

SOFTWARE ZA PRORACUN:

- jedna od opcija : - demo program FRILO
 - licenca vrijedi mjesec dana
 - od ponuđenih modula u FRILO-u za izradu programa su potrebni
[DLT10 Continuous beam](#) i [ELI Influence Line](#)

FRILO

ELI INFLUENCE LINE

INFLUENCE LINE ELI 01/2004 - new item (Project VARAZDIN) - [input]

File Edit Options View Window Help

input
 output design
 envelope M
 envelope V
 envelope M+V
 single cut M+V
 support reaction
 remarks
 Output
 Word
 Screen
 Printer
 Print Preview

3,00

UNOS DULJINA RASPONA
(u ovom primjeru 15x19x19x15)

length of spans

	length (m)
1	3,00
*	0,00

load train

	type of lo	load	distance
*	0		

dimensioning presets

lli for single cut in

fieldNo i= 1

distance x= 1,50 m

lli for support reaction in

suppNo = 2

results
tabular

Feldlänge

7.10.2009 14:35

CONTINUOUS BEA... SOFSTIK Ursula - [G... Presentation1 INFLUENCE LINE ELI...

INFLUENCE LINE ELI 01/2004 - new item (Project VARAZDIN) - [input]

File Edit Options View Window Help

input
 output design
 envelope M
 envelope V
 envelope M+V
 single cut M+V
 support reaction
 remarks
 Output
 Word
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 Print Preview

15,00 19,00 19,00 15,00 68,00

UNOS OPTEREĆENJA:
 -2 koncent.sile na razmaku 1,20 m koje
 se prevode preko zadanih raspona

length of spans

	length (m)
1	15,00
2	19,00
3	19,00
4	15,00

load train

	type of lo	load	distance
*	0		

dimensioning presets

lli for single cut in
 fieldNo = 1
 distance x = 1,50 m

lli for support reaction in
 suppNo = 2

results
 tabular

delete all lines

Length of span

7.10.2009 14:39

CONTINUOUS BEA... SOFIŠTIK Ursula - [G... FRIO PREZENTACIJA INFLUENCE LINE ELI...

INFLUENCE LINE ELI 01/2004 - new item (Project VARAZDIN) - [input]

File Edit Options View Window Help

input
 output design
 envelope M
 envelope V
 envelope M+V
 single cut M+V
 support reaction
 remarks
 Output
 Word
 Screen
 Printer
 Print Preview

Projects Input

length of spans

	length (m)
1	15,00
2	19,00
3	19,00
4	15,00

load train

	type of	load	distance
1	1	221,96	0,00
2	1	221,96	1,20

dimensioning presets

lli for single cut in

fieldNo i= 1

distance x= 1,50 m

lli for support reaction in

suppNo = 2

results
tabular

distance

7.10.2009 14:47

CONTINUOUS BEA... SOFSTIK Ursula - [G... FRLO PREZENTACIJA INFLUENCE LINE ELI... GREDA POZ 207-208...

HR 14:47

• type of load= 1 (koncentrirana sila)
 • load= ... (iznos koncentrirane sile)
 • distance=... (položaj sile;
 kod prve sile "0"-pocetak mosta,
 a druga 1,20 m udaljena od prve)

INFLUENCE LINE ELI 01/2004 - new item (Project VARAZDIN) - [input]

File Edit Options View Window Help

input
 output design
 envelope M
 envelope V
 envelope M+V
 single cut M+V
 support reaction
 remarks
 Output
 Word
 Screen
 Printer
 Print Preview

