LAMPIRAN 1

PENGUJIAN TEKAN BETON

Komposisi benda uji : 1:2:2

Ukuran benda uji : Kubus 15x15x15 cm

Umur benda uji : 7 hari dan 28 hari

Benda Uji	Luas penampang (cm2)	Berat (kg)	Umur	Beban Maksimum		Kuat Tekan (28 hari)	
				(kN)	(kg)	(kg/cm2)	MPa
A1	225	7.48	7	362	36913.727	209.493	20.544
A2	225	7.34	7	348	35486.124	201.391	19.750
A3	225	7.42	7	361	36811.755	208.915	20.488
A4	225	7.6	28	530	54044.959	199.366	19.551
A5	225	7.24	28	502	51189.754	188.833	18.518
A6	225	7.24	28	475	48436.520	178.677	17.522
Kuat Tekan Beton Rata-rata						197.779	19.396

Kuat tekan beton rata-rata :

f'c = (209.493+201.391+208.915+199.366+188.833+178.677)/6

= 197.779kg/cm2

LAMPIRAN 2

PENGUJIAN REGANGAN

- **BATANG 1**

Beban (kg)	Jarak (cm)	Pembacaan Awal (με)	Pembacaan Akhir (με)	Regangan (με)
50	0	3130	3133	3.000000
	40	3139	3141	2.000000
	80	3146	3145	-1.000000
	120	3146	3144	-2.000000
	160	3146	3144	-2.000000
	0	3098	3100	2.000000
	40	3099	3100	1.000000
	80	3105	3104	-1.000000
	120	3104	3101	-3.000000
	160	3095	3094	-1.000000
	0	4184	4185	1.000000
	40	4174	4176	2.000000
	80	4182	4185	3.000000
	120	4176	4178	2.000000
	160	4178	4180	2.000000
100	0	4175	4177	2.000000
	40	4167	4170	3.000000
	80	4168	4172	4.000000
	120	4166	4169	3.000000
	160	4165	4166	1.000000
	0	4177	4178	1.000000
	40	4175	4178	3.000000
	80	4175	4179	4.000000
	120	4175	4177	2.000000
	160	4174	4176	2.000000
	0	4177	4178	1.000000
	40	4179	4180	1.000000
	80	4187	4189	2.000000
	120	4186	4187	1.000000
	160	4186	4187	1.000000
150	0	4176	4178	2.000000
	40	4175	4178	3.000000

	80	4175	4179	4.000000
	120	4176	4177	1.000000
	160	4176	4178	2.000000
	0	4175	4178	3.000000
	40	4179	4181	2.000000
	80	4176	4182	6.000000
	120	4180	4183	3.000000
	160	4182	4185	3.000000
	0	4177	4179	2.000000
	40	4175	4178	3.000000
	80	4173	4179	6.000000
	120	4175	4179	4.000000
	160	4174	4175	1.000000

- **BATANG 2**

Beban (kg)	Jarak (cm)	Pembacaan Awal (με)	Pembacaan Akhir (με)	Regangan (με)
50	0	4171	4172	1.000000
	40	4173	4176	3.000000
	80	4177	4180	3.000000
	120	4179	4180	1.000000
	160	4174	4176	2.000000
	0	4185	4186	1.000000
	40	4186	4188	2.000000
	80	4193	4196	3.000000
	120	4190	4193	3.000000
	160	4192	4193	1.000000
	0	3095	3096	1.000000
	40	3092	3095	3.000000
	80	3095	3097	2.000000
	120	3096	3092	-4.000000
	160	3095	3093	-2.000000
100	0	3160	3161	1.000000
	40	3094	3096	2.000000
	80	3097	3095	-2.000000
	120	3096	3093	-3.000000
	160	3096	3094	-2.000000
	0	3121	3123	2.000000
	40	3120	3123	3.000000
	80	3118	3119	1.000000
	120	3119	3117	-2.000000
	160	3117	3116	-1.000000
	0	3121	3123	2.000000
	40	3124	3125	1.000000
	80	3137	3135	-2.000000
	120	3134	3132	-2.000000
	160	3136	3134	-2.000000
150	0	3346	3345	-1.000000
	40	3345	3343	-2.000000
	80	3340	3335	-5.000000
	120	3341	3337	-4.000000

	160	3337	3335	-2.000000
	0	3121	3123	2.000000
	40	3116	3120	4.000000
	80	3120	3117	-3.000000
	120	3120	3118	-2.000000
	160	3120	3117	-3.000000
	0	3121	3125	4.000000
	40	3127	3128	1.000000
	80	3128	3125	-3.000000
	120	3128	3123	-5.000000
	160	3131	3129	-2.000000

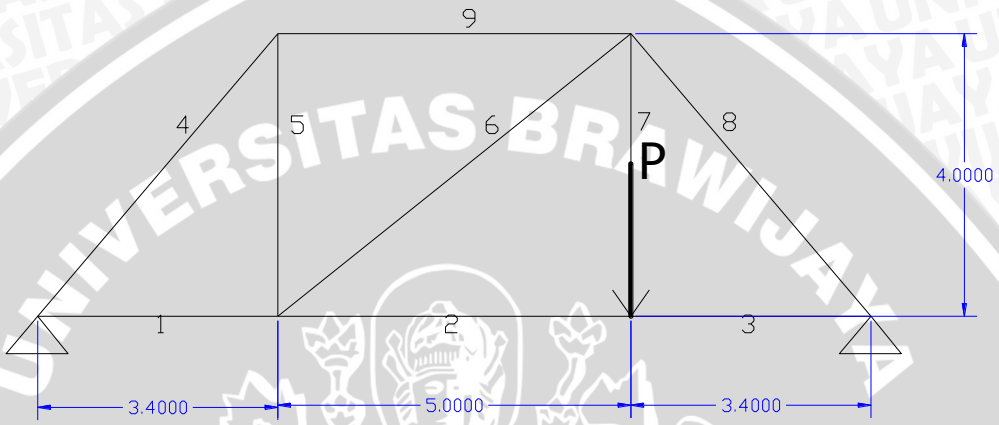
- **BATANG 3**

Beban (kg)	Jarak (cm)	Pembacaan Awal (με)	Pembacaan Akhir (με)	Regangan (με)
50	0	3378	3377	-1.000000
	40	3376	3374	-2.000000
	80	3373	3369	-4.000000
	120	3370	3367	-3.000000
	160	3375	3374	-1.000000
	0	3316	3315	-1.000000
	40	3319	3317	-2.000000
	80	3317	3314	-3.000000
	120	3317	3315	-2.000000
	160	3317	3316	-1.000000
	0	3305	3303	-2.000000
	40	3296	3293	-3.000000
	80	3296	3292	-4.000000
	120	3298	3295	-3.000000
	160	3296	3294	-2.000000
100	0	3310	3309	-1.000000
	40	3310	3308	-2.000000
	80	3312	3306	-6.000000
	120	3311	3307	-4.000000
	160	3313	3311	-2.000000
	0	3326	3325	-1.000000
	40	3313	3309	Eee4-4.000000
	80	3313	3309	-4.000000
	120	3308	3306	-2.000000
	160	3307	3306	-1.000000
	0	3311	3309	-2.000000
	40	3310	3306	-4.000000
	80	3315	3309	-6.000000
	120	3310	3307	-3.000000
	160	3309	3306	-3.000000
150	0	3346	3345	-1.000000
	40	3345	3343	-2.000000
	80	3340	3335	-5.000000

