

ZZZZ289 - Validations of computations of the elementary matrixes of elements INCO

Summarized:

This test is used to validate the computation of options `MASS_MECA` and `RIGI_MECA` of the elements of modelizations `INCO` and `INCO_UP`. Three modelizations are used: (A) elements `3D`, (B) elements `D_PLAN` and (C) elements `AXIS`.

1 Principle of the test

One uses operator `CALC_MATR_ELEM` to evaluate the mass matrixes and of stiffness of various incompressible elements `INCO` and `INCO_UP`.

2 Reference solution

For the checking of the computation of the mass matrix, option `MASS_MECA`, one uses property `S_R` of the matrixes calculated with `CALC_MATR_ELEM` that one compares with that obtained for the standard elements (`3D`, `D_PLAN` and `AXIS`). The solution is thus of type `AUTRE_ASTER`.

For the stiffness matrixes, one always uses property `S_R` of the matrixes calculated with option `RIGI_MECA` except that in this case solution is of the non regression type.