označiti envelope M i envelope V

PRINT PREVIEW

length of spans

	length (m)
1	15,00
2	19,00
3	19,00
4	15,00

load train

	type of	load	distance
1	1	221,96	0,00
2	1	221,96	1,20

dimensioning presets

lli for single cut in

fieldNo i= 1

distance x= 1,50 m

lli for support reaction in

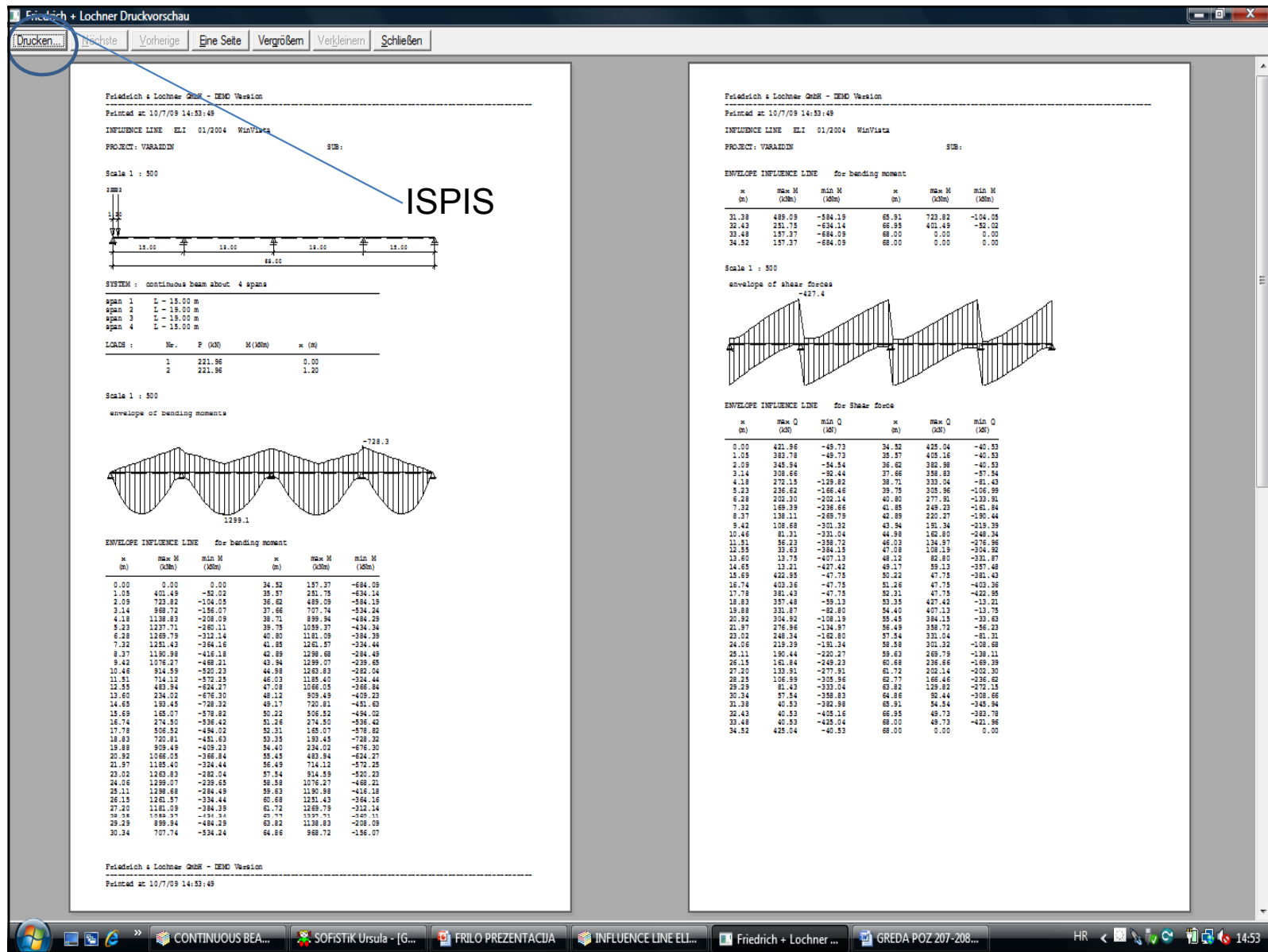
suppNo = 2

results
tabular

distance

