

STS+

Single-span Steel Column

The STS+ application performs structural safety analyses in accordance with the model column method for columns of steel profile sections as per EC 3 (EN 1993-1-1) under planned (e-c)centric loading. The regulations of the National Annexes are taken into consideration.

- DIN EN 1993-1-1/NA
- ÖNORM B 1993-1-1
- NA to BS EN 1993-1-1

Structural systems

The following structural systems are supported:

- Cantilever column
- Hinged column
- Column pinned on top and restrained on bottom
- Column restrained on top and on bottom

- General column (the supporting conditions can vary in the directions of the main axes)

Loads

You can apply vertical and horizontal loading on the column system and define moments. You cannot define loading that produces planned torsion, however. Moreover, you can define appended hinged columns in the directions of the both main axes and optionally apply the self-weight of the column.

Calculation

STS+ generates automatically the appropriate load cases and load case combinations in accordance with the defined actions and performs the necessary analyses, whereby the decisive load case combination is determined for each limit state.

Interfaces to other applications

You can transfer the characteristic support reactions or the design values of the support reactions to the following software applications:

- FD+ Isolation Foundation
- FDB+ Block Foundation
- ST3 Hinged Column Base
- ST6 Restrained Column Base

If you have a valid licence for the BTII+ (2nd Order Buckling Torsion Analyses) you can transfer the structural system from STS+ to BTII+ via the data export function. The BTII+ application is also suitable for second order buckling torsion analyses of more complex systems.

