

ZÁKLADNÍ VSTUPNÍ DATA

-62-

RADA AB - PROSTOROVY MODEL

TYP KONSTRUKCE : 5= prost. ram
 POCET UZLU : 110
 POCET PRUTU : 188
 POCET PODPOR : 21
 POCET ZAT.STAVU: 10

POPIS SOURADNIC UZLU

CISLO PODP.	SOURADNICE	SOURADNICE	SOURADNICE
UZLU UZEL	X [m]	Y [m]	Z [m]
1 1	0.000	0.000	3.000
2 1	9.000	0.000	3.000
3 1	0.000	0.000	15.000
4 1	9.000	0.000	15.000
5 0	0.000	7.950	0.000
6 0	2.875	7.950	0.000
7 0	6.125	7.950	0.000
8 0	9.000	7.950	0.000
9 0	0.000	7.950	3.000
10 0	2.875	7.950	3.000
11 0	6.125	7.950	3.000
12 0	9.000	7.950	3.000
13 0	0.000	7.950	15.000
14 0	2.875	7.950	15.000
15 0	6.125	7.950	15.000
16 0	9.000	7.950	15.000
17 1	0.000	7.950	18.000
18 1	2.875	7.950	18.000
19 1	6.125	7.950	18.000
20 1	9.000	7.950	18.000
21 0	0.000	18.550	0.000
22 0	6.000	18.550	0.000
23 0	0.000	18.550	3.000
24 0	6.000	18.550	3.000
25 0	7.000	18.550	3.000
26 0	8.000	18.550	3.000
27 0	9.000	18.550	3.000
28 0	0.000	18.550	7.000
29 0	6.000	18.550	7.000
30 0	8.000	18.550	7.000
31 0	0.000	18.550	11.000
32 0	6.000	18.550	11.000
33 0	8.000	18.550	11.000
34 0	0.000	18.550	15.000
35 0	6.000	18.550	15.000
36 0	7.000	18.550	15.000
37 0	8.000	18.550	15.000
38 0	9.000	18.550	15.000
39 1	0.000	18.550	18.000
40 1	6.000	18.550	18.000
41 0	9.000	20.000	1.939
42 0	9.000	20.000	3.000
43 0	9.000	20.000	7.000
44 0	9.000	20.000	11.000
45 0	9.000	20.000	15.000
46 0	9.000	20.000	16.061
47 0	0.000	22.650	0.000
48 0	2.981	22.650	0.000
49 0	7.000	22.650	0.000

50	0	9.000	22.650	0.000
51	1	0.000	22.650	18.000
52	1	2.981	22.650	18.000
53	1	7.000	22.650	18.000
54	1	9.000	22.650	18.000
55	0	0.000	23.450	0.000
56	0	0.000	23.450	3.000
57	0	0.000	23.450	15.000
58	1	0.000	23.450	18.000
59	0	0.000	26.700	0.000
60	0	0.000	26.700	3.000
61	0	0.000	26.700	7.000
62	0	0.000	26.700	11.000
63	0	0.000	26.700	15.000
64	1	0.000	26.700	18.000
65	0	0.000	30.280	0.000
66	0	4.500	30.280	0.000
67	0	9.000	30.280	0.000
68	0	0.000	30.280	3.000
69	0	4.500	30.280	3.000
70	0	9.000	30.280	3.000
71	0	0.000	30.280	7.000
72	0	4.500	30.280	7.000
73	0	9.000	30.280	7.000
74	0	0.000	30.280	9.000
75	0	9.000	30.280	9.000
76	0	0.000	30.280	11.000
77	0	4.500	30.280	11.000
78	0	9.000	30.280	11.000
79	0	0.000	30.280	15.000
80	0	4.500	30.280	15.000
81	0	9.000	30.280	15.000
82	1	0.000	30.280	18.000
83	1	4.500	30.280	18.000
84	1	9.000	30.280	18.000
85	0	0.000	34.000	0.000
86	0	9.000	34.500	0.000
87	0	0.000	34.000	3.000
88	0	9.000	34.500	3.000
89	0	0.000	34.000	9.000
90	0	9.000	34.500	9.000
91	0	0.000	34.000	15.000
92	0	9.000	34.500	15.000
93	1	0.000	34.000	18.000
94	1	9.000	34.500	18.000
95	0	0.	7.95	9.
96	0	3.	7.95	9.
97	0	6.	7.95	9.
98	0	9.	7.95	9.
99	0	9.	25.14	0.
100	0	9.	25.14	3.
101	0	9.	25.14	7.
102	0	9.	25.14	11.
103	0	9.	25.14	15.
104	0	9.	25.14	18.
105	0	4.9325	20.00	7.
106	0	4.9325	20.00	11.
107	0	3.092	22.5	7.
108	0	9.	22.5	7.
109	0	3.092	22.5	11. 110 0

9.