	120	3341	3337	-4.000000
	160	3337	3335	-2.000000
	0	3308	3306	-2.000000
	40	3311	3309	-2.000000
	80	3309	3303	-6.000000
	120	3306	3303	-3.000000
	160	3304	3303	-1.000000
	0	3346	3343	-3.000000
	40	3345	3341	-4.000000
	80	3340	3333	-7.000000
	120	3341	3337	-4.000000
	160	3337	3334	-3.000000

LAMPIRAN 3

PERHITUNGAN P MAX



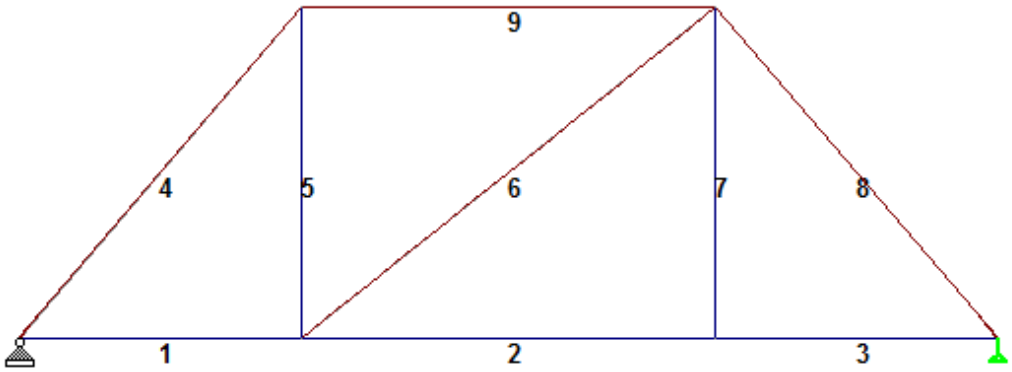
❖ **GAYA BATANG**

Dengan bantuan staad pro v8 didapatkan gaya batang dalam (P) sebagai berikut

Nomor Batang	Gaya Batang (P)	Keterangan
1	0.245	Tarik
2	0.605	Tarik
3	0.605	Tarik
4	0.378	Tekan
5	0.288	Tarik
6	0.461	Tekan
7	**1**	Tarik
8	**0.934**	Tekan
9	0.245	Tekan

Sehingga diperoleh, Gaya Tarik maksimum sebesar 1 P

Gaya Tekan Maksimum sebesar 0,934 P



Keterangan :

Merah = Tekan

Biru = Tarik

❖ **AKIBAT BEBAN SENDIRI**

Dimensi rangka : 10 x 10 cm

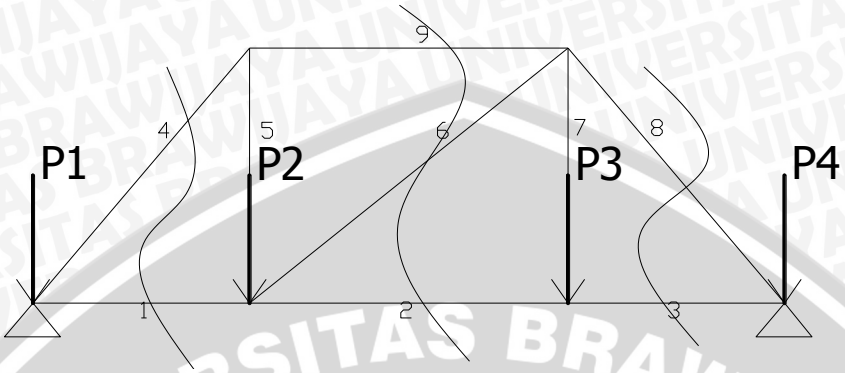
ɣ Beton : 2400 kg/m3

Berat sendiri Rangka = 0,1 x x 0,1 x 2400

= 24 kg/m

= 0,24 kg/cm

Berat sendiri rangka akan bekerja sebagai beban terpusat pada titik buhul rangka



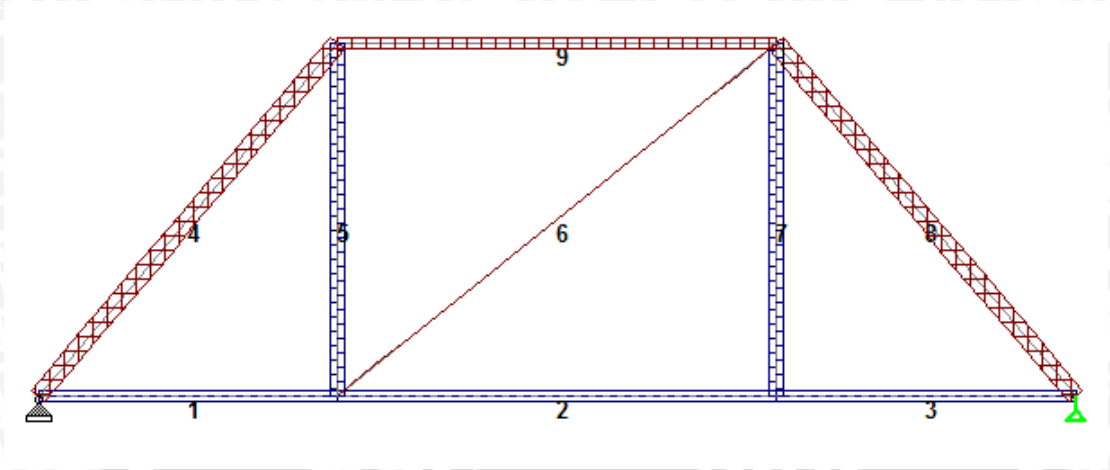
P1 = P4 = (262,5+170)cm x 0,24kg/cm

= 103,8 kg

P1 = P4 = (262,5 + 170 + 250 + 320 + 250 + 400)cm x 0,24kg/cm

= 396,6 kg

Nomor Batang	Gaya Batang (Kg)	Keterangan
1	337,11	Tarik
2	337,11	Tarik
3	337,11	Tarik
4	**520,514**	Tekan
5	**396,600**	Tarik
6	0	
7	**396,600**	Tarik
8	**520,514**	Tekan
9	337,110	Tekan



