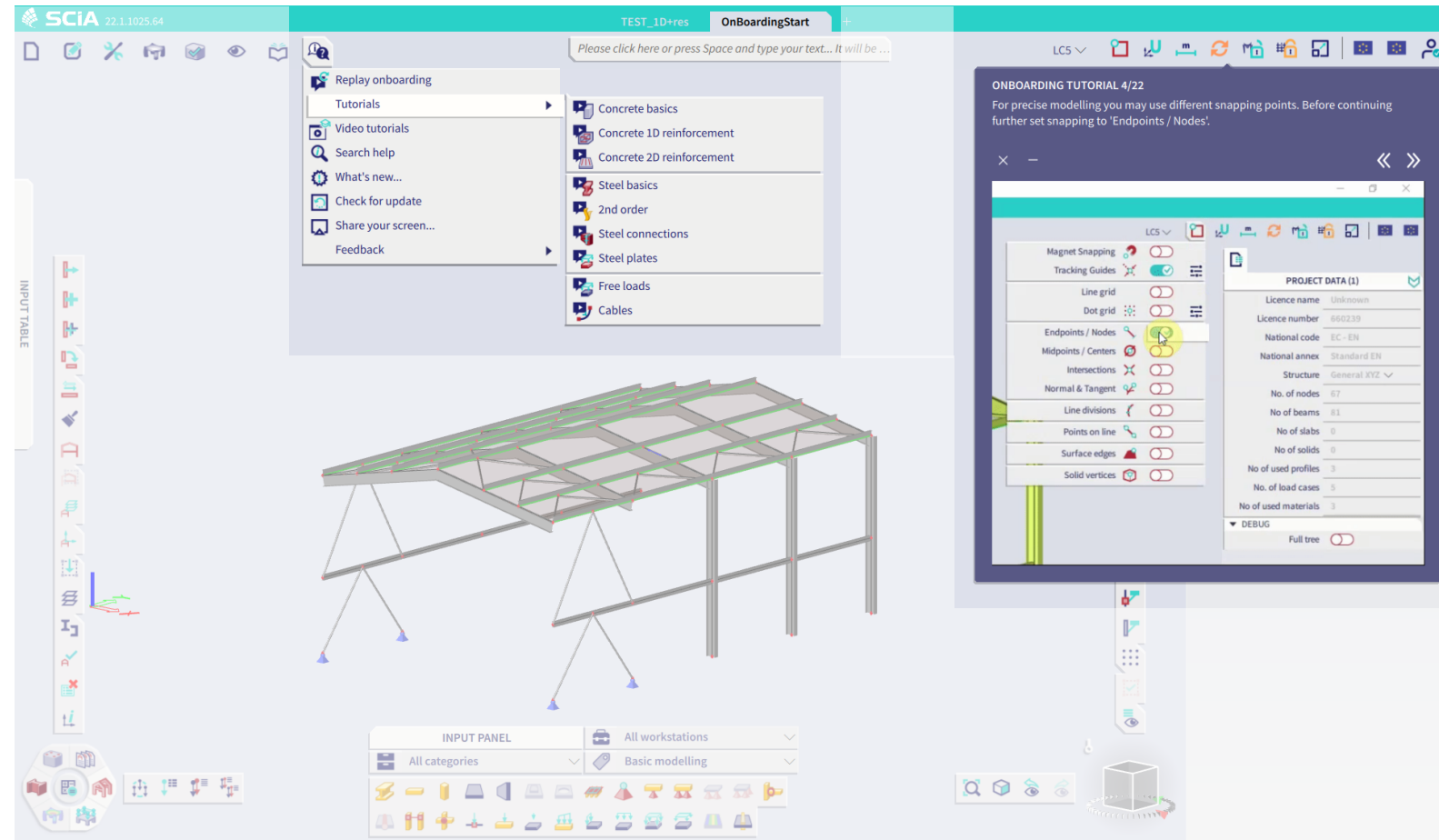


# INTRODUCTIETUTORIAL

## EN ANDERE TUTORIALS

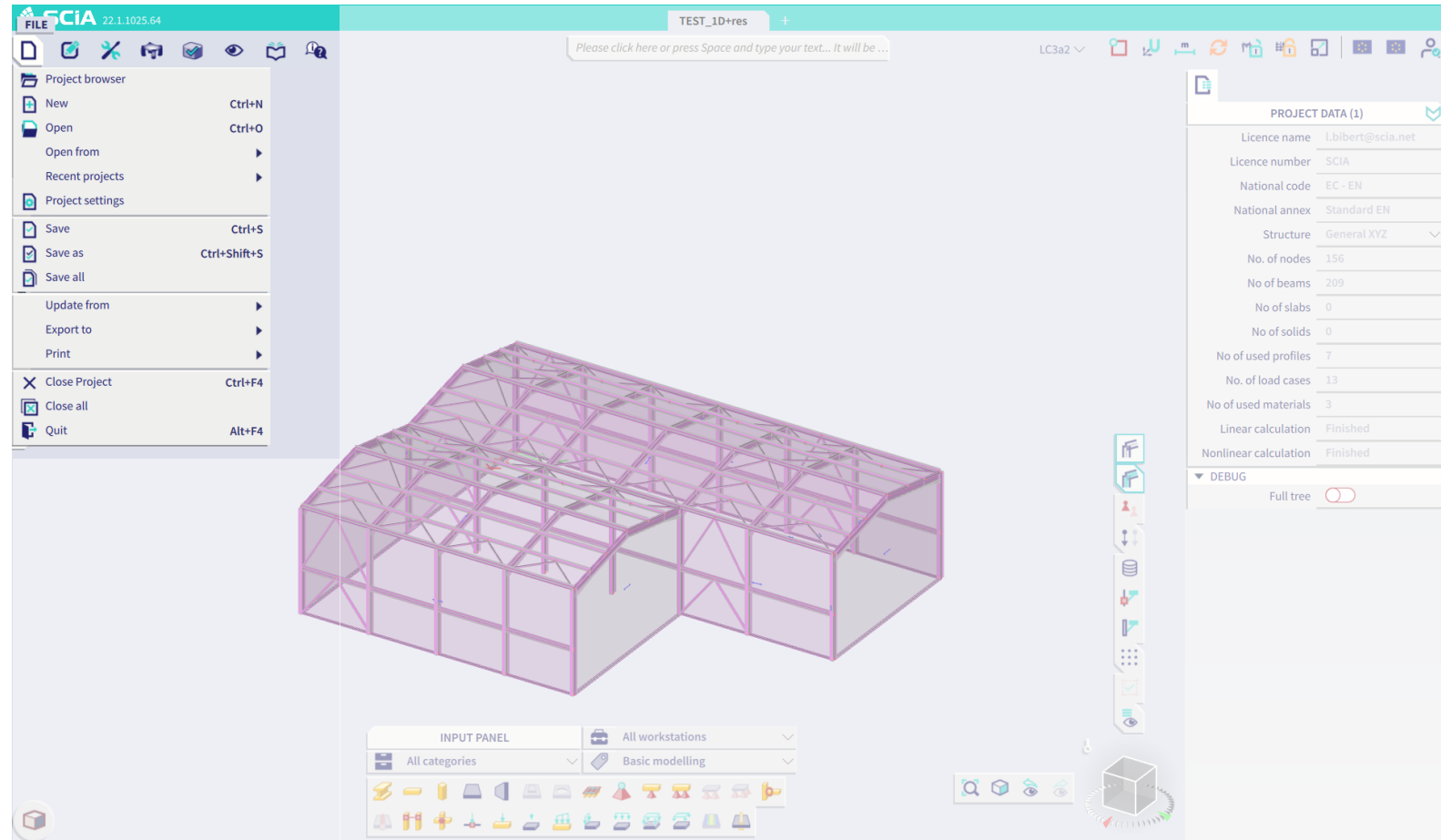
- **Ingebouwde** manier van leren
- Tutorials voor verschillende onderwerpen
- Nieuwe tutorials regelmatig toegevoegd



# MENU'S

## MENUBALK

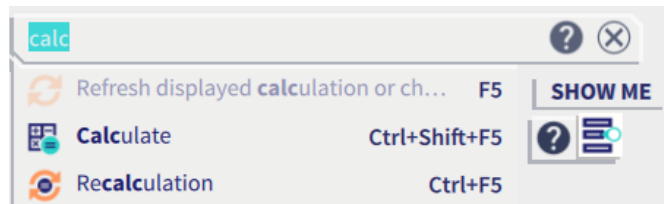
- **Menu inhoud**
  - Bestand
  - Bewerken
  - Tools
  - Resultaten
  - Ontwerp
  - Beeld
  - Bibliotheken
  - Help
- Naar proceswerkbalk slepen en neerzetten
- Sneltoetsen wijzigen
- Sneltoetsen met één letter mogelijk