22.5

11.

POPIS KODOVYCH CISEL PRUTU		
CISLO PRUTU	CISLO POCAT. UZLU	CISLO KONC. UZLU
1	1	9
2	2	12
3	3	13
4	4	16
5	9	23
6	12	27
7	13	34
8	16	38
9	23	56
10	56	60
11	60	68
12	27	42
13	100	70
14	34	57
15	57	63
16	63	79
17	38	45
18	103	81
19	68	87
20	70	88
21	74	89
22	75	90
23	79	91
24	81	92
25	9	10
26	10	11
27	11	12
28	13	14
29	14	15
30	15	16
31	23	24
32	24	25
33	25	26
34	26	27
35	34	35
36	35	36
37	36	37
38	37	38
39	21	22
40	39	40
41	28	29
42	31	32
43	29	30
44	32	33
45	47	48
46	48	49
47	49	50
48	51	52
49	52	53
50	53	54
51	68	69
52	69	70
53	79	80
54	80	81
55	65	66
56	66	67

57	71	72
58	72	73
59	76	77
60	77	78
61	82	83
62	83	84
63	87	88
64	89	90
65	91	92
66	5	9
67	9	95
68	13	17
69	6	10
70	10	96
71	14	18
72	7	11
73	11	97
74	15	19
75	8	12
76	12	98
77	16	20
78	26	30
79	30	33
80	33	37
81	22	24
82	35	40
83	24	29
84	29	32
85	32	35
86	21	23
87	23	28
88	28	31
89	31	34
90	34	39
91	41	42
92	42	43
93	43	44
94	44	45
95	45	46
96	55	56
97	56	57
98	57	58
99	59	60
100	60	61
101	61	62
102	62	63
103	63	64
104	65	68
105	68	71
106	71	74
107	74	76
108	76	79
109	79	82
110	67	70
111	70	73
112	73	75
113	75	78
114	78	81
115	81	84
116	85	87

117	87	89
118	89	91
119	91	93
120	86	88
121	88	90
122	90	92
123	92	94
124	23	47
125	34	51
126	24	48
127	35	52
128	25	49
129	36	53
130	41	50
131	46	54
132	26	41
133	37	46
134	26	42
135	30	43
136	33	44
137	37	45
138	48	59
139	107	61
140	109	62
141	52	64
142	24	60
143	35	63
144	99	67
145	104	84
146	47	55
147	51	58
148	59	65
149	64	82
150	61	71
151	62	76
152	101	73
153	102	78
154	55	59
155	58	64
156	66	69
157	69	72
158	72	77
159	77	80
160	80	83
161	95	13
162	96	14
163	97	15
164	98	16
165	95	96
166	96	97
167	97	98
168	42	100
169	45	103
170	108	101
171	110	102
172	50	99
173	54	104
174	99	100
175	100	101
176	101	102

177	102	103
178	103	104
179	105	43
180	106	44
181	29	105
182	32	106
183	107	108
184	109	110
185	105	107
186	106	109
187	43	108
188	44	110

POPIS FYZIKALNICH VELICIN PRUTU

CISLO PRUTU V SERII	MODUL PRUZNOSTI	MODUL PRUZ. VE SHYKU
PRVNI POSL.	E [MPa]	G [MPa]
1 188	27000.	0.

POPIS PRUREZOVYCH VELICIN PRUTU [m²]

CISLO PRUTU V SERII	PRUREZOVA PLOCHA FX	SHYKOVA PLOCHA FY	SHYKOVA PLOCHA FZ	TORZNI KONST. IX	MOMENT SERTV. IY	MOMENT SETRV. IZ
PRVNI POSL.						

		$\Lambda(1,n)$	$\Lambda(2,n)$	$\Lambda(3,n)$	$\Lambda(4,n)$	$\Lambda(5,n)$	$\Lambda(6,n)$
1	8	1.3	1.083	1.083	.2275	.1083	.1831
9	18	.7	.58	.58	.0635	.0286	Beta= 0. .0583
19	24	.2	.17	.17	.0054	.0027	Beta= 0. .0042
25	30	1.44	1.2	1.2	.2272	.1888	Beta= 0. .4818
31	38	1.76	1.47	1.47	.2955	.2059	Beta= 0. .7561
39	40	.32	.27	.27	.0117	.0043	Beta= 0. .0171
41	42	.12	.1	.1	.0013	.0004	Beta= 0. .0036
43	44	.08	.06	.06	.0008	.0004	Beta= 0. .0006
45	50	.4	.33	.33	.021	.0083	Beta= 0. .0213
51	54	.76	.65	.65	.0366	.1411	Beta= 0. .0626
55	62	.33	.28	.28	.0104	.0034	Beta= 0. .0250
63	65	.24	.2	.2	.0075	.0032	Beta= 0. .0072
66	68	.8	.67	.67	.053	.0167	Beta= 0. .1707
69	74	.54	.45	.45	.0279	.0091	Beta= 0. .0648
75	77	.75	.63	.63	.0494	.0156	Beta= 0. .1406
78	80	.75	.63	.63	.0738	.0352	Beta= 0. .0625
81	82	.5	.42	.42	.0286	.0104	Beta= 0. .0417
83	85	1.69	1.41	1.41	.3955	.2197	Beta= 0. .2563
86	90	.7	.58	.58	.0429	.0146	Beta= 0. .1143