Keterangan :

Merah = Tekan

Biru = Tarik

Perhitungan Gaya Batang Maksimum

- Batang Tekan maks = Batang 4 dan 8
  = 0,934 P + 520,514 kg
- Batang Tarik maks = Batang 5 dan 7
  = P + 396,6 kg

Perhitungan Kapasitas Batang

- f'c (-) = 19,396 Mpa = 197,779 kg/cm2
- 1. fct prinsipil = 0,4 x $\sqrt{f'c}$
  2. fct lentur = 0,6 x $\sqrt{f'c}$
  Karena merupakan struktur rangka (tidak terjadi lentur) sehingga menggunakan rumus 0,4 x $\sqrt{f'c}$
  fct (+) = 0,4 x $\sqrt{197,779}$ = 5,62 kg/cm2
- fyb (-) = 450 kg/cm2

- fyb (+)= 637,83 kg/cm2
- Ag = (10x10)
  = 100 cm2
- Ab = (1 x 1) x4
  = 4 cm2

  Sehingga didapatkan
- Po (max) = { 0,85 x f'c x (Ag-Ab) + fyb x Ab}
  = {0,85 x 197,779 x (100-4) + 450 x 4}
  = 17938,7664 (tekan)
- Po (max) = { 0,85 x fct x (Ag-Ab) + fyb x Ab}
  = {0,85 x 5,62 x (100-4) + 637,83 x 4}
  = 3009,912 (tarik)

PERHITUNGAN BEBAN P MAX

- Batang tekan maks = 17938,7664 kg

  0,934 P + 520,514kg = 17938,7664 kg

  = 18649,0925 kg
- Batang tarik maks = 3009,912 kg

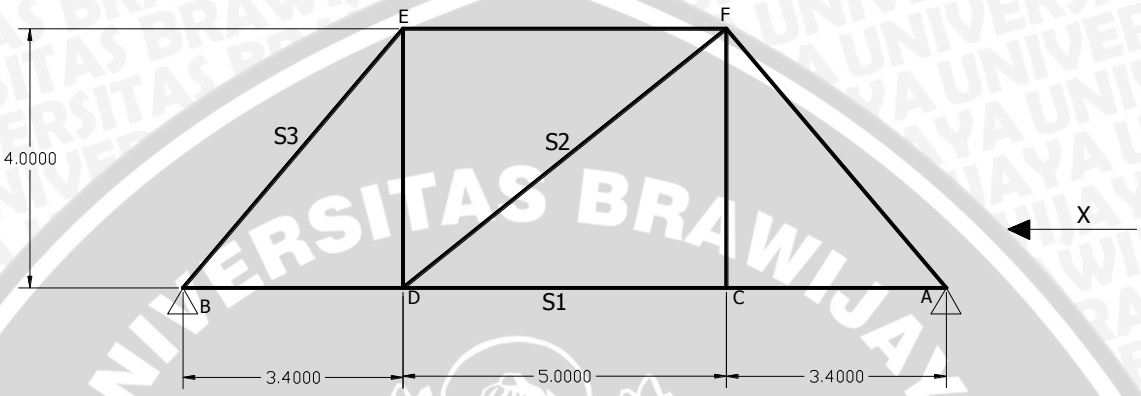
  P + 396,6 kg = 3009,912 kg

  = 2613,312 kg

Jadi pada struktur Rangka jembatan monolit, batang tarik no 5 dan no 7 akan mengalami keruntuhan pada waktu beban P sebesar 2613,312 kg.

LAMPIRAN 4

PERHITUNGAN GARIS PENGARUH



Dimisalkan beban 1 kg berjalan dari titik A ke titik B

- Garis Pengaruh R_A dan R_B

$R_A = \frac{11{,}8-x}{11{,}8}$

$R_B = \frac{x}{11{,}8}$

P 1 kg di	R_A	R_B
A	1	1
B	0,712	0,712
D	0,2881	0,2881
C	0	0

➢ **Potongan I-I**

<u>Ketika P 1 kg berjalan pada Interval 0 ≤ x ≤ 3,4</u>

P disebelah kanan sehingga ditinjau sebelah kiri

$\sum MF = 0$

$(-S1 \times 4) + (RB \times 8,4) = 0$

$-4\ S1 + 8,4\ RB = 0$

$S1 = 2,1\ RB$

$S1 = 2,1 \left(\frac{x}{11,8}\right)$

Ketika x = 0 maka S1 = 0

Ketika x = 1,9 maka S1 = 0,338 kg

Ketika x = 3,4 maka S1 = 0, 605 kg

$\sum V = 0$

$RB + (S2 \sin \alpha) = 0$

$RB + S2 \left(\frac{4}{6,403}\right) = 0$

$S2 = -1,6\ RB$

$S2 = -1,6 \left(\frac{x}{11,8}\right)$

Ketika x = 0 maka S2 = 0

Ketika x = 1,9 maka S2 = -0,257 kg

Ketika x = 3,4 maka S2 = -0,467 kg

Ketika P 1 kg berjalan pada Interval 8,4 ≤ x ≤ 11,8

P disebelah kiri sehingga ditinjau sebelah kanan

$\sum MF = 0$

(S1 x 4) - (RA x 3,4) = 0

- 4 S1 + 3,4 RA = 0

S1 = 0,85 RA

S1 = 0,85 $(\frac{11,8- x}{11,8})$

Ketika x = 8,4 maka S1 = 0,245 kg

Ketika x = 9,9 maka S1 = 0,137 kg

Ketika x = 11,8 maka S1 = 0 kg

$\sum V = 0$

RA - (S2 Sin α) = 0

RA - S2 $(\frac{4}{6,403})$ = 0

S2 = 1,6 RA

S2 = 1,6 $(\frac{11,8- X}{11,8})$

Ketika x = 8,4 maka S2 = 0,461

Ketika x = 9,9 maka S2 = 0,257 kg

Ketika x = 0 maka S2 = 0 kg

<u>Ketika P 1 kg berjalan pada Interval 3,4 ≤ x ≤ 8,4</u>

Dipilih tinjau sebelah kanan maka, RC = $\frac{8,4- X}{5}$

∑MF = 0

(S1 x 4) - (RA x 3,4) = 0

- 4 S1 + 3,4 RA = 0

S1 = 0,85 RA

S1 = 0,85 ($\frac{11,8- x}{11,8}$)

Ketika x = 3,4 maka S1 = 0,605 kg

Ketika x = 5,9 maka S1 = 0,425 kg

Ketika x = 8,4 maka S1 = 0,245 kg

∑V = 0

RA - (S2 Sin α) - RC = 0

RA - S2 ($\frac{4}{6,403}$) - RC= 0

S2 = 1,6 (RA-RC)