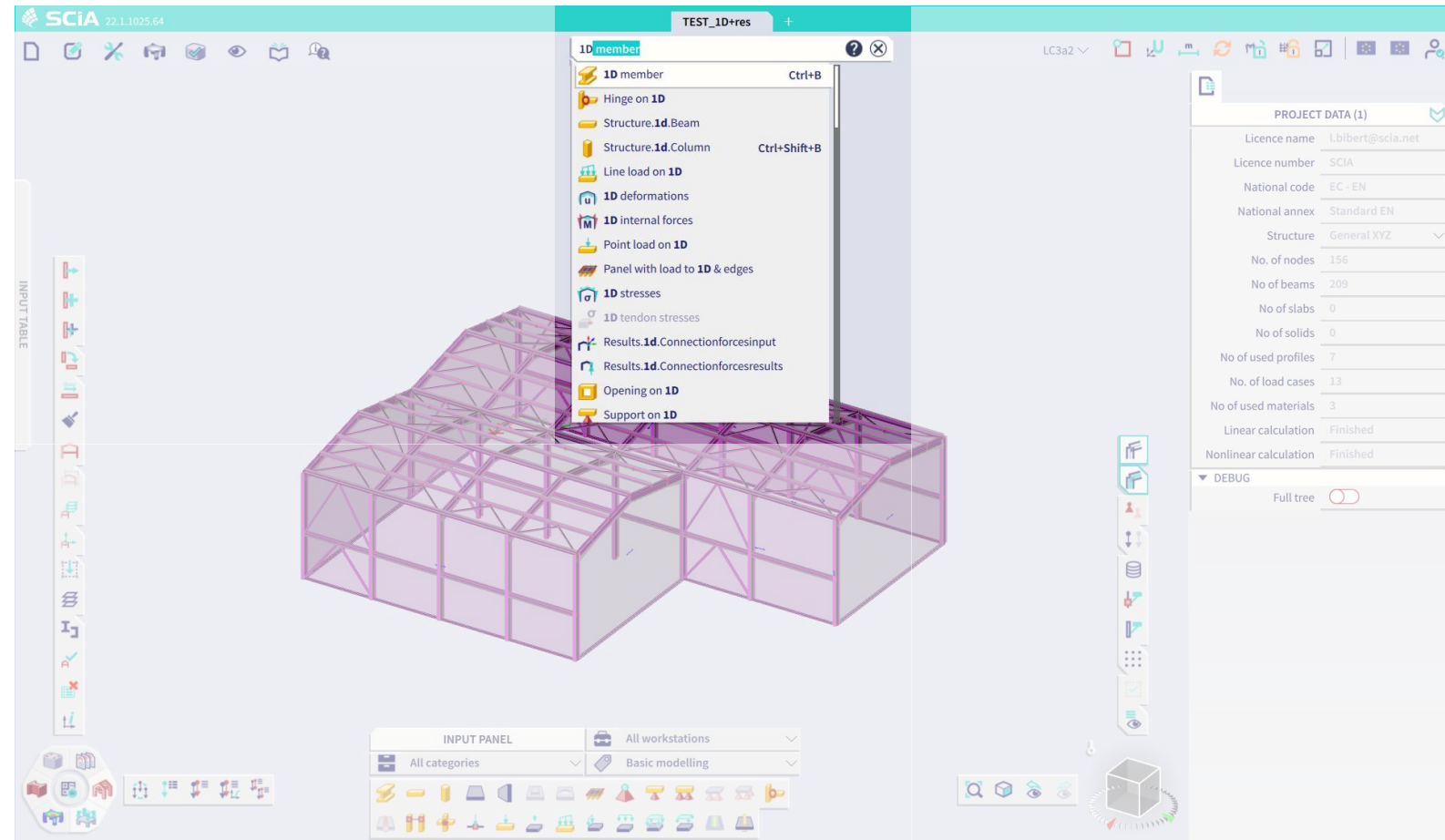
# SPOTLIGHT

## ZOEKBALK EN OPDRACHTREGEL

- **Autofill**
- Resultaten in volgorde van relevantie
- **Spatiebalk** om te focussen
- **Laat me zien (in menu) & help**



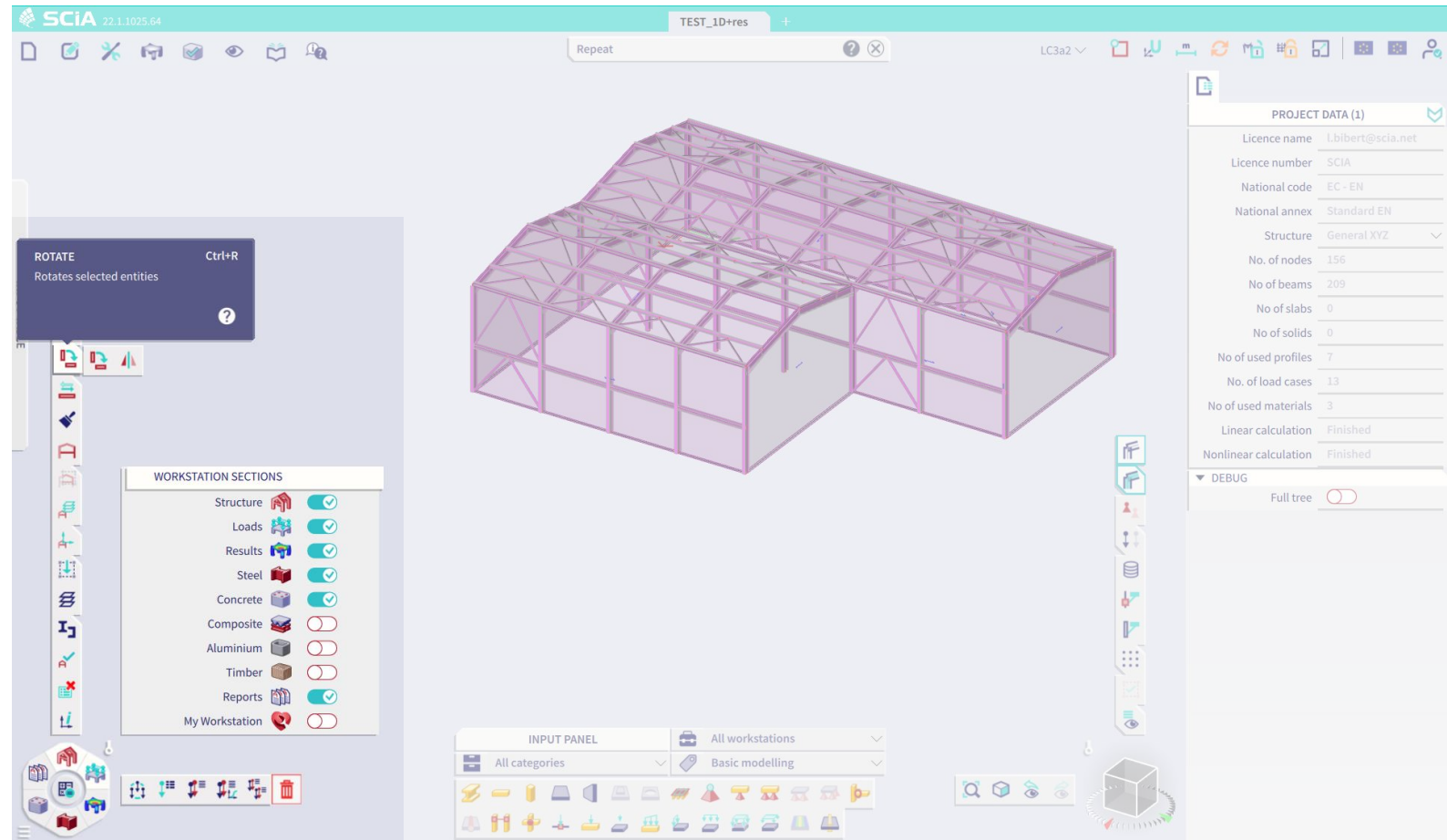
- Gemarkerd tijdens het commando
- Voer **coördinaten** direct in tijdens het commando
- **Sneltoetsen** wijzigen
- **Laatste** commando herhalen



# PROCESWERKBALK

## & WERKSTATION WIEL

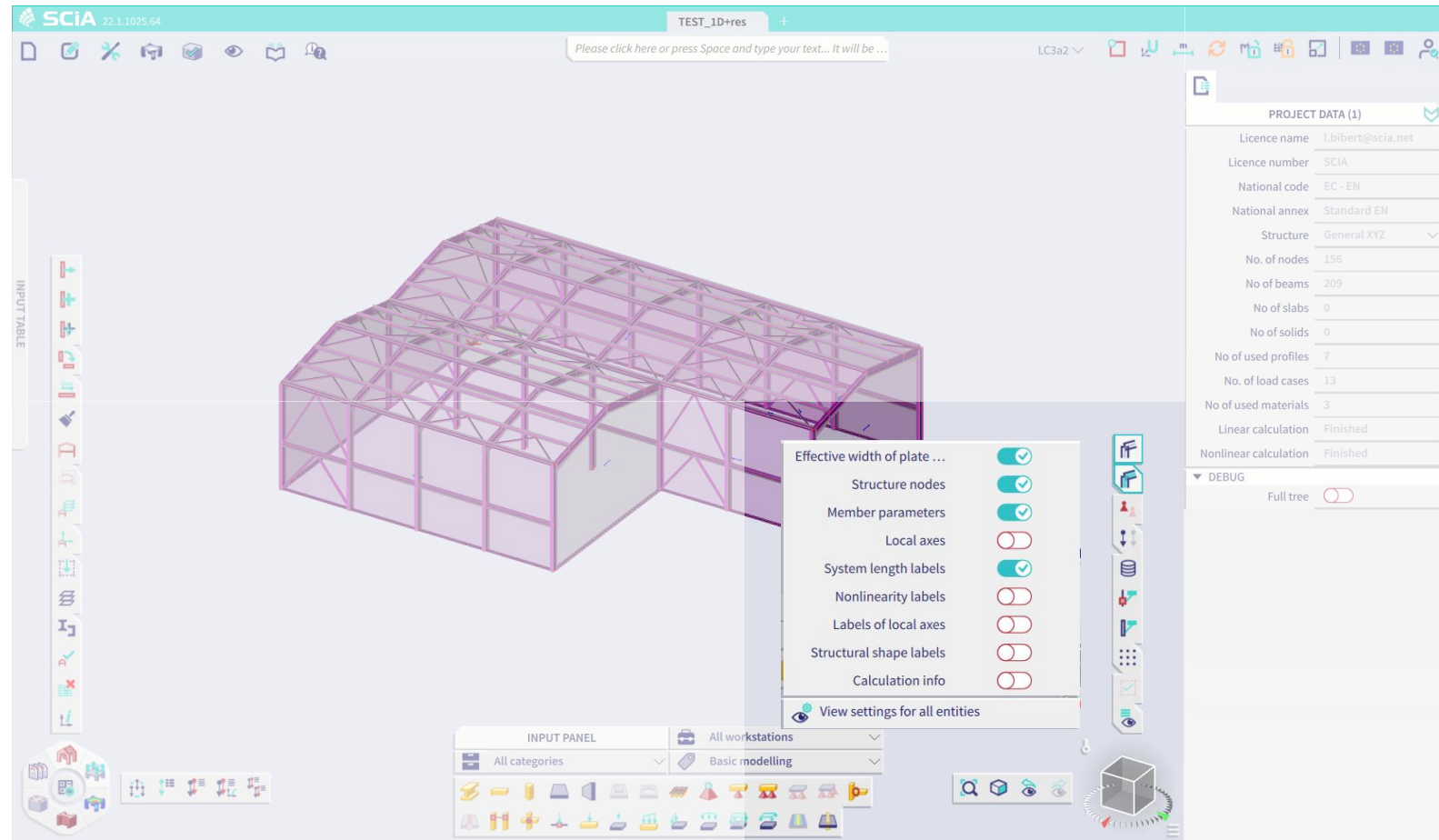
- Verschillende **werkstations** met knoppenbalk in het wiel
- **Twee werkstations** tegelijkertijd
- Wijzig workstation met klik en ctrl+klik
- Workstation selectie via hamburger menu
- Minimaliseren of verslepen
- Armen kunnen gewisseld worden
- **Sleep commando's** vanuit spotlight of menu
- Commando's kunnen **gestapeld**
- **Tooltip** bij zweven met muis (**help & sneltoets**)
- **Bereken** knop
- Zichtbaar of/welke resultaten berekend zijn