91	95	1.5	1.25	1.25	.2936	Beta= 0. .1250 .2813
96	98	1.1	.92	.92	.1694	Beta= 0. .0917 .1109
99	103	1.2	1.	1.	.1993	Beta= 0. .1 .144
104	115	.8	.67	.67	.0896	Beta= 0. .0667 .0427
116	123	.4	.33	.33	.0205	Beta= 0. .0083 .0213
124	125	.09	.08	.08	.0011	Beta= 0. .0007 .0007
126	131	.19	.16	.16	.0031	Beta= 0. .001 .0088
132	133	.37	.31	.31	.0119	Beta= 0. .0038 .0338
134	134	.74	.61	.61	.0705	Beta= 0. .03 .0675
135	136	.37	.31	.31	.0119	Beta= 0. .0038 .0338
137	137	.74	.61	.61	.0705	Beta= 0. .03 .0675
138	138	.42	.35	.35	.0141	Beta= 0. .0043 .0504
139	140	.8325	.6938	.6938	.024	Beta= 0. .1701 .0995
185	186	.8325	.6938	.6938	.024	Beta= 0. .1701 .0995
141	141	.42	.35	.35	.0141	Beta= 0. .0043 .0504
142	143	1.165	.9708	.9708	.119	Beta= 0. .1938 .1554
144	149	.25	.21	.21	.0088	Beta= 0. .0052 .0052
150	153	.35	.29	.29	.0109	Beta= 0. .0036 .0292
154	155	.25	.21	.21	.0088	Beta= 0. .0052 .0052
156	160	.8	.67	.67	.053	Beta= 0. .1707 .0167
161	161	.8	.67	.67	.053	Beta= 0. .0167 .1707
162	163	.54	.45	.45	.0279	Beta= 0. .0091 .0648
164	164	.75	.63	.63	.0494	Beta= 0. .0156 .1406
165	167	.12	.10	.10	.0013	Beta= 0. .0036 .0004
168	169	.7	.58	.58	.0635	Beta= 0. .0286 .0583
170	171	.35	.29	.29	.0109	Beta= 0. .0036 .0292
187	188	.35	.29	.29	.0109	Beta= 0. .0036 .0292
172	173	.25	.21	.21	.0088	Beta= 0. .0052 .0052
174	178	.19	.16	.16	.0031	Beta= 0. .0010 .0088
179	180	1.	.83	.83	.0203	Beta= 0. .0052 1.3333

183	184	.5	.42	.42	.0094	.0026	.1667
						Beta=	0.
181	182	.8325	.6938	.6938	.024	.1701	.0995
						Beta=	0.
						Beta=	0.

POPIS UVOLNENI PODPOROVYCH UZLU
CISLO UVOLNENI VE SMERU

UZLU	X	Y	Z	MX	MY	MZ
17	1	1	0	0	0	1
18	1	1	0	0	0	1
19	1	1	0	0	0	1
20	1	1	0	0	0	1
39	1	1	0	0	0	1
40	1	1	0	0	0	1
51	1	1	0	0	0	1
52	1	1	0	0	0	1
53	1	1	0	0	0	1
54	1	1	0	0	0	1
58	1	1	0	0	0	1
64	1	1	0	0	0	1
82	1	1	0	0	0	1
83	1	1	0	0	0	1
84	1	1	0	0	0	1
93	1	1	0	0	0	1
94	1	1	0	0	0	1

