

## Data structures sd\_cara\_elem

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Summarized:

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## Contents

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<a href="#">1 General information.....</a>	<a href="#">3</a>
<a href="#">2 Tree structure .....</a>	<a href="#">3</a>
<a href="#">3 Description of the cards composing the CARA_ELEM.....</a>	<a href="#">3</a>

## 1 General information

the data structure `cara_elem` are a set of cards [D4.06.05] which contain the information assigned to the finite elements of the model.

In general, this information relates to the structural elements: shells, beams,... they are for example the thickness of the shells, the characteristics of inertia of the beams,...

One also uses the `CARA_ELEM` to assign a directional sense (a local coordinate system) to elements parametric Iso -. This directional sense is necessary if for example the material is not isotropic.

## 2 Tree structure

```

cara_elem (K8)  :: =record

| ' .CANBSP'          ! CARD
| ' .CARARCPO'       ! CARD
| ' .CARCABLE'       ! CARD
| ' .CARCOQUE'       ! CARD
| ' .CARDISCA'       ! CARD
| ' .CARDISCK'       ! CARD
| ' .CARDISCM'       ! CARD
| ' .CARGENBA'       ! CARD
| ' .CARGENPO'       ! CARD
| ' .CARGEOBA'       ! CARD
| ' .CARGEOPO'       ! CARD
| ' .CARMASSI'       ! CARD
| ' .CARORIEN'       ! CARD
| ' .CARPOUFL'       ! CARD
    
```

## 3 Description of the cards composing the `CARA_ELEM`

name of the card	name of the quantity	Description
".CANBSP"	NBSP_I	Of the integers allowing to calculate number of subpoints elements at subpoints: many layers, of sectors, fibers,...
".CARARCPO"	CAARPO	characteristic of curved beam elements
".CARCABLE"	CACABL	characteristic of cable elements
".CARCOQUE"	CACOQU	characteristic of shell elements
".CARDISCA"	CADISA	characteristic of damping of discrete elements
".CARDISCK"	CADISK	characteristic of stiffness of discrete elements
".CARDISCM"	CADISM	characteristic of mass of discrete elements
".CARGENBA"	CAGNBA	area of the section of the elements of inertial
bar ".CARGENPO	"	CAGNPO characteristic of the sections of geometrical
beam elements ".CARGEOBA	"	CAGEBA characteristic of the elements of bar with rectangular or circular section

Warning : The translation process used on this website is a "Machine Translation". It may be imprecise and inaccurate in whole or in part and is provided as a convenience.

".CARGEPO"	CAGEPO	characteristic geometrical of the beam elements with rectangular section or circular
".CARMASSI"	CAMASS	orthotropic reference for the solid elements 3D or 2D
".CARORIEN"	CAORIE	directional sense: nautical angles of local coordinate system
".CARPOUFL"	CAPOUF	characteristic of the elements of modelization 3D_FAISCEAU