End-plate connection optimization – Python codes

Classes (in classes.py):

|  |  |
| --- | --- |
| EndPlate | General functionalities for end-plate connections |
| Side | Implements one side of an end-plate connection |
| Row | A single bolt row |
| T\_stub | Properties of a T-stub |
| RowGroup | Bolt row group |
| ShearBlock | Properties of a shear block supporting the beam |

General functions (in functions.py):

Containts basic functions of the component method

Tables and tuples:

|  |  |
| --- | --- |
| gamma\_M | Partial safety factors |
| mat | Material properties |
| mat\_bolt | Bolt material properties |
| bolt\_sizes | Array of bolt sizes |
| bolt\_lengths | Array of standard bolt lengths |
| bolt\_size | Dictionary of bolt sizes, including shear area |
| profile | Dictionary of rolled I- and H-profiles |

Optimization (optimization.py)