ZATÍŽENÍ

0. STÁLE ZATÍŽENÍ

- VLASTNÍ TÍHA PRUTŮ

$$g = 25 \text{ kN.m}^{-3}$$

$$g = F_k \cdot \gamma$$

PRUTY 25-30, 31-38, 51-54, 109, 110, 112, 113, 181, 182 - VČETNĚ DESKY
185, 186

- DALŠÍ STÁLE NA PRUTY A UKL

63-65

DESKA 20,25

$$z.s. = 3 + 3 = 6,0 \text{ m}$$

$$g = 6 \cdot 0,17 \cdot 25 = 25,5 \text{ kN.m}^{-1}$$

51-54

DESKA 20,25

$$z.s. = 1,5 + 2 = 3,5 \text{ m}$$

$$g = 3,5 \cdot 0,2 \cdot 25 = 17,5 \text{ kN.m}^{-1}$$

$$x = 0,25 - 2,0 \text{ m}$$

55,56,61,62

DESKA 20,25

$$z.s. = 1,5 \text{ m}$$

$$g = 1,5 \cdot 0,2 \cdot 25 = 7,5 \text{ kN.m}^{-1}$$

$$x = 2,5 - 4,25 \text{ m}$$

57-60

DESKA 20,25

$$z.s. = 2 + 2 = 4,0 \text{ m}$$

$$g = 4 \cdot 0,2 \cdot 25 = 20,0 \text{ kN.m}^{-1}$$

99-103

STĚNA DVHLEK

$$z.s. = 2,5 \text{ m}$$

$$g = 2,5 \cdot 0,25 \cdot 25 = 15,6 \text{ kN.m}^{-1}$$

PRUT X

$$99 \quad 0,5 - 2,65 \text{ m}$$

$$100 \quad 0,25 - 2,83 \text{ m}$$

$$101 \quad 0,18 - 3,03 \text{ m}$$

$$102 \quad 0,18 - 3,65 \text{ m}$$

$$103 \quad 0,35 - 2,5 \text{ m}$$

104-109

STĚNA

$$g = 0,5 \cdot 0,5 \cdot 18 = 4,5 \text{ kN.m}^{-1}$$

138, 141

z. s. 1,33 m

$$g = 1,33 \cdot 0,25 \cdot 25 = 8,31 \text{ kN} \cdot \text{m}^{-1}$$

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142, 143

z. s. 1,15 m

$$g = 1,15 \cdot 0,25 \cdot 25 = 7,33 \text{ kN} \cdot \text{m}^{-1}$$

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139, 140, 141, 142

z. s. 2,0 m

$$g = 2,0 \cdot 0,25 \cdot 25 = 12,5 \text{ kN} \cdot \text{m}^{-1}$$

51, 55

z. s. 1,5 m

$$g = 1,5 \cdot 0,25 \cdot 25 = 9,375 \text{ kN} \cdot \text{m}^{-1}$$

39, 40

z. s. 1,5 m

$$g = 9,375 \text{ kN} \cdot \text{m}^{-1}$$

D = 19,0 m

41, 42

z. s. 0,8 m

$$g = 0,8 \cdot 0,25 \cdot 25 = 5,0 \text{ kN} \cdot \text{m}^{-1}$$

D = 19,5 m

25 - 30

z. s. 4,0 m

$$g = 4,0 \cdot 0,25 \cdot 25 = 25,0 \text{ kN} \cdot \text{m}^{-1}$$

D = 7,70 m

$$x = 0,25 - 2,75 \text{ m}$$

165 - 167

z. s. 5,4 m

$$g = 5,4 \cdot 0,25 \cdot 25 = 33,75 \text{ kN} \cdot \text{m}^{-1}$$

D = 7,70 m

$$x = 0,25 - 2,75 \text{ m}$$

... + 4,20

1,3 $x = 55m$ $\xi = 39,6 \text{ kN}$

2,4 $x = 52m$ $\xi = 182,6 \text{ kN}$

1. UŽITNÉ NA PODLAŽÍCH

 (SÁDĚNÍ ZDE PŘÍPOČTOU PŘÍČNÝ
TĚŽNÝ)

$$+ 29,75 \quad w = 5 \text{ kN} \cdot \text{m}^{-2}$$

$$\underline{55,56, 61,62} \quad \text{z.s. } 1,5 \text{ m} \Rightarrow w = 7,5 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{51,52, 53,54} \quad \text{z.s. } 1,5 + 2 = 3,5 \text{ m} \Rightarrow w = 17,5 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{57 - 60} \quad \text{z.s. } 4 \text{ m} \Rightarrow w = 20,0 \text{ kN} \cdot \text{m}^{-1}$$

$$+ 18,50 \quad w = 8 \text{ kN} \cdot \text{m}^{-2}$$

$$\underline{39,40} \quad \text{z.s. } 1,5 \text{ m} \Rightarrow 12,0 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{31,35} \quad \text{z.s. } 3,5 \text{ m} \Rightarrow 28,0 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{41,42} \quad \text{z.s. } 4,0 \text{ m} \Rightarrow 32,0 \text{ kN} \cdot \text{m}^{-1}$$

$$+ 7,70 \quad w = 15 \text{ kN} \cdot \text{m}^{-2}$$

$$\left. \begin{array}{l} \underline{25 - 30} \quad \text{z.s. } 6,0 \text{ m} \Rightarrow \\ \underline{165 - 167} \quad \text{z.s. } 6,0 \text{ m} \Rightarrow \end{array} \right\} 90 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{75 - 77, 164} \quad 1,85 \cdot 15 = 27,75 \text{ kN} \cdot \text{m}^{-1}$$