# WEERGAVEBALK

## & NAVICUBE

- Gelijkaardig aan proceswerkbalk
- **Beeld, zoom, zichtbaarheid**commando's en -instellingen
- Armen kunnen gewisseld worden
- **Navicube** toont x, y en z
- **Minimaliseren** via hamburger menu
- Vaste positie

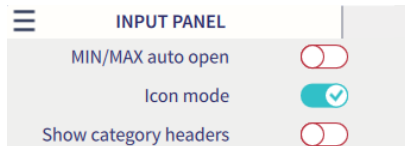




# INVOERPANEEL

## & FILTERS

- **Filters** en werkstations
- Slepen, docken, uittrekken, minimaliseren
- **Icoonmodus** of commandonamen



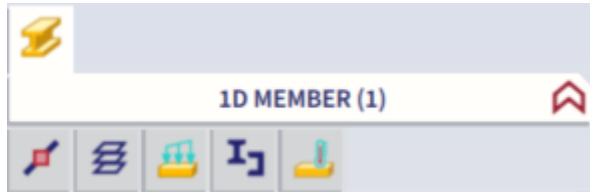
- **Sneltoetsen** wijzigen

A screenshot of the SCIA Engineer software interface. The main window displays a 3D wireframe model of a building structure. The interface includes a top toolbar with icons for file operations, a left sidebar with an 'INPUT TABLE' and a detailed 'INPUT PANEL' menu, and a right sidebar with 'PROJECT DATA (1)' and 'DEBUG' sections. The 'INPUT PANEL' menu is expanded, showing categories for 1D MEMBERS (e.g., 1D member, Beam, Column) and 2D MEMBERS (e.g., Plate, Composite deck, Metal deck). The 'PROJECT DATA' section lists various project parameters such as licence name, national code, and calculation status.

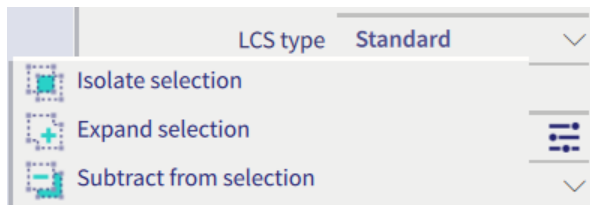
# EIGENSCHAPPENPANEEL

## & RESULTATEN

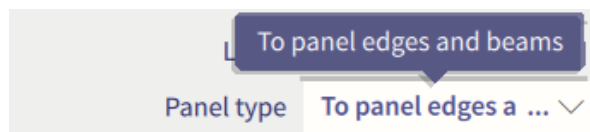
- **Geselecteerde objecten en geassocieerde gegevens**



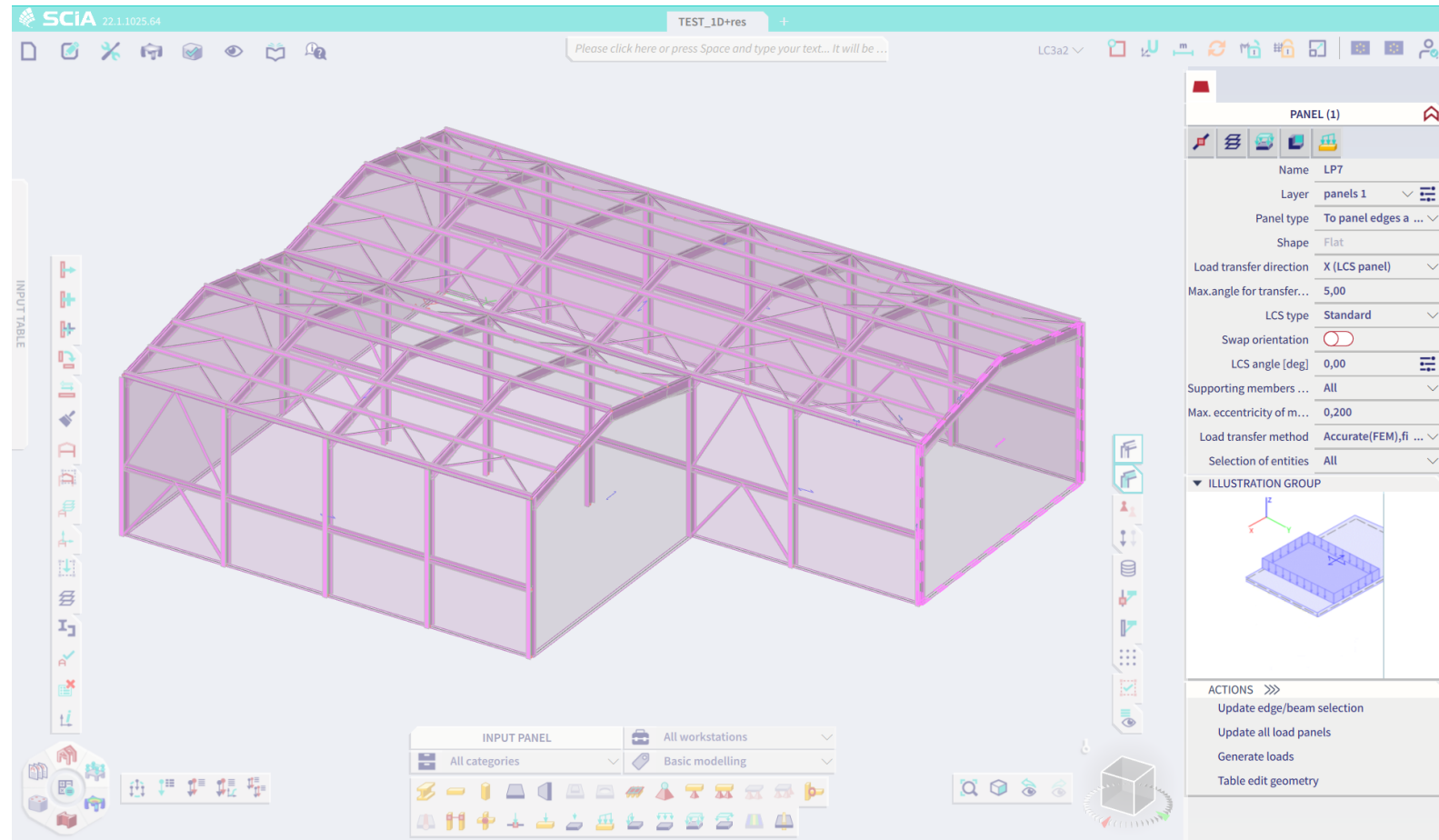
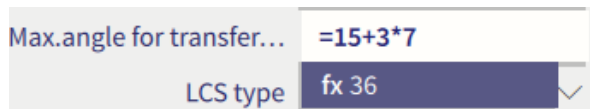
- Slepen, docken, uitscheuren, minimaliseren
- **Basis / Geavanceerde** modus
- **Selectiegereedschappen** met rechtermuisklik, zelfs keuzemenu



