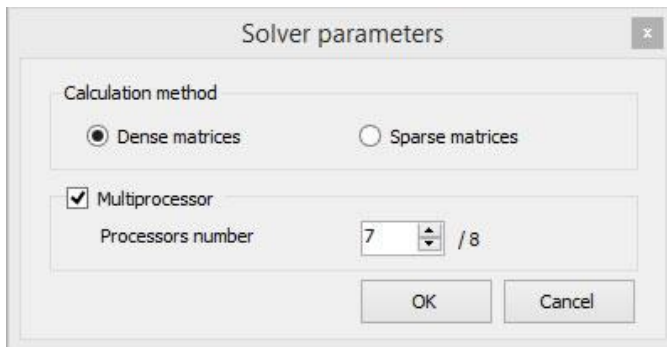


MULTI-THREADING

(OPTIONAL MODULE)

The module allows to speed up the calculation by selecting the calculation method and using the multiprocessor.

Two different solver parameters are now available.



Calculation method

- Dense matrices
- Sparse matrices

3Muri software performs the calculation using the FEM method (finite element method), that needs to know the stiffness matrix K . Classical engineering applications leads to stiffness matrices characterized by a lot of zero values inside them. In numerical analysis, a sparse matrix is a matrix in which most of the elements are zero.

When a software manages sparse matrices it is better to use specialized algorithms and data structures that take into account the characteristics of the sparse matrix. Performing operations using the dense matrix algorithms can take a long time and a large amount of memory. The sparse matrices can be easily compressed, achieving faster calculations and less memory use.

Multiprocessor

Using this option you can perform simultaneously different calculations on multiple processors. When you perform multiple analysis (24 pushover analysis) you can perform the analysis using every available processors, saving time.