$$M_{x, 1,4k} = -\frac{1}{2} \cdot 1,85 \cdot 27,75 = -25,67 \text{ kN} \cdot \text{m}$$

$$+ 4,30 \quad w = 5 \text{ kN}$$

$$\underline{1,2} \quad x = 5,2 \quad G = 9 \cdot 3,5 = 135,0 \text{ kN}$$

$$\underline{2,14} \quad x = 5,2 \quad G = 9 \cdot 3,5 = 162,0 \text{ kN}$$

$$M_{x, 3,9k} = -1,5 \cdot 135 = -202,5 \text{ kN} \cdot \text{m}$$

2. REAKCE VÁŽNÍKŮ

$$q_{\text{vážník}} = 200 \text{ kg/m}^2$$

$$Z = 2,0 \cdot 9 \cdot 24,5 \cdot \frac{1}{2} = 250 \text{ kN}$$

- uzel 70

- zat 114, x = 1,0

$$M_{3, \text{glat}} = -0,25 \cdot 250 = -62,5 \text{ kN} \cdot \text{m}$$

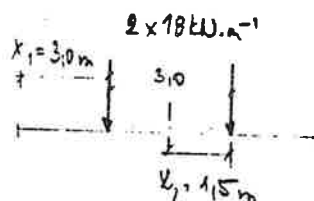
$$e = 0,25 \text{ m}$$

3. ZAHNLOVACÍ PAST

$$\underline{55-56, 61, 62} \quad 1,5 \cdot 18 = 27,0 \text{ kN}$$

$$\underline{51-54} \quad 3,5 \cdot 18 = 63,0 \text{ kN}$$

$$\underline{57-60} \quad 4 \cdot 18 = 72,0 \text{ kN}$$



4. OCELOVÁ ČÁST BĚŽNÍKŮ

- celková hmotnost včetně uhlí 28 t $\rightarrow \frac{1}{2}$ zavěšena $\Rightarrow 14 \text{ t} \rightarrow$ přetěžování 2 popravy

$$1 \text{ poprava } 70 \text{ kN} \rightarrow m = \frac{70}{12} = 5,83 \text{ kN} \cdot \text{m}^{-1}$$

$$\text{přetěžování} \rightarrow \frac{14 \text{ t}}{2} = 7 \text{ t}$$

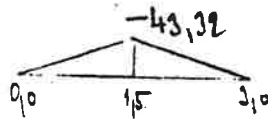
$$\underline{83-85} \quad 5,83 \text{ kN} \cdot \text{m}^{-1}$$