- **Tooltip** bij zweven



- **Formules**



# EIGENSCHAPPENPANEEL

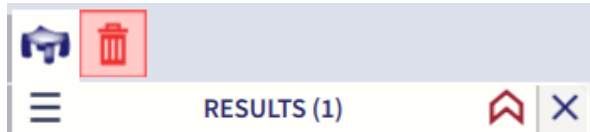
## & RESULTATEN

- Resultaatgeneratie kan worden **geannuleerd** vanuit Spotlight

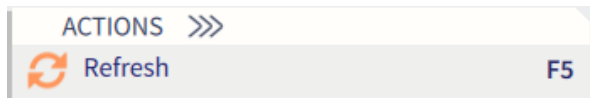
Calculating: 89 / 205

Het beschikbare deel getoond

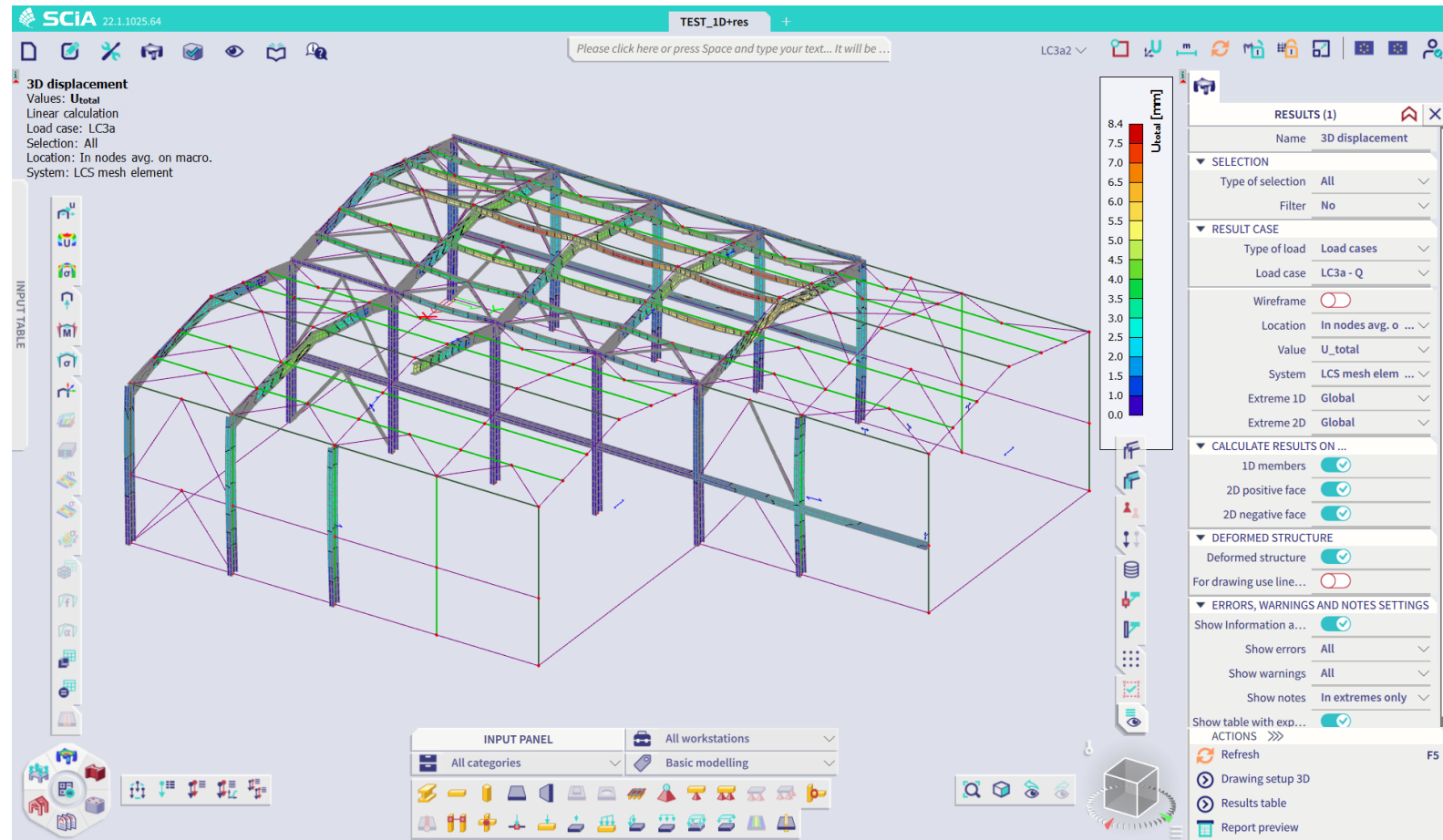
- **Resultaten sluiten:** prullenbak/knop



- (Wijzigen) Sneltoets voor **herlezen** van resultaten



- Resultaten handmatig/Automatisch vernieuwen en resultaten blokkeren in statusbalk







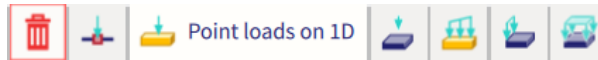
# INVOERTABEL

## TOON & BEWERK WAARDEN

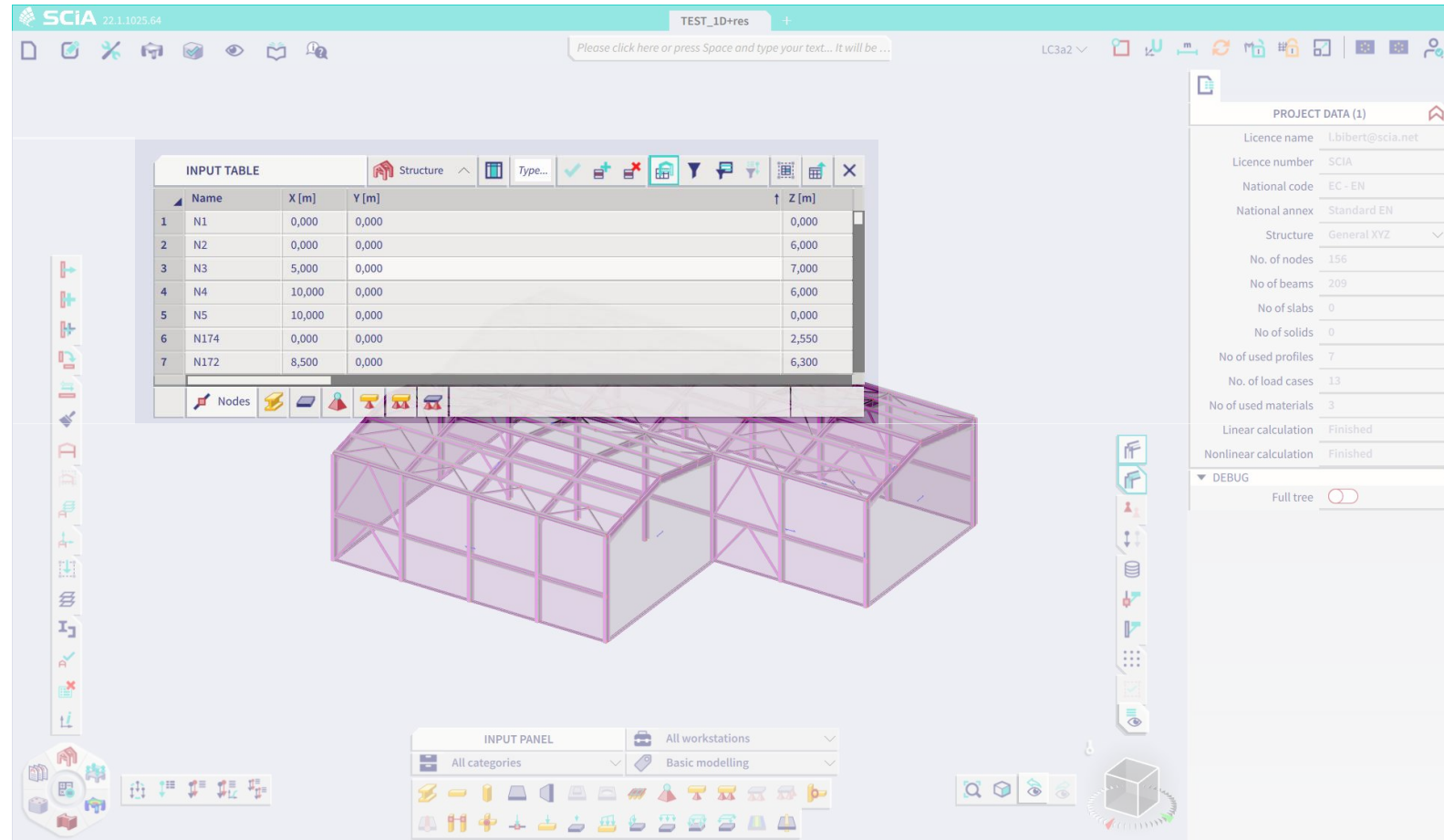
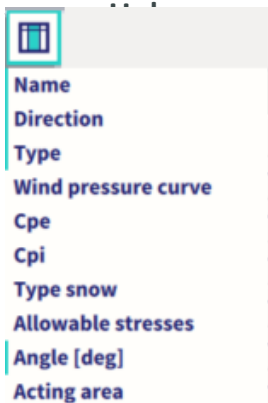
- Slepen, docken, uittrekken, minimaliseren
- Tussen werkstations schakelen



- Tabs schakelen/verwijderen



- Kolommen toevoegen of



The screenshot displays the SCIA software interface for a project named 'TEST\_1D+res'. The main window shows a 3D wireframe model of a structure. Overlaid on this is an 'INPUT TABLE' window with the following data:

	Name	X [m]	Y [m]	Z [m]
1	N1	0,000	0,000	0,000
2	N2	0,000	0,000	6,000
3	N3	5,000	0,000	7,000
4	N4	10,000	0,000	6,000
5	N5	10,000	0,000	0,000
6	N174	0,000	0,000	2,550
7	N172	8,500	0,000	6,300

Below the table is an 'INPUT PANEL' with dropdown menus for 'All categories' and 'Basic modelling', and a row of icons for various input types. On the right side, a 'PROJECT DATA (1)' panel shows project details such as 'Licence name: l.bibert@scia.net', 'National code: EC - EN', and 'Structure: General XYZ'. A 'DEBUG' section at the bottom right has a 'Full tree' toggle switch.

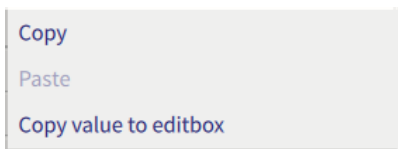
# INVOERTABEL

## TOON & BEWERK WAARDEN

- Toevoegen of verwijderen van elementen



- Bewerk waarden met het contextmenu via rechtermuisklik



- **Wijzig** waarden voor **een selectie** in de multibewerkingsvak
- Parameters worden ondersteund

SCIA 22.1.1025.64 TEST\_ID+res

Please click here or press Space and type your text... It will be ...

