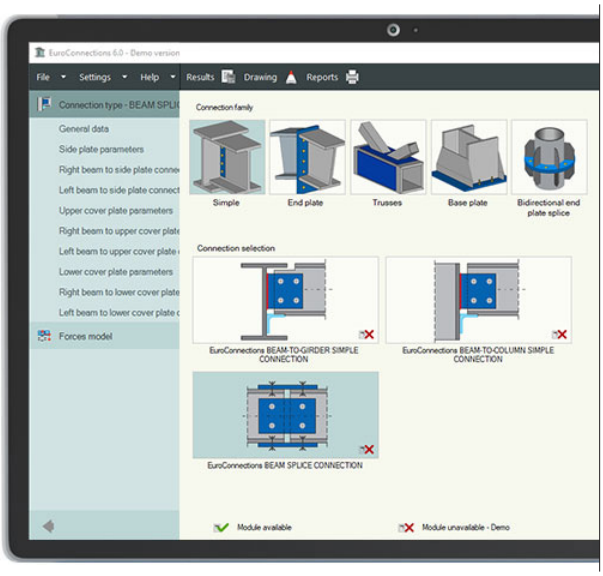
ArCADia SOFT



EuroConnections

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 connetion 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

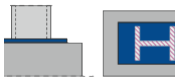
END PLATE group:
- BEAM-TO-COLUMN END PLATE connection +DXF
- BEAM-TO-BEAM END PLATE connection +DXF

TRUSSES group:
- TRUSS GUSSET PLATE connection +DXF
- WEDLED TUBULAR TRUSS node +DXF

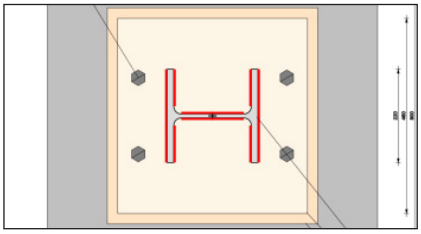
BASE PLATE group:
- I-BEAM COLUMN BASE +DXF
- DOUBLE-BRANCH COLUMN BASE +DXF
- RECTANGULAR HOLLOW SECTION COLUMN BASE +DXF
- CIRCULAR HOLLOW SECTION COLUMN BASE +DXF

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

I-BEAM COLUMN BASE

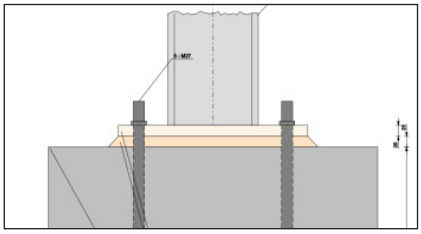


Connection type I-BEAM COLUMN BASE, fixed or pinned, for I-beam column sections, verification for sets of spatial internal forces, or the full bearing capacity of column cross-section.



General:

- advanced and dynamic sketch of the designed connection model in an editable the DXF format, which includes bill of materials
- cross-sections for the beam are I-beam sections
- possibility of the design and verification of pole/column base obtained from ArCADia RAMA structure model
- column anchored in the foundation block at a straight angle
- bisymmetrical configuration of the joint model
- the possibility of using a shear nib
- the possibility of reinforcing the column base with stiffener plates (in enumerated configurations)

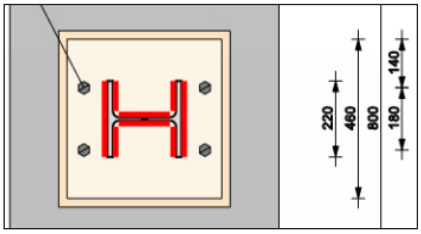


Base plate:

- rectangular base plate
- column section centered on the base plate

Stiffeners:

- in the form of a set of pairs of plates connected to column section corners, in directions perpendicular to the edges of the base plate (orthogonal projection)



Anchors:

- straight anchors, J-anchors, L-anchors and headed anchors
- possible arrangement in two distinct modes - along each side of the base plate and in a mode with exactly 4 corner fasteners