$$\underline{78-80} \quad 5,83 \text{ kN} \cdot \text{m}^{-1}$$

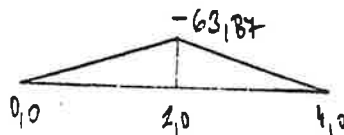
5. ZATÍŽENÍ UHLÍN - 1000t = 10000 kN

$$\rho = 9 \text{ kN.m}^{-3}$$

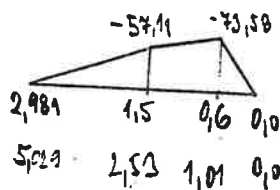
99, 103



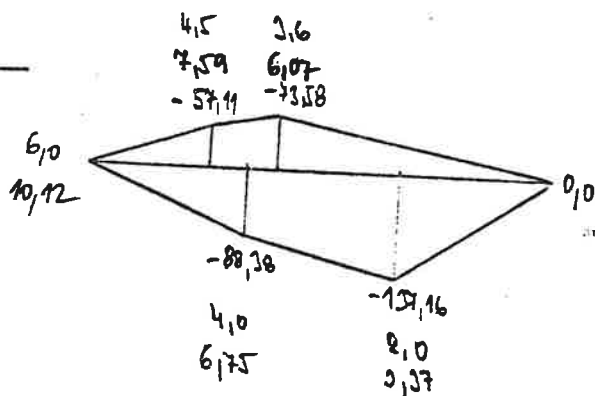
101-102



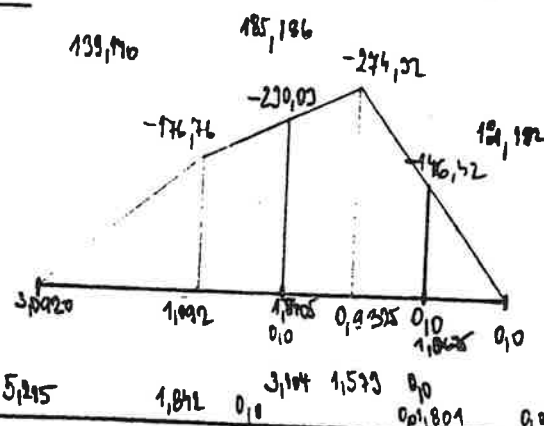
138, 141



142, 143



139, 140, 184, 182



5.1.
A) SVISLE TLAKY $u = \rho \cdot h$

$$h = 3,21 \text{ m}$$

$$u = 3,21 \cdot 1,5 \cdot 9 = 43,32 \text{ kN.m}^{-1}$$

$$h = 3,55 \text{ m}$$

$$u = 3,55 \cdot 2,9 = 63,87 \text{ kN.m}^{-1}$$

$$h^1 = 4,23 \text{ m}$$

$$h^2 = 5,45 \text{ m}$$

$$u^1 = 4,23 \cdot 1,5 \cdot 9 = 57,11 \text{ kN.m}^{-1}$$

$$u^2 = 5,45 \cdot 1,5 \cdot 9 = 73,58 \text{ kN.m}^{-1}$$

$$h^1 = 4,23 \text{ m}$$

$$h^3 = 4,91 \text{ m}$$

$$h^2 = 5,45 \text{ m}$$

$$h^4 = 7,62 \text{ m}$$

$$u^1 = 4,23 \cdot 1,5 \cdot 9 = 57,11 \text{ kN.m}^{-1}$$

$$u^2 = 5,45 \cdot 1,5 \cdot 9 = 73,58 \text{ kN.m}^{-1}$$

$$u^3 = 4,91 \cdot 2,9 = 88,39 \text{ kN.m}^{-1}$$

$$u^4 = 7,62 \cdot 2,9 = 107,16 \text{ kN.m}^{-1}$$

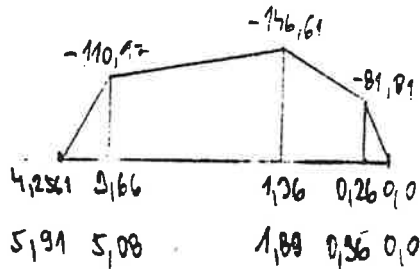
$$h_1 = 4,91 \text{ m}$$

$$h_2 = 7,62 \text{ m}$$

$$u_1 = 4,91 \cdot 4,9 = 176,76 \text{ kN.m}^{-1}$$

$$u_2 = 7,62 \cdot 4,9 = 274,32 \text{ kN.m}^{-1}$$

126,127



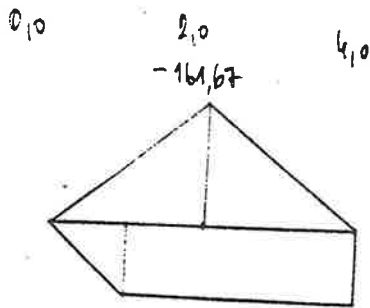
$$h_1 = 6,85 \text{ m} \quad h_2 = 9,05 \text{ m} \quad h_3 = 10,1 \text{ m}$$