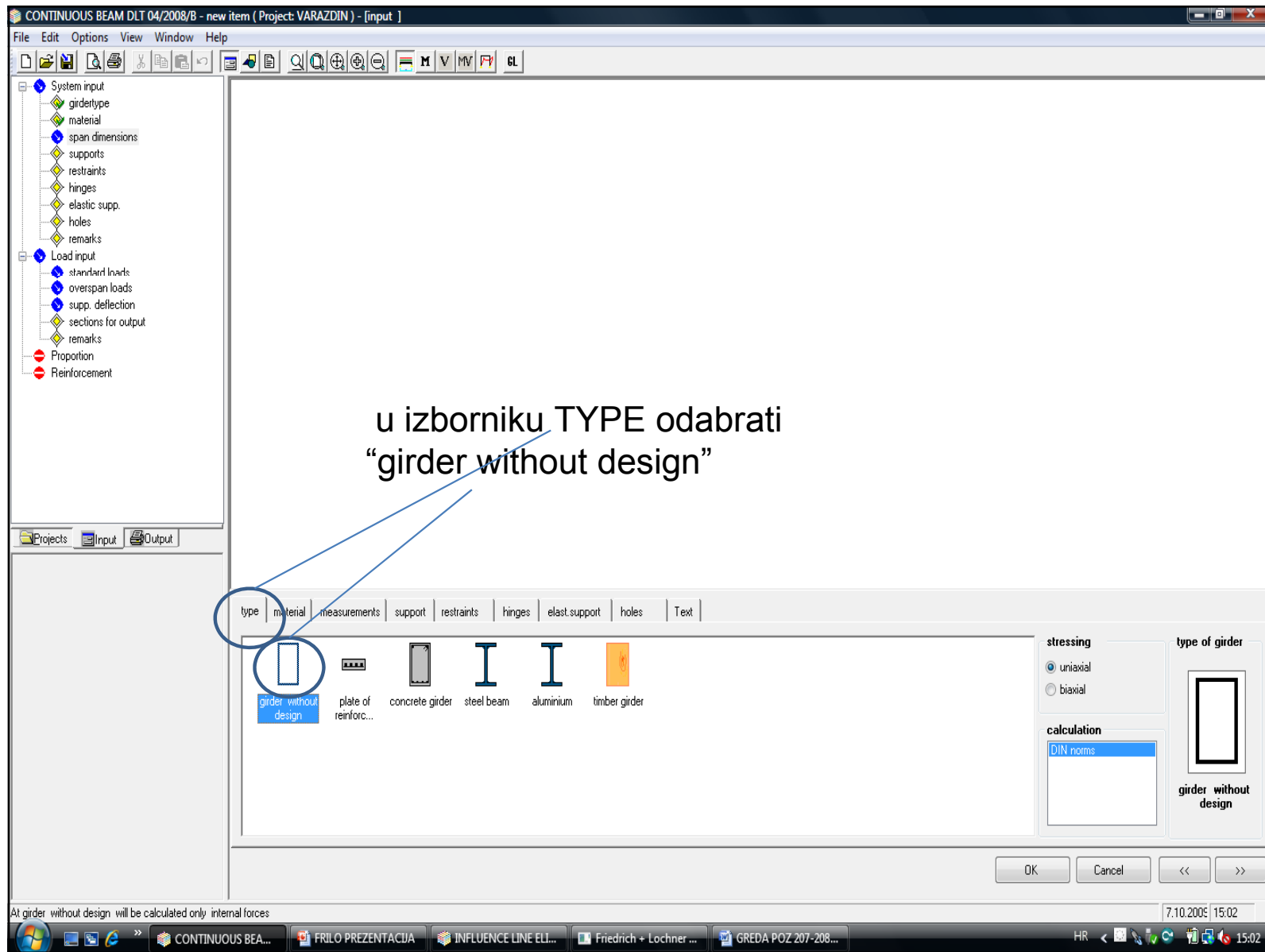
7.10.2009 14:47

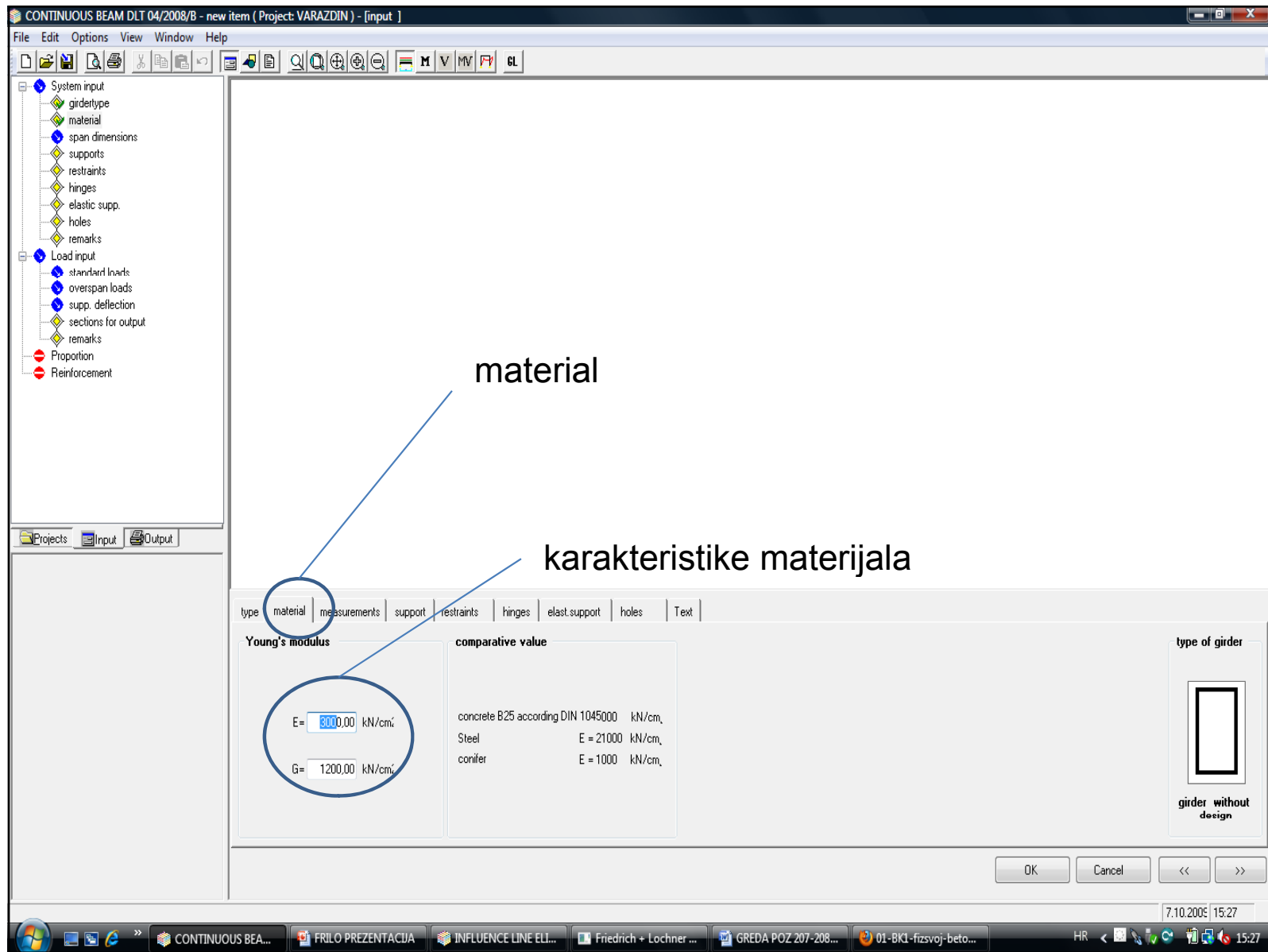
CONTINUOUS BEA... SOFSTIK Ursula - [G... FRLO PREZENTACIJA INFLUENCE LINE ELI... GREDA POZ 207-208...