S2 = 1,6 ($\frac{11,8- X}{11,8}$ - $\frac{8,4- X}{5}$

Ketika x = 3,4 maka S2 = 0,461

Ketika x = 5,9 maka S2 = 0,257 kg

Ketika x = 8,4 maka S2 = 0,461 kg

➢ **Potongan II-II**

<u>Ketika P 1 kg berjalan pada Interval 0 ≤ x ≤ 8,4</u>

P disebelah kanan sehingga ditinjau sebelah kiri

$\sum V = 0$

RB + (S3 Sin α) = 0

RB + S3 $(\frac{4}{5,25})$ = 0

S3 = - 1,3125 RB

S2 = -1,3125 $(\frac{x}{11,8})$

Ketika x = 0 maka S3 = 0

Ketika x = 1,9 maka S3 = -0,2113 kg

Ketika x = 3,4 maka S3 = -0,378 kg

Ketika x = 5,9 maka S3 = -0,6562 kg

Ketika x = 8,4 maka S3 = -0,9342 kg

<u>Ketika P 1 kg berjalan pada Interval 8,4 ≤ x ≤ 11,8</u>

Dipilih tinjau sebelah kanan maka, RD = $\frac{11,8- X}{3,4}$

$\sum V = 0$

RA - (S3 Sin α) – RD = 0

S3 = -1,3125 (RA - RD)

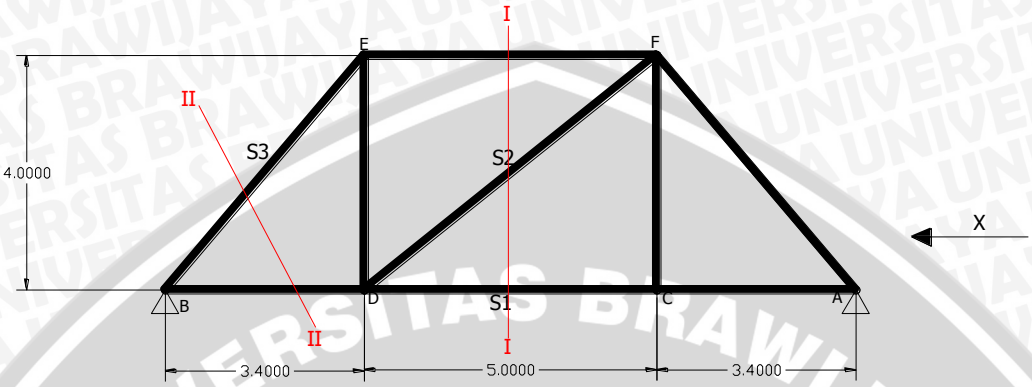
S3 = -1,3125 $(\frac{11,8 - x}{11,8} - \frac{11,8 - x}{3,4})$

Ketika x = 8,4 maka S3 = -0,934

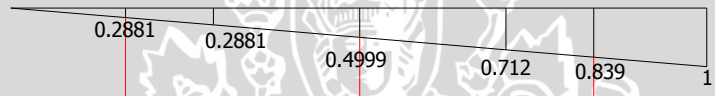
Ketika x = 9,9 maka S3 = - 0,2113 kg

Ketika x = 11,8 maka S3 = 0kg

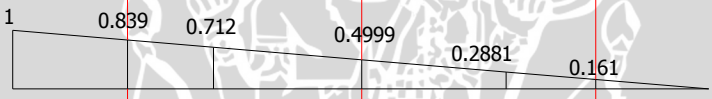
DIAGRAM GARIS PENGARUH



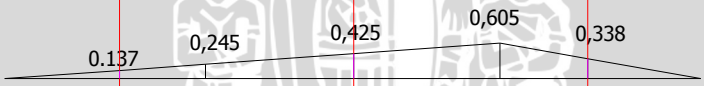
POSISI V **POSISI IV** **POSISI III** **POSISI II** **POSISI I**



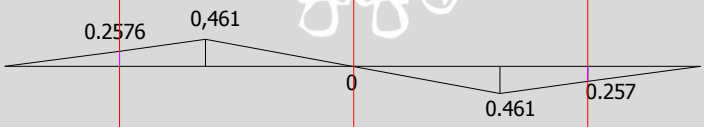
Garis Pengaruh RA



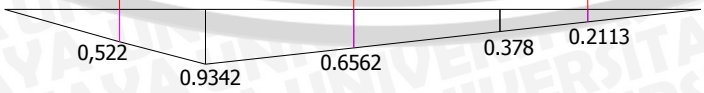
Garis Pengaruh RB



Garis Pengaruh S1



Garis Pengaruh S2



Garis Pengaruh S3

LAMPIRAN 5

PERHITUNGAN REGANGAN TEORITIS

GAYA BATANG 1					Luas Penampang	Tegangan (kg/cm2)			Modulus elastisitas	Regangan		
Posisi Ke-	Faktor Pengali	Beban 50	Beban 100	Beban 150	cm2	Beban 50	Beban 100	Beban 150	kg/cm2	Beban 50	Beban 100	Beban 150
Posisi I	0	0	0	0	100	0	0	0	0	0	0	0
Posisi II	0.338	16.9	33.8	50.7	100	0.169	0.338	0.507	200379.5228	8.434E-07	1.6868E-06	2.5302E-06
Posisi III	0.425	21.25	42.5	63.75	100	0.2125	0.425	0.6375	200379.5228	1.06049E-06	2.12098E-06	3.18146E-06
Posisi IV	0.137	6.85	13.7	20.55	100	0.0685	0.137	0.2055	200379.5228	3.41851E-07	6.83703E-07	1.02555E-06
Posisi V	0	0	0	0	100	0	0	0	0	0	0	0
GAYA BATANG 2					Luas Penampang	Tegangan			Modulus elastisitas	Regangan		
Posisi Ke-	Faktor Pengali	Beban 50	Beban 100	Beban 150	cm2	Beban 50	Beban 100	Beban 150	kg/cm2	Beban 50	Beban 100	Beban 150
Posisi I	0	0	0	0	100	0	0	0	0	0	0	0
Posisi II	-0.257	-12.85	-25.7	-38.55	100	-0.1285	-0.257	-0.3855	200379.5228	-6.41283E-07	-1.2826E-06	-1.92385E-06
Posisi III	0	0	0	0	100	0	0	0	200379.5228	0	0	0
Posisi IV	0.2576	12.88	25.76	38.64	100	0.1288	0.2576	0.3864	200379.5228	6.4278E-07	1.28556E-06	1.92834E-06
Posisi V	0	0	0	0	100	0	0	0	0	0	0	0
GAYA BATANG 3					Luas Penampang	Tegangan			Modulus elastisitas	Regangan		
Posisi Ke-	Faktor Pengali	Beban 50	Beban 100	Beban 150	cm2	Beban 50	Beban 100	Beban 150	kg/cm2	Beban 50	Beban 100	Beban 150
Posisi I	0	0	0	0	100	0	0	0	0	0	0	0
Posisi II	-0.2113	-10.565	-21.13	-31.695	100	-0.10565	-0.2113	-0.31695	200379.5228	-5.27249E-07	-1.0545E-06	-1.58175E-06
Posisi III	-0.6562	-32.81	-65.62	-98.43	100	-0.3281	-0.6562	-0.9843	200379.5228	-1.63739E-06	-3.2748E-06	-4.91218E-06
Posisi IV	-0.552	-27.6	-55.2	-82.8	100	-0.276	-0.552	-0.828	200379.5228	-1.37739E-06	-2.7548E-06	-4.13216E-06
Posisi V	0	0	0	0	100	0	0	0	0	0	0	0