$$u_1 = 6,85 \cdot 1,3 \cdot 9 = 110,97 \text{ kW} \cdot \text{m}^{-1}$$

$$u_2 = 9,05 \cdot 1,3 \cdot 9 = 146,61 \text{ kW} \cdot \text{m}^{-1}$$

$$u_3 = 10,1 \cdot 0,9 \cdot 9 = 81,81 \text{ kW} \cdot \text{m}^{-1}$$

82,85



$$h_1 = 8,98$$

$$u_1 = 8,98 \cdot 2 \cdot 9 = 161,67 \text{ kW} \cdot \text{m}^{-1}$$

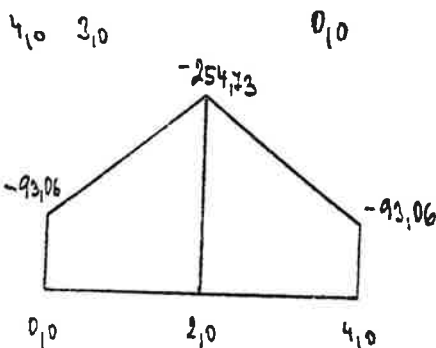
$$h_2 = 10,34 \text{ m}$$

$$u_2 = 10,34 \cdot 1,10 \cdot 9 = 99,06 \text{ kW} \cdot \text{m}^{-1}$$

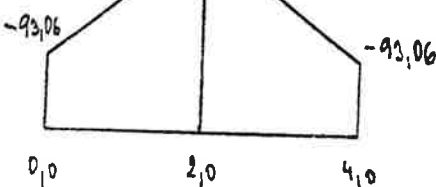
82



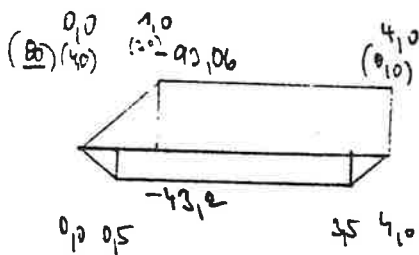
85



84



78,20



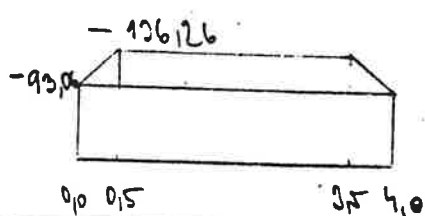
$$h_1 = 9,6 \text{ m}$$

$$u_1 = 9,6 \cdot 0,5 \cdot 9 = 43,2 \text{ kW} \cdot \text{m}^{-1}$$

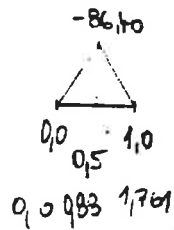
$$h_2 = 10,34 \text{ m}$$

$$u_2 = 10,34 \cdot 1,10 \cdot 9 = 99,06 \text{ kW} \cdot \text{m}^{-1}$$

79



134 - 137

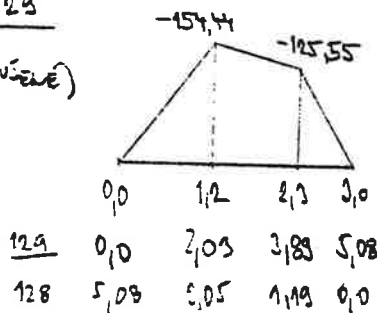


$$h_1 = 9,6 \text{ m}$$

$$w_1 = 96 \cdot 1,0 \cdot 9,0 = 861,40 \text{ kN} \cdot \text{m}^{-1}$$

128, 129

(Zjednotenie)



$$h_1 = 7,8 \text{ m}$$

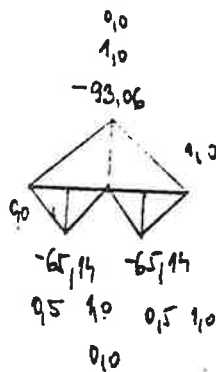
$$h_2 = 9,0 \text{ m}$$

$$w_1 = 7,8 \cdot 2,2 \cdot 9 = 154,44 \text{ kN} \cdot \text{m}^{-1}$$

$$w_2 = 9,0 \cdot 1,5 \cdot 9 = 125,55 \text{ kN} \cdot \text{m}^{-1}$$

32, 33

26, 27

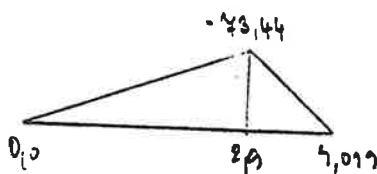


$$h_1 = 10,27 \text{ m}$$

$$w_1 = 10,27 \cdot 1,0 \cdot 9 = 93,06 \text{ kN} \cdot \text{m}^{-1}$$

$$w_2 = 10,27 \cdot 0,7 \cdot 9 = 65,14 \text{ kN} \cdot \text{m}^{-1}$$

46, 49



$$h_1 = 6,8 \text{ m}$$

$$w_1 = 6,8 \cdot 1,2 \cdot 9 = 43,44 \text{ kN} \cdot \text{m}^{-1}$$

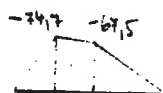
47, 50



$$h_1 = 6,8 \text{ m}$$

$$w_1 = 6,8 \cdot 1,0 \cdot 9 = 61,20 \text{ kN} \cdot \text{m}^{-1}$$

130, 131



0,0 0,5 1,0 1,0,9

131 0,0 0,5 1,0 3,284

130 3,284 2,53 1,59 0,0

$$h_2 = 7,5 \text{ m}$$

$$h_1 = 8,3 \text{ m}$$

$$M_1 = 8,3 \cdot 1,0 \cdot 9 = 74,7 \text{ kN} \cdot \text{m}^{-1}$$

$$M_2 = 7,5 \cdot 1,0 \cdot 9 = 67,5 \text{ kN} \cdot \text{m}^{-1}$$

132, 133

-63,63 -79,66



0,0 0,3 1,2 1,5

133 0,0 0,3 1,2 2,056

132 2,056 1,61 0,41 0,0

91,95

$$h_1 = 10,1 \text{ m}$$

$$h_2 = 9,2 \text{ m}$$

$$M_1 = 10,1 \cdot 0,7 \cdot 9 = 63,63 \text{ kN} \cdot \text{m}^{-1}$$

$$M_2 = 9,2 \cdot 0,95 \cdot 9 = 79,66 \text{ kN} \cdot \text{m}^{-1}$$

-24,20

0,0 0,5 1,0 1,061

(95) (1,061) (0,261) (0,0)

$$h_1 = 9,0 \text{ m}$$

$$M_1 = 9,0 \cdot 0,5 \cdot 9 = 24,20 \text{ kN} \cdot \text{m}^{-1}$$

5.2.