	Name	X [m]	Y [m]	Z [m]
1	N1	0,000	0,000	0,000
2	N2	0,000	0,000	6,000
3	N3	5,000	0,000	7,000
4	N4	10,000	0,000	6,000
5	N5	10,000	0,000	0,000
6	N174	0,000	0,000	2,550
7	N172	8,500	0,000	6,300

Nodes

INPUT PANEL

All categories

All workstations

Basic modelling

MULTIEDIT BOX OPERATIONS

Modify the value of selected cell(s). Available operations are:

- +x : add x
- x : subtract x
- \*x : multiply by x
- /x : divide by x
- ~x : round to the closest multiple of x
- >x : replace by x
- ?x : search the table for x

All operators can be typed directly or inserted using the context menu (right-click).

Type here

# INVOERTABEL

## FILTEREN EN ZICHTBAARHEID

- Filterrij met conditioneringsfuncties
- Filter op geselecteerde rijen of belastingsgeval
- Filteren op zichtbaarheid in 3D
- Selecteer cellen met dezelfde waarde
- Gemarkeerde items in tabel zijn geselecteerd in 3D-scène en omgekeerd
- Tabel naar rapport verzenden

**INPUT TABLE**

Name	Material type	Thermal...	Unit ma ...	E modulus [MPa]	Poisson ...	Indepen...	G modu
1	C16	Timber	0,00	310,0	8000,0000	0,0	500,00

**FILTER CONDITIONS**  
Given the specified **condition**, show rows of the table where the value  $x$  in the same column is such that...

- $a$  :  $x$  contains  $a$
- $=a$  :  $x$  is equal to  $a$
- $\neq a$  :  $x$  is not equal to  $a$
- $<a$  :  $x$  is less than  $a$
- $\leq a$  :  $x$  is less than or equal to  $a$
- $>a$  :  $x$  is greater than  $a$
- $\geq a$  :  $x$  is greater than or equal to  $a$
- $(a;b)$  or  $[a;b]$  :  $a < x < b$
- $<a;b>$  or  $[a;b]$  :  $a \leq x \leq b$

All operators are applicable to numerical, text and boolean values (checkboxes), as well as parameters.

For filtering boolean properties, use values **1** for *true* and **0** for *false*.

**INPUT TABLE**

Name	Type	Beg. node	End node	Cross-section	Length [...]	Layer
B323	general (0)	N259	N230	CS10 - I + lw prom (IPE300; 180; 14 ...	5,099	hall 1
B324	general (0)	N87	N261	CS10 - I + lw prom (IPE360; 180; 14 ...	5,099	hall 1
B325	general (0)	N263	N262	CS4 - IPE360	6,000	hall 1
B326	general (0)	N262	N261	CS10 - I + lw prom (IPE360; 180; 14 ...	5,099	hall 1
B327	general (0)	N108	N264	CS10 - I + lw prom (IPE360; 180; 14 ...	5,099	hall 1
B328	general (0)	N266	N265	CS4 - IPE360	6,000	hall 1
B329	general (0)	N265	N264	CS10 - I + lw prom (IPE360; 180; 14 ...	5,099	hall 1

# RESULTATENTABEL

- Slepen, docken, uittrekken, minimaliseren
- **Tabbladen** schakelen, verwijderen of hergenereren



Results on 1D members:  
List of Combination keys

1D internal forces - Results ...

- Kolommen toevoegen of verwijderen

Name  
Direction  
Type  
Wind pressure curve  
Cpe  
Cpi  
Type snow  
Allowable stresses  
Angle [deg]  
Acting area

SCIA 22.1.1025.64 TEST\_1D+res

1D internal forces  
Values: M<sub>y</sub>  
Linear calculation  
Combination: CO1  
Coordinate system: Principal  
Extreme 1D: Global  
Selection: All

Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>z</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]
1 B502	0,000	CO1/1	-400,63	0,00	0,26	0,01	0,00
2 B501	0,000	CO1/1	439,17	0,00	-5,30	-0,01	0,00
3 B3	6,000	CO1/2	-40,93	-16,47	-0,41	0,00	-2,44
4 B3	2,550+	CO1/3	-62,55	19,34	0,43	0,00	1,11
5 B428	0,000	CO1/4	-61,54	-0,13	-18,03	0,00	0,00
6 B95	0,000	CO1/5	-16,26	-2,72	69,75	-0,12	-142,03
7 B346	0,000	CO1/6	-26,15	0,00	0,15	-0,62	0,00
8 B320	1,500+	CO1/6	-14,11	2,35	10,67	0,61	23,71

RESULTS TABLE

RESULTS (1)

SELECTION  
Type of selection: All  
Filter: No  
Results in sections: All

RESULT CASE  
Type of load: Combinations  
Combination: CO1

EXTREME 1D  
Extreme 1D: Global  
Values: M<sub>y</sub>  
Interval:

Coordinate system: Principal

OUTPUT SETTINGS  
Print combination key:

DRAWING SETUP 1D  
Display value name:   
Display values:   
Display units:   
Display case:   
Display section dx:   
Display combination ...:   
Display combination ...:   
Color scheme: Defined by result  
Graph type: Filled transparent  
Envelopes drawing: 0 to extreme

ACTIONS  
Refresh  
New combination from Combination key  
Results table  
Report preview



# RESULTATENTABEL

- Resultaten ophalen of bijwerken van resultatenpaneel

Results table



- Identificeer resultaten

EC-EN 1993 Steel check ULS



- Wijzig uitvoerdetail of bekijk voorbeeld gedetailleerde

Summary

Summary

Detailed

The screenshot displays the SCIA Engineer software interface. At the top, the title bar shows 'SCIA 22.1.1025.64' and 'TEST\_1D+res'. The main window features a 3D model of a steel truss structure. A 'RESULTS TABLE' window is open in the foreground, displaying the following data:

Name	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]
1 B502	0,000	CO1/1	-400,63	0,00	0,26	0,01	0,00
2 B501	0,000	CO1/1	439,17	0,00	-5,30	-0,01	0,00
3 B3	6,000	CO1/2	-40,93	-16,47	-0,41	0,00	-2,44
4 B3	2,550+	CO1/3	-62,55	19,34	0,43	0,00	1,11
5 B428	0,000	CO1/4	-61,54	-0,13	-18,03	0,00	0,00
6 B95	0,000	CO1/5	-16,26	-2,72	69,75	-0,12	-142,03
7 B346	0,000	CO1/6	-26,15	0,00	0,15	-0,62	0,00
8 B320	1,500+	CO1/6	-14,11	2,35	10,67	0,61	23,71

The interface also includes a 'RESULTS (1)' panel on the right with various settings for selection, result case, and output. The bottom of the screen shows an 'INPUT PANEL' with various tool icons.

# RESULTATENTABEL

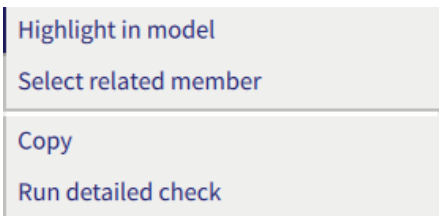
- Filterrij met conditioneringsfuncties
- Filter op geselecteerde rijen of belastingsgeval



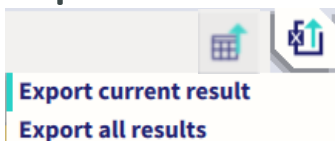
- Filteren op zichtbaarheid in 3D-scène



- Toon/selecteer items in 3D-scène via het contextmenu via



- Stuur tabel naar rapport of exporteer



Name	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kN]
B3	2,550+	CO2/3	-46,83	12,89	0,29	0,00	0,74	-7,15

**FILTER CONDITIONS**

Given the specified **condition**, show rows of the table where the value  $x$  in the same column is such that...

- $a$  :  $x$  contains  $a$
- $=a$  :  $x$  is equal to  $a$
- $\neq a$  :  $x$  is not equal to  $a$
- $<a$  :  $x$  is less than  $a$
- $\leq a$  :  $x$  is less than or equal to  $a$
- $>a$  :  $x$  is greater than  $a$
- $\geq a$  :  $x$  is greater than or equal to  $a$
- $(a;b)$  or  $[a;b]$  :  $a < x < b$
- $<a;b>$  or  $[a;b]$  :  $a \leq x \leq b$

All operators are applicable to numerical, text and boolean values (checkboxes), as well as parameters.

For filtering boolean properties, use values **1** for *true* and **0** for *false*.