LAMPIRAN 6

PERHITUNGAN GAYA BATANG EKSPERIMEN

BATANG 1										
	Regangan Eksperimen			E Bambu	A Bambu	E Beton	A Beton	Gaya Batang		
Posisi Ke-	Beban 50 kg	Beban 100 kg	Beban 150 kg	kg/cm2	cm2	kg/cm2	cm2	Beban 50 kg	Beban 100 kg	Beban 150 kg
Posisi I	0.000001	0.000001	0.000002	166703	1	20699.218	94	2.1124	2.8166	4.9290
Posisi II	0.000002	0.000002	0.000003	166703	1	20699.218	94	4.9290	4.9290	5.6331
Posisi III	0.000003	0.000003	0.000005	166703	1	20699.218	94	6.3373	7.0414	11.2663
Posisi IV	0.000002	0.000002	0.000003	166703	1	20699.218	94	4.2249	4.2249	5.6331
Posisi V	0.000002	0.000001	0.000002	166703	1	20699.218	94	3.5207	2.8166	4.2249

BATANG 2										
	Regangan Eksperimen			E Bambu	A Bambu	E Beton	A Beton	Gaya Batang		
Posisi Ke-	Beban 50 kg	Beban 100 kg	Beban 150 kg	kg/cm2	cm2	kg/cm2	cm2	Beban 50 kg	Beban 100 kg	Beban 150 kg
Posisi I	-0.000002	-0.000001	-0.000002	166703	1	20699.218	94	-3.5207	-2.8166	-4.2249
Posisi II	-0.000002	-0.000002	-0.000003	166703	1	20699.218	94	-4.2249	-3.5207	-7.0414
Posisi III	0.000000	0.000001	0.000002	166703	1	20699.218	94	-0.7041	2.8166	3.5207
Posisi IV	0.000002	0.000002	0.000003	166703	1	20699.218	94	4.9290	3.5207	7.0414
Posisi V	0.000001	0.000002	0.000002	166703	1	20699.218	94	2.8166	4.9290	4.9290

BATANG 3										
	Regangan Eksperimen			E Bambu	A Bambu	E Beton	A Beton	Gaya Batang		
Posisi Ke-	Beban 50 kg	Beban 100 kg	Beban 150 kg	kg/cm2	cm2	kg/cm2	cm2	Beban 50 kg	Beban 100 kg	Beban 150 kg
Posisi I	-0.000001	-0.000001	-0.000002	166703	1	20699.218	94	-2.8166	-2.8166	-4.2249
Posisi II	-0.000002	-0.000003	-0.000003	166703	1	20699.218	94	-4.9290	-7.0414	-5.6331
Posisi III	-0.000004	-0.000005	-0.000006	166703	1	20699.218	94	-7.7456	-11.2663	-12.6746
Posisi IV	-0.000003	-0.000003	-0.000004	166703	1	20699.218	94	-5.6331	-6.3373	-7.7456
Posisi V	-0.000001	-0.000002	-0.000002	166703	1	20699.218	94	-2.8166	-4.2249	-4.2249

LAMPIRAN 7

HASIL ANALISIS SAP 2000 v 15

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 50_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 50_40	LinStatic	-2.120E-09	1.753E-09	-2.317E-07	-7.937E-08	2.014E-06	2.713E-09
6	Beban 50_40	LinStatic	2.620E-09	1.990E-09	-2.593E-07	-8.030E-08	-2.204E-06	-3.461E-09
7	Beban 50_40	LinStatic	2.230E-10	6.978E-09	-9.805E-08	4.077E-07	7.948E-07	9.417E-09
8	Beban 50_40	LinStatic	8.247E-10	1.763E-09	-5.058E-08	5.011E-07	2.226E-07	1.255E-09
9	Beban 50_40	LinStatic	2.029E-10	3.791E-09	-1.757E-07	7.197E-07	7.312E-07	-2.012E-08
10	Beban 50_40	LinStatic	-5.548E-11	5.024E-10	-3.380E-07	1.374E-06	-2.083E-07	2.984E-09
11	Beban 50_40	LinStatic	-1.666E-10	2.044E-09	-2.540E-07	1.031E-06	-5.982E-07	1.447E-08
12	Beban 50_40	LinStatic	-2.515E-10	7.907E-09	-1.075E-07	4.409E-07	-8.130E-07	-1.094E-08
13	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	1.203E-07	5.982E-08	2.852E-08
14	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	1.896E-07	-1.866E-09	2.800E-09
15	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	3.512E-07	-1.557E-10	1.935E-10
16	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	3.552E-07	8.789E-11	-2.452E-10
17	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	2.702E-07	2.674E-10	-9.852E-10
18	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	1.312E-07	-6.196E-08	-2.974E-08
19	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-8.356E-07	2.075E-07	-4.698E-08
20	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-2.132E-06	-1.174E-09	-3.078E-10
21	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-3.029E-06	-1.075E-09	3.702E-11
22	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-3.439E-06	1.782E-10	-1.560E-10
23	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-2.440E-06	1.915E-09	2.362E-10
24	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-9.228E-07	-2.254E-07	5.069E-08
25	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-4.028E-08	-9.321E-09	-8.269E-09
26	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-9.884E-08	-4.742E-09	3.283E-09
30	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	-4.384E-08	9.440E-09	8.624E-09
31	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	2.917E-07	-1.703E-08	1.365E-08
36	Beban 50_40	LinStatic	0.000000	0.000000	0.000000	3.226E-07	1.792E-08	-1.473E-08
37	Beban 50_40	LinStatic	4.482E-07	2.337E-08	-1.544E-07	3.098E-08	9.783E-07	2.789E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 50_80	LinStatic	-2.847E-09	-4.372E-09	-5.698E-07	-2.510E-06	3.948E-06	4.148E-09
6	Beban 50_80	LinStatic	2.847E-09	-4.372E-09	-5.698E-07	-2.510E-06	-3.948E-06	-4.148E-09
7	Beban 50_80	LinStatic	-3.008E-09	5.424E-09	-5.444E-07	2.186E-06	3.943E-06	-3.011E-08
8	Beban 50_80	LinStatic	1.006E-09	9.275E-10	-2.885E-07	2.787E-06	1.291E-06	-3.144E-09
9	Beban 50_80	LinStatic	-2.126E-09	1.666E-09	-9.566E-07	3.738E-06	4.007E-06	-2.365E-08
10	Beban 50_80	LinStatic	4.657E-10	-4.303E-10	-1.837E-06	6.427E-06	-1.301E-06	1.173E-09
11	Beban 50_80	LinStatic	1.482E-09	1.749E-10	-1.340E-06	4.946E-06	-3.453E-06	1.011E-08
12	Beban 50_80	LinStatic	3.008E-09	5.424E-09	-5.444E-07	2.186E-06	-3.943E-06	3.011E-08
13	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	7.320E-07	2.840E-07	1.151E-07
14	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	1.120E-06	-1.049E-08	1.012E-08
15	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	2.114E-06	-4.987E-10	1.170E-10
16	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	2.114E-06	4.987E-10	-1.170E-10
17	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	1.541E-06	1.814E-09	-1.625E-09
18	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	7.320E-07	-2.840E-07	-1.151E-07
19	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-7.321E-07	2.959E-07	-1.164E-07
20	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-1.555E-06	-1.734E-09	-1.522E-09
21	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-2.132E-06	-4.956E-10	-9.683E-11
22	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-2.132E-06	4.956E-10	9.683E-11
23	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-1.555E-06	1.734E-09	1.522E-09
24	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-7.321E-07	-2.959E-07	1.164E-07
25	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-2.459E-07	-3.874E-08	-3.341E-08
26	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-5.860E-07	-2.316E-08	1.341E-08
30	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	-2.459E-07	3.874E-08	3.341E-08
31	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	2.458E-07	-4.141E-08	3.379E-08
36	Beban 50_80	LinStatic	0.000000	0.000000	0.000000	2.458E-07	4.141E-08	-3.379E-08
37	Beban 50_80	LinStatic	1.149E-06	1.012E-07	-4.246E-07	-2.018E-07	2.767E-06	-5.378E-07