FRILO

DLT10 Continuous Beam





CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
 supports
 restraints
 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
 remarks
 Proportion
 Reinforcement

measurements

duljina raspona

$Q_{nr} = 0$ (zadavanje novog pop.presjeka)

zadavanje dimenzija pop.presjeka

type	material	measurements	support	restraints	hinges	elastic support	holes	Text
span	L [m]	x [m]	QNr	crosssection	I [cm4]	Wo [cm3]	Wu[cm3]	
1	1	15,000	15,000	0		0,0	0,0	0,0
2	2	0,000						
3	ca li	0,000						
4	ca ri	0,000						

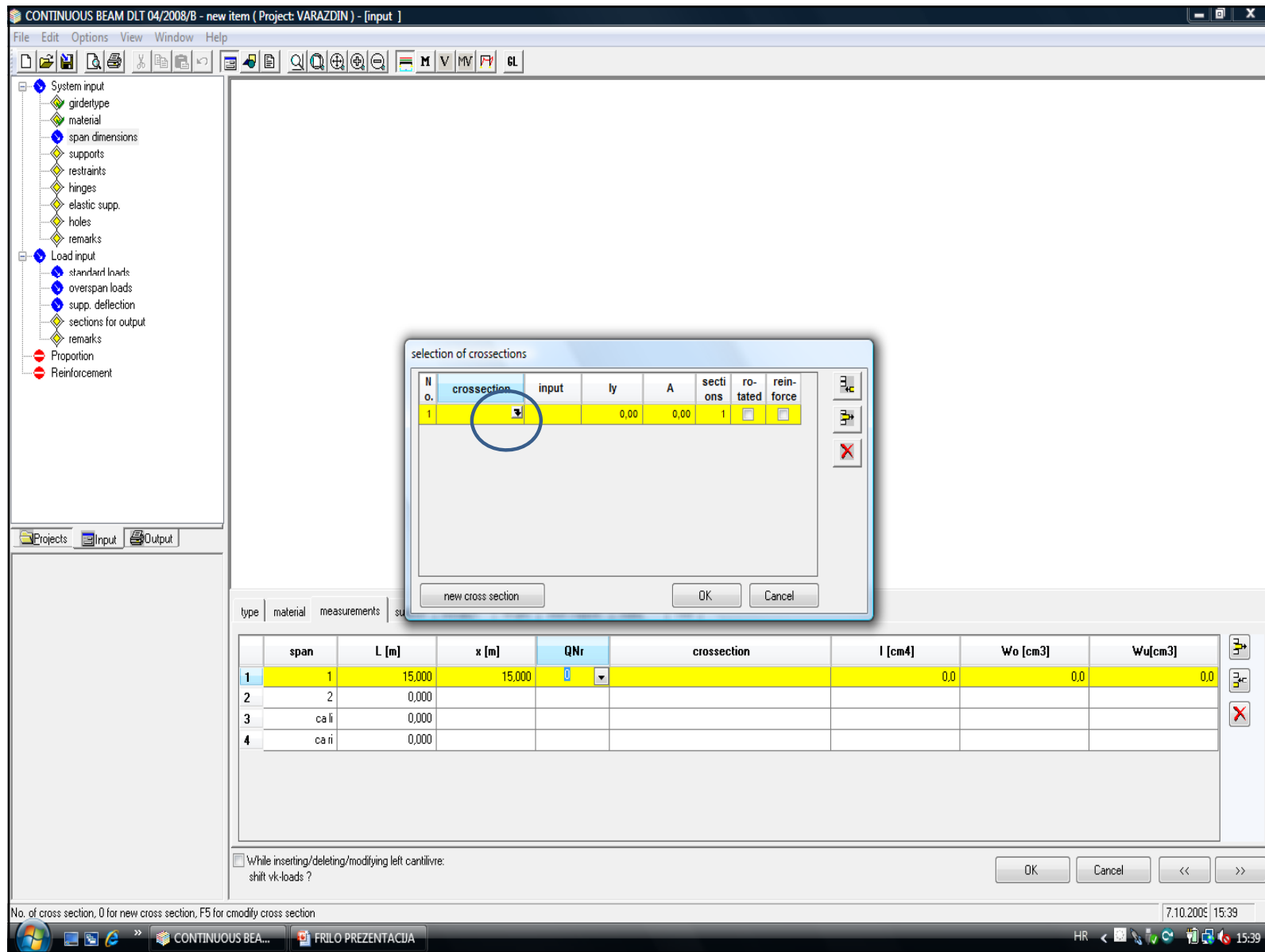
☐ While inserting/deleting/modifying left cantilever:
shift vk-loads ?