# RAPPORTAGE AFDRUKVOORBEELD

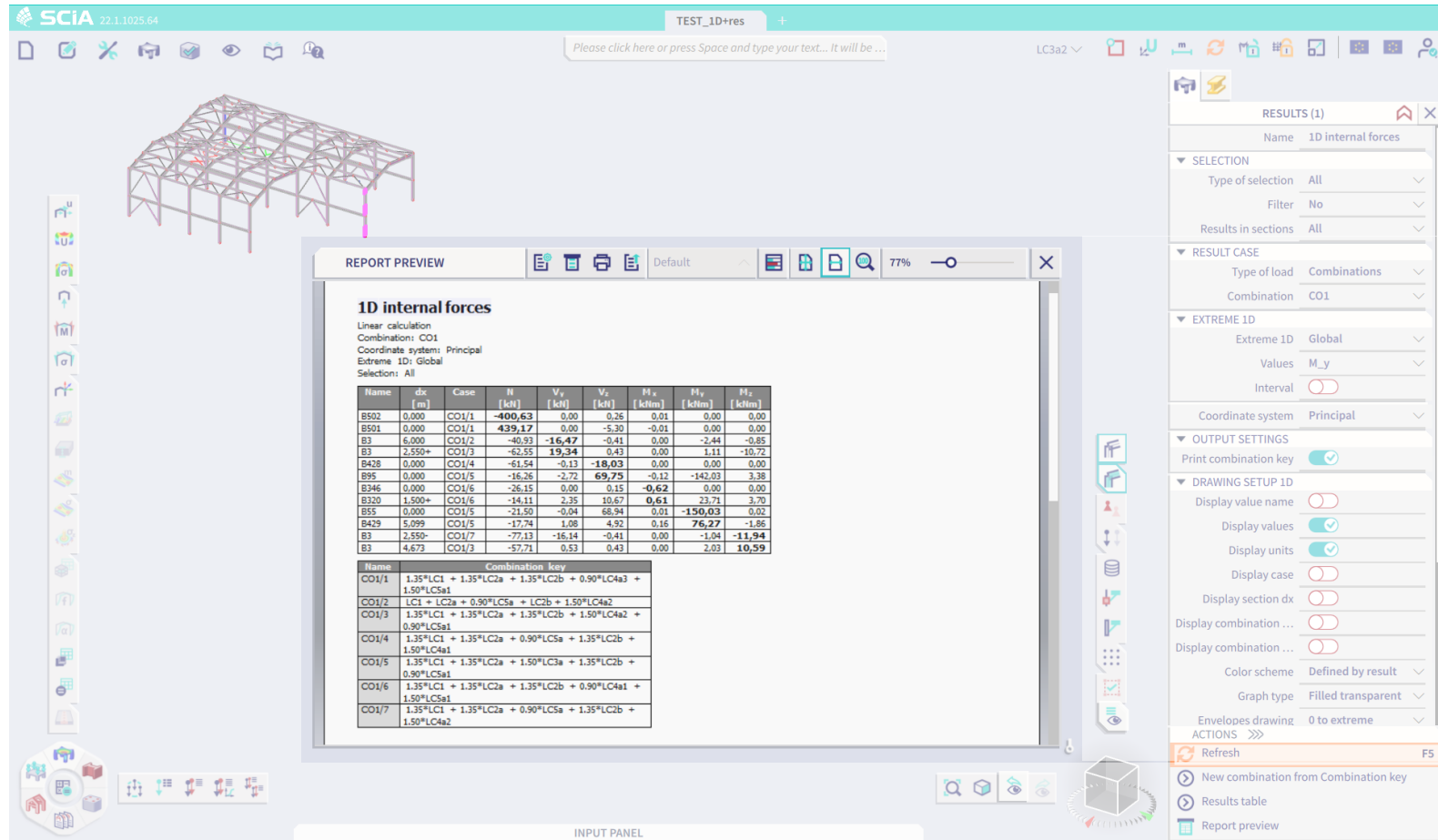
- Openen vanuit resultaatpaneel, tabel, spotlight...

 Report preview

- Instellingen, afdrukken, exporteren



- Zoom



The screenshot shows the SCIA Engineer software interface. The main window displays a 3D model of a steel structure. A 'REPORT PREVIEW' window is open, showing the following data:

**1D internal forces**  
Linear calculation  
Combination: CO1  
Coordinate system: Principal  
Extreme 1D: Global  
Selection: All

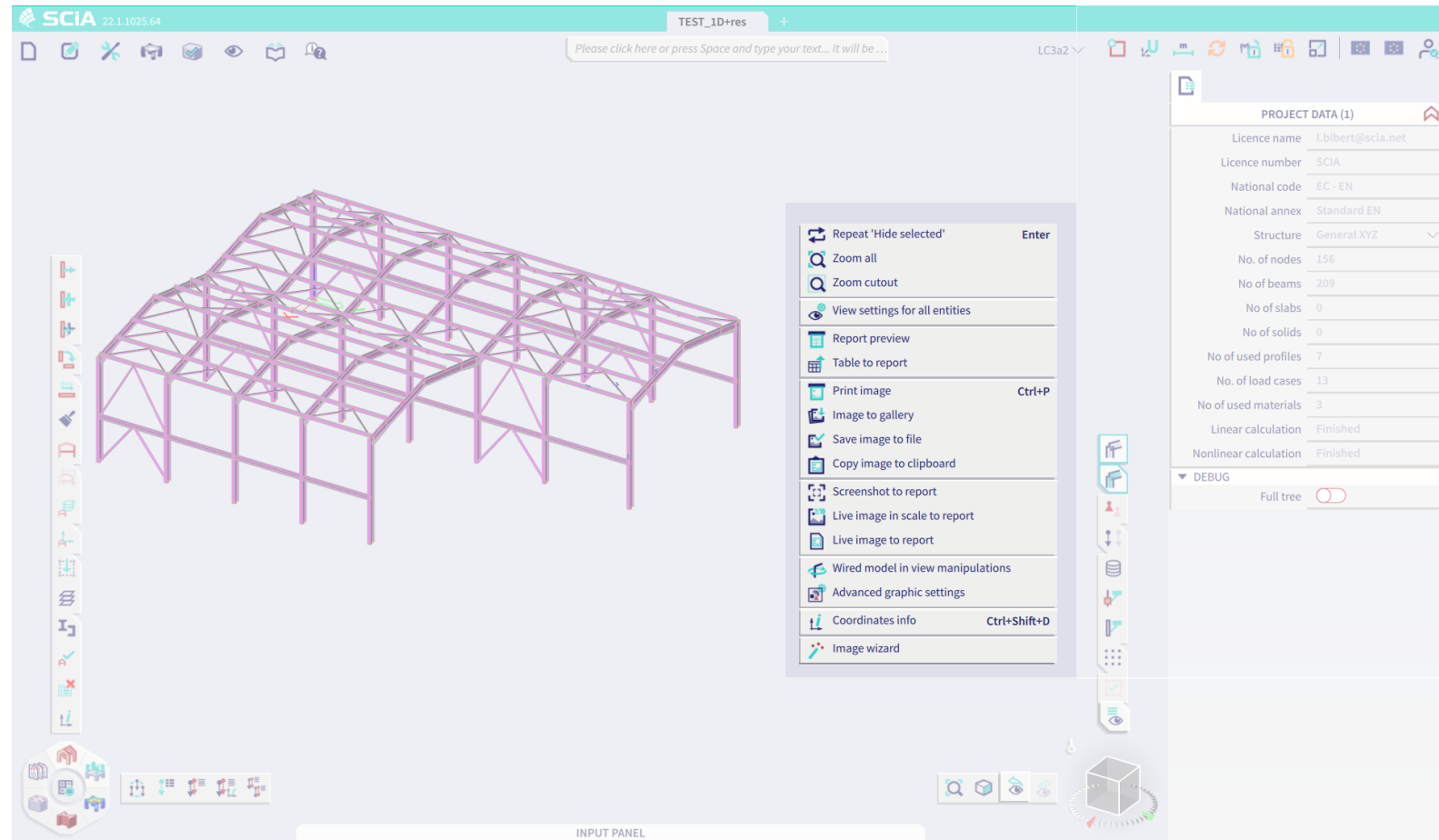
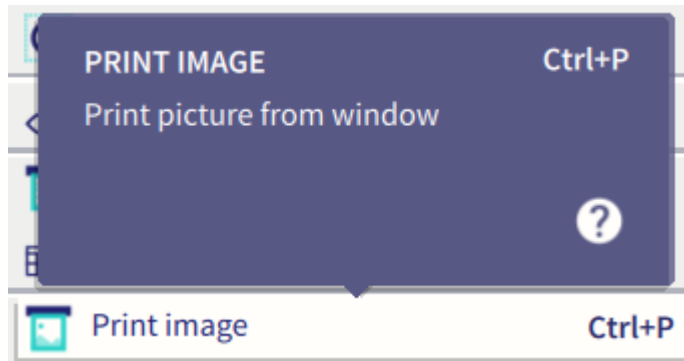
Name	dx [m]	Case	N [kN]	V <sub>y</sub> [kN]	V <sub>x</sub> [kN]	M <sub>x</sub> [kNm]	M <sub>y</sub> [kNm]	M <sub>z</sub> [kNm]
B502	0,000	CO1/1	<b>-400,63</b>	0,00	0,26	0,01	0,00	0,00
B501	0,000	CO1/1	<b>439,17</b>	0,00	-5,35	-0,01	0,00	0,00
B3	6,000	CO1/2	<b>-60,93</b>	<b>-16,47</b>	-0,41	0,00	-2,44	-0,85
B3	2,550+	CO1/3	<b>-62,55</b>	<b>19,34</b>	0,43	0,00	1,11	-10,72
B428	0,000	CO1/4	-61,54	-0,13	<b>-18,03</b>	0,00	0,00	0,00
B95	0,000	CO1/5	-16,26	-2,72	<b>69,75</b>	-0,12	-142,03	3,38
B246	0,000	CO1/6	-26,15	0,00	0,15	<b>-0,62</b>	0,00	0,00
B320	1,500+	CO1/6	-19,11	2,35	10,67	<b>0,61</b>	23,71	2,70
B55	0,000	CO1/5	-21,50	-0,04	66,94	0,01	<b>-150,03</b>	0,02
B429	5,099	CO1/5	-17,74	1,08	4,92	0,16	<b>76,27</b>	-1,86
B3	2,550-	CO1/7	-77,13	-16,14	-0,41	0,00	-1,04	<b>-11,94</b>
B3	4,673	CO1/3	-57,71	0,53	0,43	0,00	2,03	<b>10,59</b>

Below the table, there is a section for 'Combination key' with the following entries:

Name	Combination key
CO1/1	1.35*LC1 + 1.35*LC2a + 1.35*LC2b + 0.90*LC4a3 + 1.50*LC5a1
CO1/2	LC1 + LC2a + 0.90*LC5a + LC2b + 1.50*LC4a2
CO1/3	1.35*LC1 + 1.35*LC2a + 1.35*LC2b + 1.50*LC4a2 + 0.90*LC5a1
CO1/4	1.35*LC1 + 1.35*LC2a + 0.90*LC5a + 1.35*LC2b + 1.50*LC4a1
CO1/5	1.35*LC1 + 1.35*LC2a + 1.50*LC3a + 1.35*LC2b + 0.90*LC5a1
CO1/6	1.35*LC1 + 1.35*LC2a + 1.35*LC2b + 0.90*LC4a1 + 1.50*LC5a1
CO1/7	1.35*LC1 + 1.35*LC2a + 0.90*LC5a + 1.35*LC2b + 1.50*LC4a2

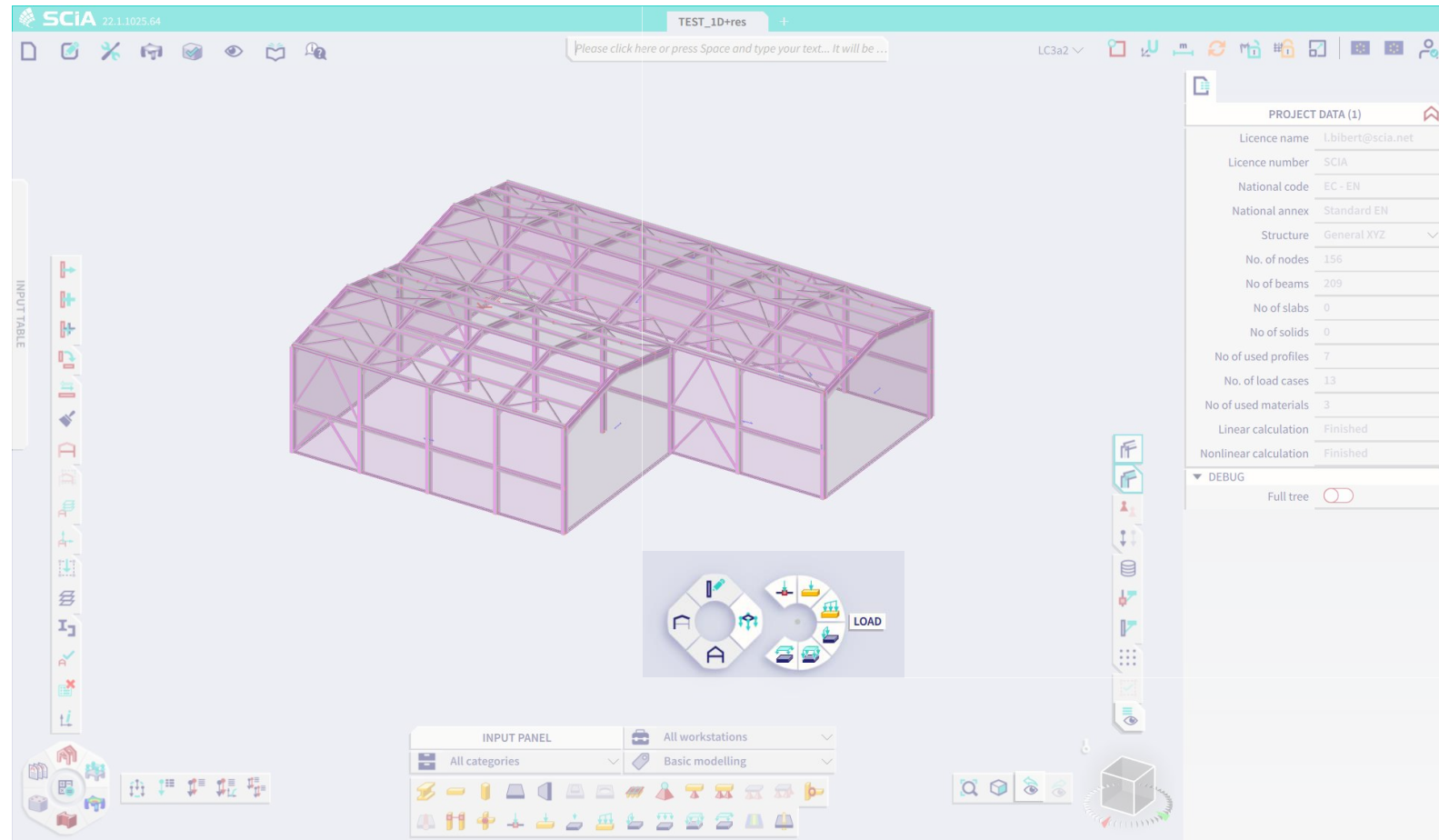
# CONTEXTMENU

- Rechtermuisklik in 3D-scène
- Zichtbaarheid- en afbeeldingcommando's
- Tooltip bij zweven
- Sneltoetsen wijzigen



# MARKING MENU

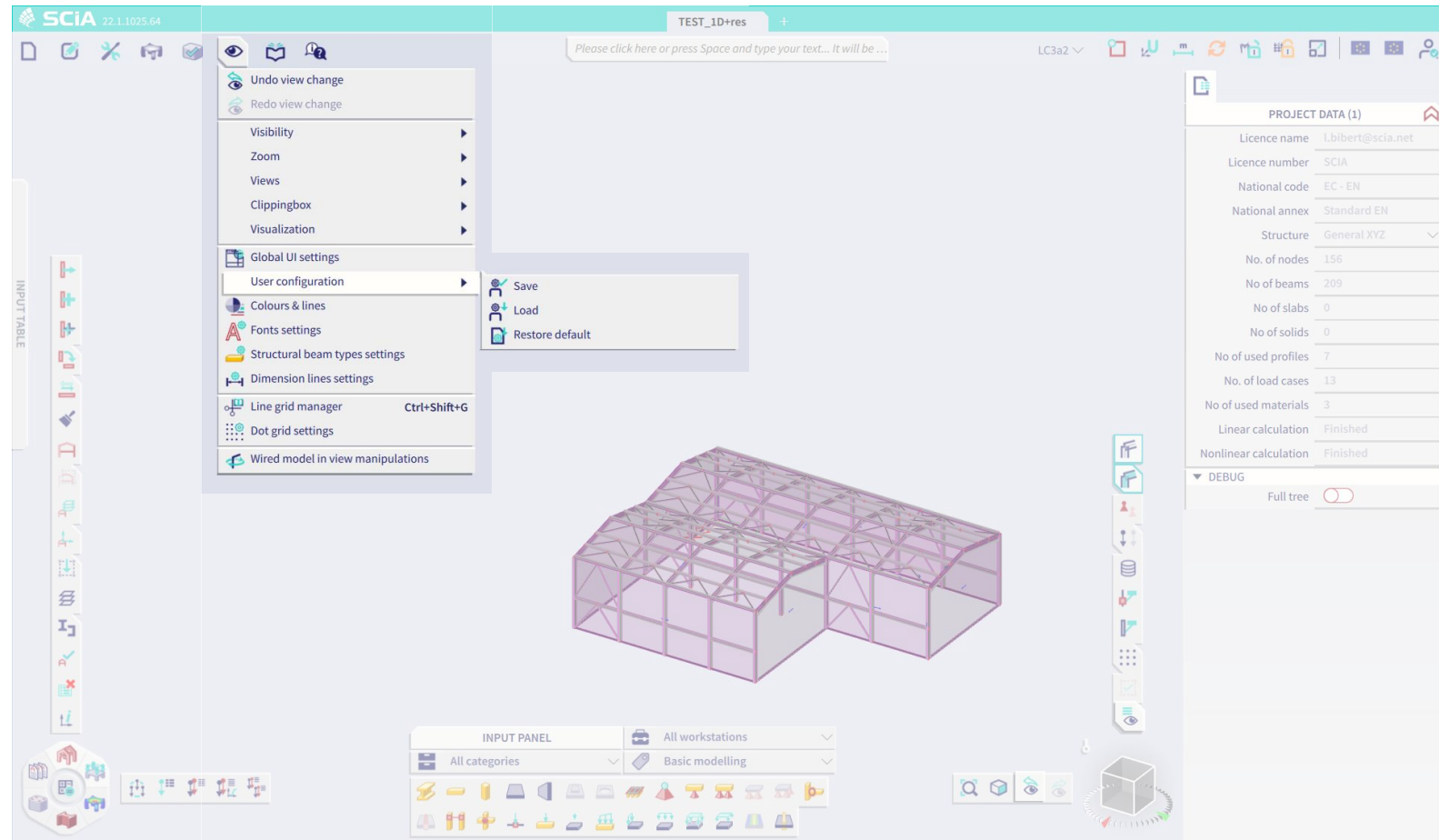
- Onzichtbare helper
- Alt + rechtsklik
- Snel modelleren op spiergeheugen
- Vaste commando's (voorlopig)
- Best gebruikt met globale UI-instellingen invoerdialog overslaan





# CONFIGURATIE

- Persoonlijke lay-out, sneltoetsen ... herinnerd
- Overgedragen naar **nieuwe versies**
- Kan worden opgeslagen in bestand
  
