

## Structure of data sd\_char\_cine

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### Summary:

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## 1 General information

The structure of data `sd_char_cine` contains the furnished information by the user with the orders `AFFE_CHAR_CINE (_F)`. I.e. information concerning blockings of `DDL`s that one wants to eliminate (and not dualiser).

## 2 Tree structure

```
sd_char_cine (K19)  :: =record
  (O)  \.AFCK'   : OJB  S  V  K8      lonmax=3
  (O)  \.AFCI'   : OJB  S  V  I
  (F)  \.AFCV'   : OJB  S  V  R/C/K8
```

## 3 Contents of the OJB

### 3.1 Object .AFCK

`AFCK (1)` a character string contains "typifying" the load: `\CIxx_yy'`

with:

```
xx:      / ME (mechanics)
         / HT (thermics)
         / AC (acoustics)

yy:      / RE (actual values). Example: AFFE_CHAR_CINE/MECA_IMPO
         / CX (complex values). Example: AFFE_CHAR_CINE/ACOU_IMPO
         / FT (values "function (INST)"). Example:
```

`AFFE_CHAR_CINE_F/MECA_IMPO`

**Notice :**

| *one uses `yy = FT` in the case `AFFE_CHAR_CINE/EVOL_IMPO`*

`WithFCK (2)` : name of the model associated with the load

`AFCK (3)` : / ``  
          / `evoimp` : name of `sd evol_xxx` provided like argument of the keyword `EVOL_IMPO`.

### 3.2 Object .AFCI

One calls a blocking, a kinematic condition being written in the form:

`CMP_i (NOEUD_j) = alpha_ij.`

A kinematic load in is made a list of such blockings. Either `nbloc` the number of blockings of the load, object `.AFCI` is then length  $\geq 3 \cdot \text{nbloc} + 1$

<code>.AFCI (1)</code>	<code>nbloc</code>
<code>.AFCI (2)</code>	number of <code>NODE</code> concerned with the 1 <sup>st</sup> blocking
<code>.AFCI (3)</code>	number of <code>CMP</code> concerned with the 1 <sup>st</sup> blocking
<code>.AFCI (4)</code>	0 (unutilised)
<code>.AFCI (5)</code>	number of <code>NODE</code> concerned with the 2 <sup>ième</sup> blocking
<code>.AFCI (6)</code>	number of <code>CMP</code> concerned with the 2 <sup>ième</sup> blocking

.AFCI (7)	0 (unutilised)
...	...

**Caution:**

The number of *CMP* is the number of *cmp* range by this node and not the absolute number of *CMP* in the catalogue of the size.  
For example, for a bearing node 'DX' and 'DZ', *AFCI* (3) = 2 wants to say "it DZ node *AFCI* (2) ".

### 3.3 Object .AFCV

Object .AFCV when there exists, east is length  $\geq$  nbloc.

Object .AFCV does not exist if AFCK (3)  $\neq$  ``

According to the cases, the stored values are realities, complexes or k8 (names of functions).

.AFCV (1)	specified value for the 1 <sup>st</sup> blocking
.AFCV (2)	specified value for the 2 <sup>ème</sup> blocking
.AFCV (3)	specified value for the 3 <sup>ème</sup> blocking
...	...

### 3.4 Example

```
CHCI=AFFE_CHAR_CINE (MODELE=MO, MECA_IMPO= (
  _F ( GROUP_NO = 'GNO15', DY = -1.2, DZ = 6.1),
  _F ( NODE = 'N368', DY = 3.0) ) )
```

```
IMPR_CO (CONCEPT=_F (NOM=CHCI))
```

```
=====
IMPRESSION OF THE CONTENTS OF THE LOST PROPERTY:
-----
SEGMENT IMPRESSION OF VALUES >CHCI                .AFCI                <
1 -          3          267          2          1          267
6 -          3          1          368          2          1
-----
SEGMENT IMPRESSION OF VALUES >CHCI                .AFCK                <
1 - >CIME_RE <>MO          <>          <
-----
SEGMENT IMPRESSION OF VALUES >CHCI                .AFCV                <
1 - -1.20000D+00  6.10000D+00  3.00000D+00
```