OK Cancel << >>

No. of cross section, 0 for new cross section, F5 for modify cross section

7.10.2009 15:29

CONTINUOUS BEA... FRLO PREZENTACIJA Friedrich + Lochner ...



CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
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 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
 remarks
 Proportion
 Reinforcement

Projects Input Output

span

span	1	2	3	4
1	1			
2	2			
3	ca li	0,000		
4	ca ri	0,000		

Dimensions concrete/wood :

- rectangle (za ploču)
- top flange (rebro)

Select/change the form of cross-section

F3: Goto tree

- 1 - F+L cross section database
 - IPE
 - HE-A
 - HE-B
 - HE-M
 - I section (half)
 - U
 - Q-H
 - R-H
 - L
 - T
 - Z
 - Tubes
 - Round bar
 - Square bar
 - Flat steel
 - ARBED
 - 3 - Dimensions steel
 - 4 - Dimensions concrete/wood
 - 5 - Static values

Name	Iy [cm4]	A [cm2]
I 80	77,700	7,570
I 100	170,000	10,600
I 120	327,000	14,200
I 140	572,000	18,200
I 160	934,000	22,800
I 180	1440,000	27,900
I 200	2140,000	33,400
I 220	3050,000	39,500
I 240	4240,000	46,100
I 260	5730,000	53,300
I 280	7570,000	61,000
I 300	9780,000	69,000
I 320	12490,000	77,700
I 340	15670,000	86,700
I 360	19570,000	97,000
I 380	23980,000	107,000
I 400	29170,000	118,000
I 425	36920,000	132,000
I 450	45790,000	147,000
I 475	56400,000	163,000

Show all cross section values

OK Cancel

While inserting/deleting/modifying left cantilive:
 shift vk-loads ?

OK Cancel << >>

No. of cross section, 0 for new cross section, F5 for modify cross section

7.10.2009 15:40

CONTINUOUS BEA... FRILLO PREZENTACIJA

CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
 supports
 restraints
 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
 remarks
 Proportion
 Reinforcement

Projects Input Output

type material measur

span

1	1								
2	2								
3	ca li	0,000							
4	ca ri	0,000							

Select/change the form of cross-section

F3: Goto tree

- HE-B
- HE-M
- 1 section (half)
- U
- Q-H
- R-H
- L
- T
- Z
- Tubes
- Round bar
- Square bar
- Flat steel
- ARBED
- 3 - Dimensions steel
- 4 - Dimensions concrete/wood
 - 1 - Rectangle
 - 2 - Top flange
 - 3 - Bottom flange
 - 4 - Twin flange
 - 5 - Circle
 - 6 - Circular ring
- 5 - Static values

Show all cross section values

Dimensions [cm]

Name Top flange

Slab top

bpo = 40,00

dpo = 25,00

Web

b0 = 140,00

d0 = 70,00

Results [cm4/cm2]

Iy 6,32e+006 A 16300,00

Iz 1,44e+008

Section modulus [cm3]

Wyo 242766,00 Wzl 718117,00

Wyu 143695,00 Wzr 718117,00

OK Cancel

While inserting/deleting/modifying left cantilever:
 shift vk-loads?