- Mogelijk om **dezelfde configuratie te gebruiken** voor een groep/bedrijf

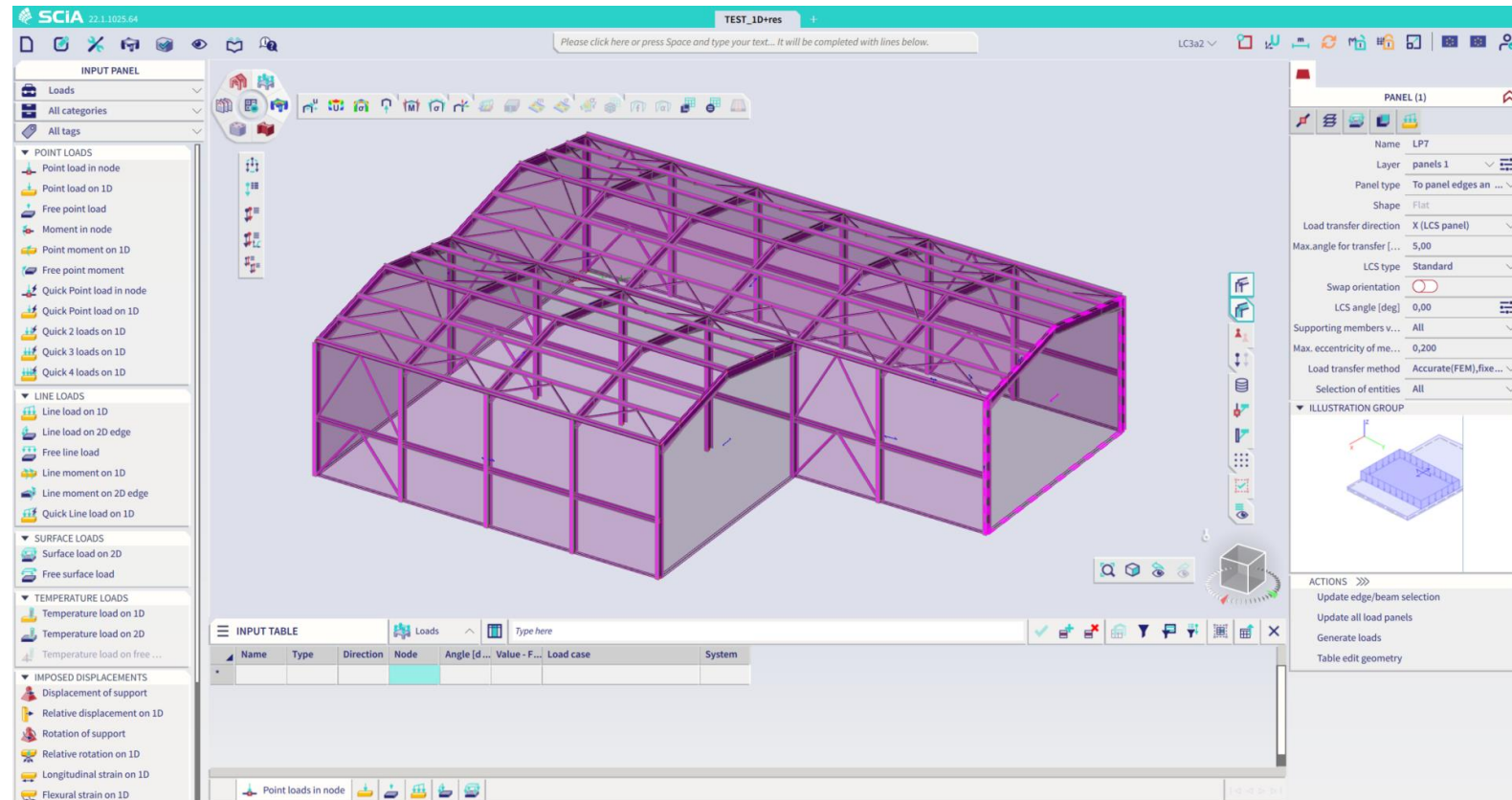


# CONFIGURATIE

## SOEPELERE OVERGANG NAAR NIEUWE UI

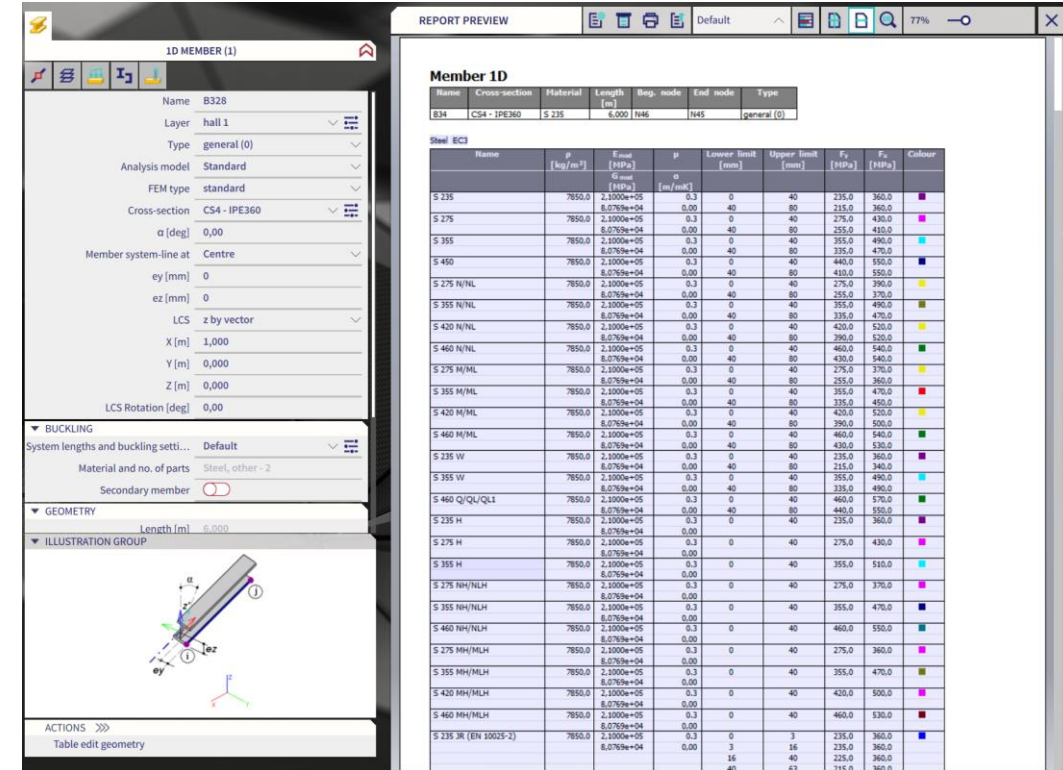
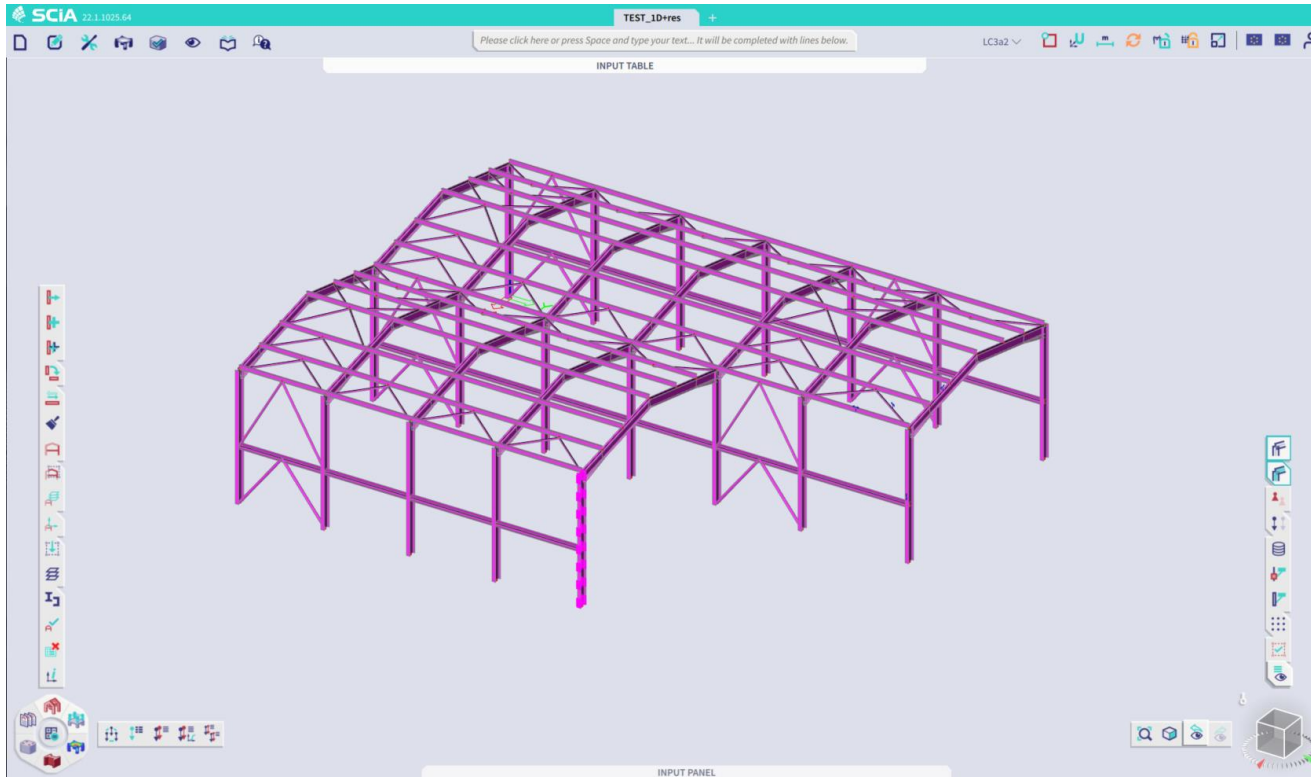
- Voorbeeld layout voor soepelere overgang
- Invoerpaneel links  
Icoonmodus uit  
Categoriekoppen aan
- Invoertabel beneden gekoppeld
- Procesbalk

linksboven Bouwworkstation  
horizontaal Actief werkstation  
vertikaal



# CONFIGURATIE

## BENUT VRIJHEID TOT HET UITERSTE



- Voorbeeld layout voor maximale grootte model

Eerste scherm

- Invoerpaneel minimaal
- Invoertabel vast bovenop
- Procesbalk linksonder

Tweede scherm

- Eigenschappenpaneel
- Rapportagevoorbeeld