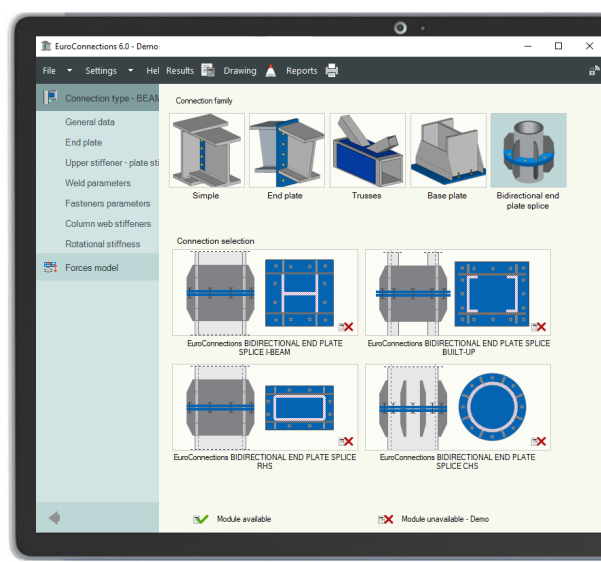
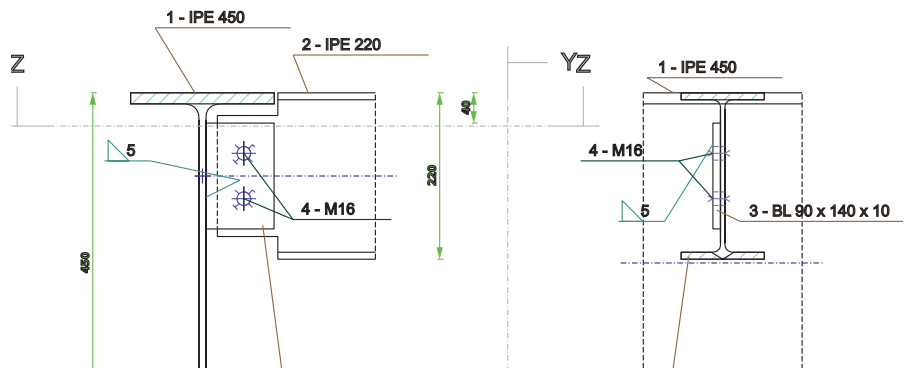


A collection of programs for steel connections design.



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

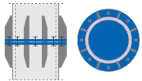
### BASE PLATE group:

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

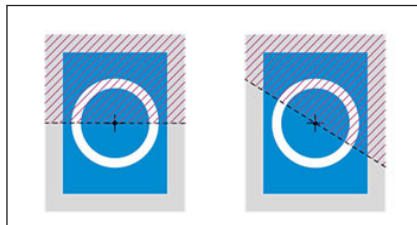
### BIDIRECTIONAL END PLATE SPLICE group:

- 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

## BIDIRECTIONAL END PLATE SPLICE FOR ROUND PIPES

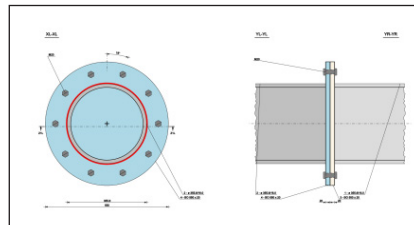


The EuroConnections BIDIRECTIONAL END PLATE SPLICE FOR ROUND PIPES module allows for the design and verification of a steel connection using beams with a profile of round tubes, with the possibility of applying radial ribbing. The connection is designed using bolts through circular or rectangular front plates. Design and verification is performed based on a user-defined two-way set of transverse forces, taking into account bending moments or the load-bearing capacity of beam sections. The connection is analyzed for stiffness.



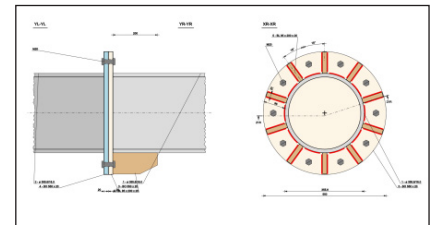
### General:

- Based on the user-defined connection model, the program allows for the automatic generation of workshop drawings of the base plate in DXF format, including a list of connecting parts.
- Calculations are conducted for the frontal connection of two co-linear beams with cross-sections of round tubes, for a set of spatial forces (two-way bending, two-plane shearing).
- The program enables node counting from the ArCADia-RAMA program.
- End reinforcement(s) of one or both beams can be applied using ribs in a radial configuration.



### Front plate:

- Has a circular or rectangular shape.
- Is circumferentially welded to its corresponding tube cross-section.
- Front plates are connected using screws arranged radially.



### Ribs:

- Take the form of plates radiating from the edges of the tube cross-section.
- Ribbing is welded to the tube cross-section and the front plate.
- The use of ribs for both sides (beams) is mutually independent.