
Operator FONC_FLUI_STRU

1 Drank

To create a constant function parameterized by the curvilinear abscisse. This function gives the value of the coefficient of added mass for a configuration of standard "the tube bundle under transverse flow".

This function is used downstream by the operator DEFI_MATERIAU [U4.43.01], factor key word ELAS_FLUI. Product a concept of type function.

2 Syntax

```
fonc_cm      [function] = FONC_FLUI_STRU      (  
            ♦TYPE_FLUI_STRU=typeflui        ,      [type_flui_stru]  
            )
```

3 Operands

3.1 Key word TYPE_FLUI_STRU

♦TYPE_FLUI_STRU = typeflui

Concept of the type [type_flui_stru] produced by the operator DEFI_FLUI_STRU [U4.25.01], providing the value of the coefficient of added mass C_m .

Note:

The value of C_m can be imposed via key word COEF_MASS_AJOU appearing in command DEFI_FLUI_STRU . If the coupling fluidelastic is taken into account, the coefficient of added mass can be calculated by the operator according to the other characteristics of the beam.

Operator FONC_FLUI_STRU creates a concept of the type [function] which is then directly usable by DEFI_MATERIAU [U4.43.01], key word ELAS_FLUI .

The function constant, is parameterized by the curvilinear abscisse, and gives the value of M_r .

the combined use of operators FONC_FLUI_STRU then DEFI_MATERIAU option ELAS_FLUI is necessary when one studies a configuration of standard "the tube bundle under transverse flow", and it is allowed only for this kind of configurations.