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 50_120	LinStatic	4.021E-10	-2.254E-09	-8.716E-08	-3.817E-07	6.125E-07	-7.220E-09
6	Beban 50_120	LinStatic	-4.021E-10	-2.254E-09	-8.716E-08	-3.817E-07	-6.125E-07	7.220E-09
7	Beban 50_120	LinStatic	-1.734E-09	-5.917E-09	-2.031E-07	-8.523E-09	1.628E-06	-1.513E-08
8	Beban 50_120	LinStatic	-4.879E-10	-1.672E-09	-2.807E-07	1.708E-06	1.307E-06	-2.088E-09
9	Beban 50_120	LinStatic	-1.219E-09	-3.494E-09	-3.792E-07	-1.107E-07	1.736E-06	1.506E-08
10	Beban 50_120	LinStatic	2.702E-10	-6.131E-10	-7.600E-07	-1.085E-07	-5.497E-07	-2.172E-09
11	Beban 50_120	LinStatic	8.474E-10	-1.822E-09	-5.467E-07	-1.576E-07	-1.504E-06	-1.036E-08
12	Beban 50_120	LinStatic	1.734E-09	-5.917E-09	-2.031E-07	-8.523E-09	-1.628E-06	1.513E-08
13	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	7.766E-07	1.816E-07	4.062E-08
14	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	1.381E-06	-5.412E-09	3.071E-09
15	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	2.424E-06	-1.789E-10	-1.768E-10
16	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	2.424E-06	1.789E-10	1.768E-10
17	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	1.887E-06	1.015E-09	1.163E-10
18	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	7.766E-07	-1.816E-07	-4.062E-08
19	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-1.103E-07	5.506E-08	-2.644E-08
20	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.112E-07	-1.687E-10	-4.588E-10
21	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.770E-07	-7.852E-11	-9.408E-11
22	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.770E-07	7.852E-11	9.408E-11
23	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.112E-07	1.687E-10	4.588E-10
24	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-1.103E-07	-5.506E-08	2.644E-08
25	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.705E-07	-1.337E-08	-1.181E-08
26	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-7.079E-07	-1.845E-08	4.815E-09
30	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	-2.705E-07	1.337E-08	1.181E-08
31	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	3.646E-08	-8.643E-09	7.677E-09
36	Beban 50_120	LinStatic	0.000000	0.000000	0.000000	3.646E-08	8.643E-09	-7.677E-09
37	Beban 50_120	LinStatic	3.007E-07	3.038E-08	-8.213E-08	-1.251E-07	8.106E-07	-3.302E-07

