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## Operator DEFI\_GRILLE

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### 1 Goal

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To define a grid starting from a grid.

A grid is a particular type of grid for which the nodes all are aligned according to the directions of a local base.

The operator produces a concept of the type `grid`.

## 2 Syntax

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```
[grid] = DEFI_GRILLE (  
  
♦ GRID          = my,                               [grid]  
  
# Impression of information  
  
◇ INFORMATION  = / 0,                               [DEFECT]  
                / 1,  
                / 2,  
  
)
```

## 3 Operands

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### 3.1 Operand GRID

◆ GRID = my

my : grid to be used for the definition of the grid

Grid my must be regular, such as all its nodes are aligned according to the directions of a local base. That imposes restrictions on the type and the shape of the elements which can be used to define the grid my: one can use only elements QUAD4 with form square or rectangular in 2D and of elements HEXA8 with form cubic or lengthened in 3D.

No restriction on the form of the field defined by the grid my is not imposed, i.e. the field should not be forcing a square or a rectangle in 2D and a cube where a parallelepiped in 3D. However all the elements must be connected between them and the field cannot be formed by several parts which are not connected.

The local base of the grid according to which the nodes are aligned is calculated automatically.

### 3.2 Operand INFORMATION

/ 0 : no impression on the file 'MESSAGE'

/ 1 : impression on the file 'MESSAGE' :

- length of the smallest edge of the grid my
- calculated local base

/ 2 : impression on the file 'MESSAGE' :

- same information as in INFO=2
- table of connection and distances from the nodes of the grid