OK Cancel << >>

No. of cross section, 0 for new cross section, F5 for modify cross section

7.10.2009 15:51

CONTINUOUS BEA... FRLO PREZENTACIJA

HR 15:51

unos dimenzija pop.presjeka

CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
 supports
 restraints
 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
 remarks
 Proportion
 Reinforcement

definiranje opterećenja

15,00 19,00 19,00 15,00 68,00

type	material	measurements	support	restraints	hinges	elast.support	holes	Text
span	L [m]	x [m]	QNr	crossection	I [cm4]	Wo [cm3]	Wu[cm3]	
1	1	15,000	15,000	1	Top flange	6323939,5	241959,4	144172,7
2	2	19,000	19,000	1	Top flange	6323939,5	241959,4	144172,7
3	3	19,000	19,000	1	Top flange	6323939,5	241959,4	144172,7
4	4	15,000	15,000	1	Top flange	6323939,5	241959,4	144172,7
5	ca li	0,000						
6	ca ri	0,000						

☐ While inserting/deleting/modifying left cantilive:
shift vk-loads ?

OK Cancel << >>

distance from begin of span

7.10.2008 15:57

CONTINUOUS BEA... FRLO PREZENTACIJA

CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
 supports
 restraints
 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
 remarks
 Proportion
 Reinforcement

15,00 19,00 19,00 15,00 68,00

prvi raspon
 type=1 (jednoliko kontin.opterećenje)

standard loads multiple-span loads displacement of supports output sections Text

	span	type	Gle	Qle	dist	Gri	Qri	len	factor	from item	ld-grp	con-grp	Alt-grp
1	1	0											
2	2	0											
3	3	0											
4	4	0											

dead load : 0.no current length of span =15,00 m

OK Cancel << >>

type of ld1=q, 2 =P, 3 =M, 4 =trapez, 5 =triangle, 6 =trapez about L, 0 =end

7.10.2009 16:01

CONTINUOUS BEA... FRLO PREZENTACIJA

CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

System input
 girder type
 material
 span dimensions
 supports
 restraints
 hinges
 elastic supp.
 holes
 remarks
 Load input
 standard loads
 overspan loads
 supp. deflection
 sections for output
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 Proportion
 Reinforcement

15,00 19,00 19,00 15,00 68,00

92,0

Gle= iznos jednolik.kontin.opterećenja

standard loads | multiple-span loads | displacement of supports | output sections | Text

span	type	Gle	Qle	dist	Gri	Qri	len	factor	from item	Id-grp	con-grp	Alt-grp
1	1	92	0,00					1,00			0	0
2	0											
3	2											
4	3											
5	4											

dead load : 0.no current length of span =15,00 m

OK Cancel << >>

load ordinate for g left in (kN) resp (kN/m) 3673,34 0,00 -1332,11 7.10.2009 16:05

CONTINUOUS BEA... FRIO PREZENTACIJA

CONTINUOUS BEAM DLT 04/2008/8 - new item (Project: VARAZDIN) - [input]

File Edit Options View Window Help

New Strg+N
Open Strg+O
Save Strg+S
Save as ...
Save as template
F + L - Explorer
Import
Export
Print Strg+P
Print Preview
Print Setup
1. REBRO VLASTITA - (VARAZDIN)
2. VLASTITA - (VARAZDIN)
3. 2 - (VARAZDIN)
4. 1 - (VARAZDIN)
Exit

Print preview

15,00 19,00 19,00 15,00
68,00

standard loads multiple-span loads displacement of supports output sections Text

span	type	Gle	Qle	dist	Gri	Qri	len	factor	from item	ld-grp	con-grp	Alt-grp
1	1	92,00	0,00					1,00			0	0
2	0											
3	2	92,00	0,00					1,00			0	0
4	0											
5	3	92,00	0,00					1,00			0	0
6	0											
7	4	92,00	0,00					1,00			0	0

dead load : 0.no current length of span =15,00 m

OK Cancel << >>

type of ld1=q, 2 =P, 3 =M, 4 =trapez, 5 =triangle, 6 =trapez about L, 0 =end

7.10.2009 16:11

CONTINUOUS BEA... FRILLO PREZENTACIJA