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	Beban 50_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	Beban 100_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 100_40	LinStatic	-3.725E-06	3.495E-06	-0.000422	-4.327E-08	3.287E-06	4.512E-09
6	Beban 100_40	LinStatic	3.725E-06	3.495E-06	-0.000422	-4.327E-08	-3.287E-06	-4.512E-09
7	Beban 100_40	LinStatic	3.951E-07	0.000013	-0.000171	6.879E-07	1.226E-06	1.337E-08
8	Beban 100_40	LinStatic	1.491E-06	3.298E-06	-0.000084	8.316E-07	3.365E-07	1.899E-09
9	Beban 100_40	LinStatic	3.445E-07	7.036E-06	-0.000290	1.179E-06	1.112E-06	-3.761E-08
10	Beban 100_40	LinStatic	-1.149E-07	8.851E-07	-0.000525	2.127E-06	-3.447E-07	4.568E-09
11	Beban 100_40	LinStatic	-2.902E-07	3.366E-06	-0.000393	1.588E-06	-9.183E-07	2.329E-08
12	Beban 100_40	LinStatic	-3.951E-07	0.000013	-0.000171	6.879E-07	-1.226E-06	-1.337E-08
13	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	2.094E-07	9.390E-08	4.483E-08
14	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	3.149E-07	-2.931E-09	4.528E-09
15	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	5.535E-07	-1.584E-10	3.755E-10
16	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	5.535E-07	1.584E-10	-3.755E-10
17	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	4.210E-07	3.674E-10	-1.569E-09
18	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	2.094E-07	-9.390E-08	-4.483E-08
19	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-1.561E-06	3.598E-07	-7.513E-08
20	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-3.791E-06	-1.974E-09	-3.798E-10
21	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-4.864E-06	-3.496E-10	1.657E-10
22	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-4.864E-06	3.496E-10	-1.657E-10
23	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-3.791E-06	1.974E-09	3.798E-10
24	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-1.561E-06	-3.598E-07	7.513E-08
25	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-6.991E-08	-1.396E-08	-1.299E-08
26	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-1.644E-07	-7.620E-09	5.139E-09
30	Beban 100_40	LinStatic	0.000000	0.000000	0.000000	-6.991E-08	1.396E-08	1.299E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 100_80	LinStatic	-5.688E-06	-8.735E-06	-0.001138	-5.015E-06	7.888E-06	8.286E-09
6	Beban 100_80	LinStatic	5.688E-06	-8.735E-06	-0.001138	-5.015E-06	-7.888E-06	-8.286E-09
7	Beban 100_80	LinStatic	-6.009E-06	0.000011	-0.001088	4.368E-06	7.877E-06	-6.016E-08
8	Beban 100_80	LinStatic	2.010E-06	1.853E-06	-0.000576	5.567E-06	2.579E-06	-6.282E-09
9	Beban 100_80	LinStatic	-4.248E-06	3.328E-06	-0.001911	7.467E-06	8.005E-06	-4.725E-08
10	Beban 100_80	LinStatic	9.304E-07	-8.597E-07	-0.003670	0.000013	-2.600E-06	2.343E-09
11	Beban 100_80	LinStatic	2.960E-06	3.495E-07	-0.002677	9.881E-06	-6.899E-06	2.019E-08
12	Beban 100_80	LinStatic	6.009E-06	0.000011	-0.001088	4.368E-06	-7.877E-06	6.016E-08
13	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	1.462E-06	5.674E-07	2.299E-07
14	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	2.238E-06	-2.096E-08	2.021E-08
15	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	4.224E-06	-9.964E-10	2.337E-10
16	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	4.224E-06	9.964E-10	-2.337E-10
17	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	3.079E-06	3.625E-09	-3.247E-09
18	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	1.462E-06	-5.674E-07	-2.299E-07
19	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-1.463E-06	5.912E-07	-2.325E-07
20	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-3.107E-06	-3.465E-09	-3.040E-09
21	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-4.260E-06	-9.901E-10	-1.935E-10
22	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-4.260E-06	9.901E-10	1.935E-10
23	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-3.107E-06	3.465E-09	3.040E-09
24	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-1.463E-06	-5.912E-07	2.325E-07
25	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-4.912E-07	-7.740E-08	-6.675E-08
26	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-1.171E-06	-4.627E-08	2.679E-08
30	Beban 100_80	LinStatic	0.000000	0.000000	0.000000	-4.912E-07	7.740E-08	6.675E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 100_120	LinStatic	8.033E-07	-4.504E-06	-0.000174	-7.626E-07	1.224E-06	-1.442E-08
6	Beban 100_120	LinStatic	-8.033E-07	-4.504E-06	-0.000174	-7.626E-07	-1.224E-06	1.442E-08
7	Beban 100_120	LinStatic	-3.465E-06	-0.000012	-0.000406	-1.703E-08	3.253E-06	-3.023E-08
8	Beban 100_120	LinStatic	-9.748E-07	-3.341E-06	-0.000561	3.413E-06	2.612E-06	-4.171E-09
9	Beban 100_120	LinStatic	-2.436E-06	-6.980E-06	-0.000758	-2.211E-07	3.469E-06	3.009E-08
10	Beban 100_120	LinStatic	5.398E-07	-1.225E-06	-0.001518	-2.169E-07	-1.098E-06	-4.339E-09
11	Beban 100_120	LinStatic	1.693E-06	-3.640E-06	-0.001092	-3.149E-07	-3.005E-06	-2.069E-08
12	Beban 100_120	LinStatic	3.465E-06	-0.000012	-0.000406	-1.703E-08	-3.253E-06	3.023E-08
13	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	1.551E-06	3.628E-07	8.116E-08
14	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	2.758E-06	-1.081E-08	6.134E-09
15	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	4.843E-06	-3.575E-10	-3.532E-10
16	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	4.843E-06	3.575E-10	3.532E-10
17	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	3.769E-06	2.028E-09	2.323E-10
18	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	1.551E-06	-3.628E-07	-8.116E-08
19	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-2.205E-07	1.100E-07	-5.282E-08
20	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-4.220E-07	-3.371E-10	-9.166E-10
21	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-5.534E-07	-1.569E-10	-1.880E-10
22	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-5.534E-07	1.569E-10	1.880E-10
23	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-4.220E-07	3.371E-10	9.166E-10
24	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-2.205E-07	-1.100E-07	5.282E-08
25	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-5.404E-07	-2.672E-08	-2.360E-08
26	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-1.414E-06	-3.685E-08	9.620E-09
30	Beban 100_120	LinStatic	0.000000	0.000000	0.000000	-5.404E-07	2.672E-08	2.360E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	Beban 100_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			m	m	m	Radians	Radians	Radians
1	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	Beban 150_0	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 150_40	LinStatic	-5.593E-06	5.247E-06	-0.000633	-6.497E-08	4.935E-06	6.775E-09
6	Beban 150_40	LinStatic	5.593E-06	5.247E-06	-0.000633	-6.497E-08	-4.935E-06	-6.775E-09
7	Beban 150_40	LinStatic	5.933E-07	0.000020	-0.000257	1.033E-06	1.841E-06	2.007E-08
8	Beban 150_40	LinStatic	2.239E-06	4.952E-06	-0.000126	1.249E-06	5.053E-07	2.852E-09
9	Beban 150_40	LinStatic	5.173E-07	0.000011	-0.000436	1.770E-06	1.670E-06	-5.648E-08
10	Beban 150_40	LinStatic	-1.725E-07	1.329E-06	-0.000788	3.194E-06	-5.176E-07	6.859E-09
11	Beban 150_40	LinStatic	-4.358E-07	5.054E-06	-0.000591	2.384E-06	-1.379E-06	3.497E-08
12	Beban 150_40	LinStatic	-5.933E-07	0.000020	-0.000257	1.033E-06	-1.841E-06	-2.007E-08
13	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	3.144E-07	1.410E-07	6.731E-08
14	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	4.728E-07	-4.401E-09	6.799E-09
15	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	8.310E-07	-2.379E-10	5.638E-10
16	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	8.310E-07	2.379E-10	-5.638E-10
17	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	6.322E-07	5.516E-10	-2.356E-09
18	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	3.144E-07	-1.410E-07	-6.731E-08
19	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-2.344E-06	5.403E-07	-1.128E-07
20	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-5.692E-06	-2.964E-09	-5.703E-10
21	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-7.303E-06	-5.250E-10	2.488E-10
22	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-7.303E-06	5.250E-10	-2.488E-10
23	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-5.692E-06	2.964E-09	5.703E-10
24	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-2.344E-06	-5.403E-07	1.128E-07
25	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-1.050E-07	-2.096E-08	-1.951E-08
26	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-2.468E-07	-1.144E-08	7.717E-09
30	Beban 150_40	LinStatic	0.000000	0.000000	0.000000	-1.050E-07	2.096E-08	1.951E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 150_80	LinStatic	-8.540E-06	-0.000013	-0.001709	-7.531E-06	0.000012	1.244E-08
6	Beban 150_80	LinStatic	8.540E-06	-0.000013	-0.001709	-7.531E-06	-0.000012	-1.244E-08
7	Beban 150_80	LinStatic	-9.022E-06	0.000016	-0.001633	6.559E-06	0.000012	-9.033E-08
8	Beban 150_80	LinStatic	3.019E-06	2.782E-06	-0.000865	8.359E-06	3.872E-06	-9.432E-09
9	Beban 150_80	LinStatic	-6.379E-06	4.998E-06	-0.002870	0.000011	0.000012	-7.095E-08
10	Beban 150_80	LinStatic	1.397E-06	-1.291E-06	-0.005510	0.000019	-3.904E-06	3.518E-09
11	Beban 150_80	LinStatic	4.445E-06	5.248E-07	-0.004019	0.000015	-0.000010	3.032E-08
12	Beban 150_80	LinStatic	9.022E-06	0.000016	-0.001633	6.559E-06	-0.000012	9.033E-08
13	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	2.196E-06	8.520E-07	3.453E-07
14	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	3.360E-06	-3.148E-08	3.035E-08
15	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	6.342E-06	-1.496E-09	3.509E-10
16	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	6.342E-06	1.496E-09	-3.509E-10
17	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	4.624E-06	5.443E-09	-4.876E-09
18	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	2.196E-06	-8.520E-07	-3.453E-07
19	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-2.196E-06	8.877E-07	-3.490E-07
20	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-4.665E-06	-5.203E-09	-4.565E-09
21	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-6.397E-06	-1.487E-09	-2.905E-10
22	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-6.397E-06	1.487E-09	2.905E-10
23	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-4.665E-06	5.203E-09	4.565E-09
24	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-2.196E-06	-8.877E-07	3.490E-07
25	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-7.375E-07	-1.162E-07	-1.002E-07
26	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-1.758E-06	-6.948E-08	4.022E-08
30	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	-7.375E-07	1.162E-07	1.002E-07
31	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	7.374E-07	-1.242E-07	1.014E-07
36	Beban 150_80	LinStatic	0.000000	0.000000	0.000000	7.374E-07	1.242E-07	-1.014E-07

