
Procedure EXTR_TABLE

1 Drank

To extract a concept of an array.

The array can be a `table_container` resulting of the command `CALCUL`. The extracted concepts are then elementary matrixes, elementary vectors or fields.

The array can be obtained by the operator `RECU_TABLE` (`NOM_TABLE = "MATR_GENE"...`) from a result concept of operator `CALC_FLUI_STRU`.

2 Syntax

```
resu = EXTR_TABLE (

    ♦ TABLE=matable ,
    [tabl_*]

# 1. Definition of the type of result:

    ♦ TYPE_RESU=type , [kN]
    (see the types authorized with the §3.2)

# 2. Selection of the cell to be extracted:

# 2.1 Selection of the column containing the cell to be extracted:

    ♦ NOM_PARA=para , [kN]

# 2.2 Selection of line containing the cell to be extracted:

    ♦ FILTRE= (_F ( ♦ NOM_PARA=para ,
[kN]
    / ♦ CRIT_COMP=/ "EQ",
[DEFAULT]
    /"NE",
    /"LT",
    /"GT",
    /"LE",
    /"GE",
    /"VIDE",
    /"NON_VIDE",
    /"MAXI",
    /"MAXI_ABS",
    /"MINI",
    /"MINI_ABS",

# If CRIT_COMP among EQ , NE , LT , GT , LE , GE

    ♦/VALE_I=ival , [I]
    /VALE_K =kval , [kN]
    /VALE_r=rval , [R]
    /VALE_C =cval , [C]
    ♦ | PRÉCISION=/prec , [R8]
    /1.0D-3 ,

[DEFAULT]
    | CRITERE=/ "RELATIF",
[DEFAULT]
    / "ABSOLU",

    ),),

    ♦ TITER=titer , [kN]

)
```

result is typified according to the value provided for TYPE_RESU .

3 Operands

3.1 Operand COUNTS

♦TABLE = matable

One gives the name of the array of which one wants to extract the value from a cell.

3.2 Operand TYPE_RESU

♦TYPE_RESU :

Type of result created.

The command does not make it possible to extract all the types of concept. The authorized types are:

```
"MATR_ASSE_GENE_R", "MATR_ELEM_DEPL_R",  
"VECT_ELEM_DEPL_R",  
"CHAM_GD_SDASTER", "CHAM_NO_SDASTER",  
"CARTE_SDASTER", "CHAM_ELEM",  
"MODE_MECA",  
"FONCTION_SDASTER", "FONCTION_C", "NAPPE_SDASTER",  
"INTEGER" .
```

3.3 Operand NOM_PARA

♦NOM_PARA = para

One gives the name of the parameter identifying the column containing the cell to be extracted.

3.4 To extract a cell; key word FILTRE

This key word factor (répétable at will) is used to select line containing the cell to be extracted. The use of this key word is described in command IMPR_TABLE [U4.91.03].

3.5 Operand TITER

♦TITER = title

Titres that one wants to give to result of the command [U4.02.01].

4 Example

examples resulting from the case test sdll118a

One wishes TOUT to extract from the array the mass matrix generalized for a velocity of fluid given:

```
MG = EXTR_TABLE ( TYPE_RESU = "MATR_ASSE_GENE_R",  
                  COUNTS = TOUT,  
                  NOM_PARA = "MATR_MASS",  
                  FILTRE = _F ( NOM_PARA = "NUME_VITE",  
                               VALE_I = 2) ,  
                  )
```

Example following CALCUL

Recovery of the stress field:

```
SIGM = EXTR_TABLE (TYPE_RESU=' CHAM_GD_SDASTER',  
                  TABLE=CONT,  
                  NOM_PARA=' SIEF_ELGA')
```

Recovery of the elementary matrixes:

```
MATR = EXTR_TABLE (TYPE_RESU=' MATR_ELEM_DEPL_R',  
                  TABLE=CONT,  
                  NOM_PARA=' MATR_ELEM')
```