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 150_120	LinStatic	1.206E-06	-6.762E-06	-0.000261	-1.145E-06	1.837E-06	-2.166E-08
6	Beban 150_120	LinStatic	-1.206E-06	-6.762E-06	-0.000261	-1.145E-06	-1.837E-06	2.166E-08
7	Beban 150_120	LinStatic	-5.203E-06	-0.000018	-0.000609	-2.557E-08	4.885E-06	-4.539E-08
8	Beban 150_120	LinStatic	-1.464E-06	-5.017E-06	-0.000842	5.125E-06	3.922E-06	-6.262E-09
9	Beban 150_120	LinStatic	-3.657E-06	-0.000010	-0.001137	-3.321E-07	5.209E-06	4.518E-08
10	Beban 150_120	LinStatic	8.105E-07	-1.839E-06	-0.002280	-3.256E-07	-1.649E-06	-6.515E-09
11	Beban 150_120	LinStatic	2.542E-06	-5.465E-06	-0.001640	-4.728E-07	-4.512E-06	-3.107E-08
12	Beban 150_120	LinStatic	5.203E-06	-0.000018	-0.000609	-2.557E-08	-4.885E-06	4.539E-08
13	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	2.330E-06	5.447E-07	1.219E-07
14	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	4.142E-06	-1.623E-08	9.211E-09
15	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	7.272E-06	-5.368E-10	-5.303E-10
16	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	7.272E-06	5.368E-10	5.303E-10
17	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	5.660E-06	3.045E-09	3.489E-10
18	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	2.330E-06	-5.447E-07	-1.219E-07
19	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-3.310E-07	1.652E-07	-7.930E-08
20	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-6.336E-07	-5.062E-10	-1.376E-09
21	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-8.310E-07	-2.355E-10	-2.822E-10
22	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-8.310E-07	2.355E-10	2.822E-10
23	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-6.336E-07	5.062E-10	1.376E-09
24	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-3.310E-07	-1.652E-07	7.930E-08
25	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-8.115E-07	-4.011E-08	-3.544E-08
26	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-2.123E-06	-5.534E-08	1.445E-08
30	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	-8.115E-07	4.011E-08	3.544E-08
31	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	1.094E-07	-2.593E-08	2.303E-08
36	Beban 150_120	LinStatic	0.000000	0.000000	0.000000	1.094E-07	2.593E-08	-2.303E-08

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	Beban 150_160	LinStatic	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table: Joint Displacements

Table: Joint Displacements

Joint	OutputCase	CaseType	U1	U2	U3	R1	R2	R3
			mm	mm	mm	Radians	Radians	Radians
1	Beban 290_80	LinStatic	-0.000017	-0.000025	-0.003305	-0.000015	0.000023	2.405E-08
6	Beban 290_80	LinStatic	0.000017	-0.000025	-0.003305	-0.000015	-0.000023	-2.405E-08
7	Beban 290_80	LinStatic	-0.000017	0.000031	-0.003157	0.000013	0.000023	-1.746E-07
8	Beban 290_80	LinStatic	5.836E-06	5.379E-06	-0.001673	0.000016	7.486E-06	-1.823E-08
9	Beban 290_80	LinStatic	-0.000012	9.662E-06	-0.005548	0.000022	0.000023	-1.372E-07
10	Beban 290_80	LinStatic	2.701E-06	-2.496E-06	-0.010653	0.000037	-7.548E-06	6.801E-09
11	Beban 290_80	LinStatic	8.593E-06	1.015E-06	-0.007770	0.000029	-0.000020	5.862E-08
12	Beban 290_80	LinStatic	0.000017	0.000031	-0.003157	0.000013	-0.000023	1.746E-07
13	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	4.245E-06	1.647E-06	6.675E-07
14	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	6.496E-06	-6.085E-08	5.867E-08
15	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	0.000012	-2.892E-09	6.784E-10
16	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	0.000012	2.892E-09	-6.784E-10
17	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	8.939E-06	1.052E-08	-9.427E-09
18	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	4.245E-06	-1.647E-06	-6.675E-07
19	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-4.246E-06	1.716E-06	-6.748E-07
20	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-9.018E-06	-1.006E-08	-8.826E-09
21	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-0.000012	-2.874E-09	-5.616E-10
22	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-0.000012	2.874E-09	5.616E-10
23	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-9.018E-06	1.006E-08	8.826E-09
24	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-4.246E-06	-1.716E-06	6.748E-07
25	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-1.426E-06	-2.247E-07	-1.938E-07
26	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-3.398E-06	-1.343E-07	7.776E-08
30	Beban 290_80	LinStatic	0.000000	0.000000	0.000000	-1.426E-06	2.247E-07	1.938E-07

DOKUMENTASI