3. VOZOVKA = TLAK

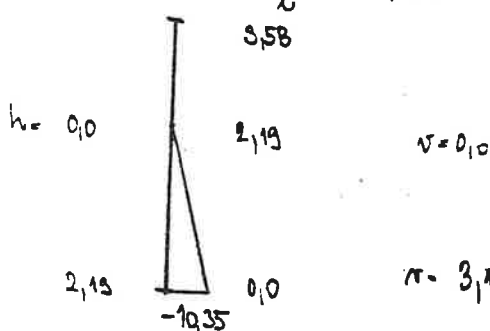
$$v = \omega \cdot g \cdot h$$

$$\omega = \frac{1}{2} \cdot \left(\frac{1}{2}^2 \left(\frac{\pi}{4} - \frac{\pi}{2} \right) + 1 - \sin \varphi \right) = \frac{1}{2} (0,27 + 0,43) = 0,35$$



$$v = 0,35 \cdot g \cdot h = 0,35 \cdot 9 \cdot h = 3,15 \cdot h$$

$$\frac{148,149}{-X} \quad \bar{J} = 1,5m$$



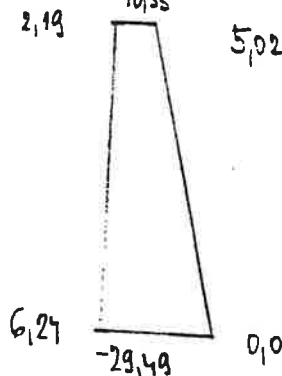
$$(-24,14 \quad 11,16)$$

$$(-27,60 \quad 150,151)$$

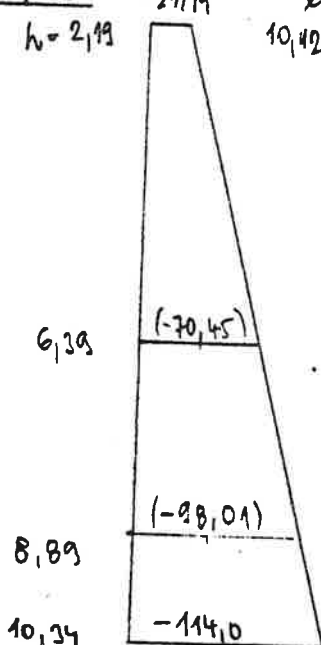
$$\frac{11,16}{\bar{J} = 1,5m} \quad v = \frac{3,5}{1,5} \cdot 10,35 = 24,14 \text{ kN} \cdot m^{-1}$$

$$\frac{150,151}{\bar{J} = 4,0m} \quad v = \frac{4}{4,5} \cdot 10,35 = 27,60 \text{ kN} \cdot m^{-1}$$

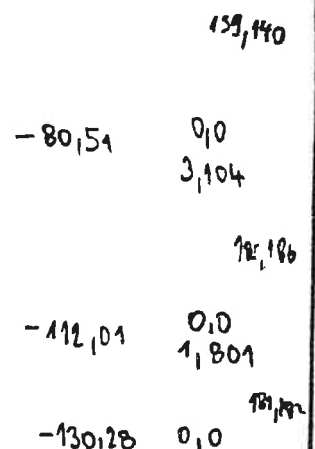
$$\frac{138,141}{h = 2,19} \quad \bar{J} = 1,5m \quad X \quad 5,029$$



$$\frac{142,143}{h = 2,19} \quad \bar{J} = 1,5m \quad v = 24,14 \quad X \quad 10,42$$



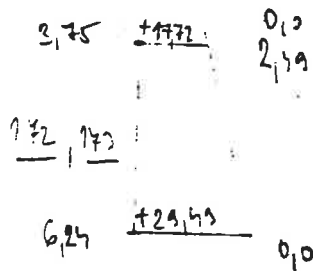
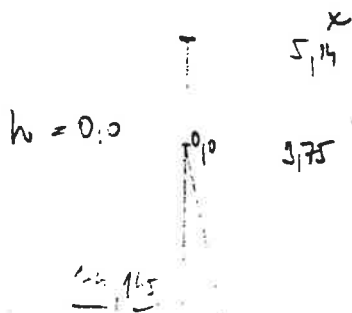
$$\frac{139,140}{v = 27,60} \quad \bar{J} = 4,0m \quad X \quad 10,42$$



+X

144, 145, 142, 143

$\bar{x} = 143,5$

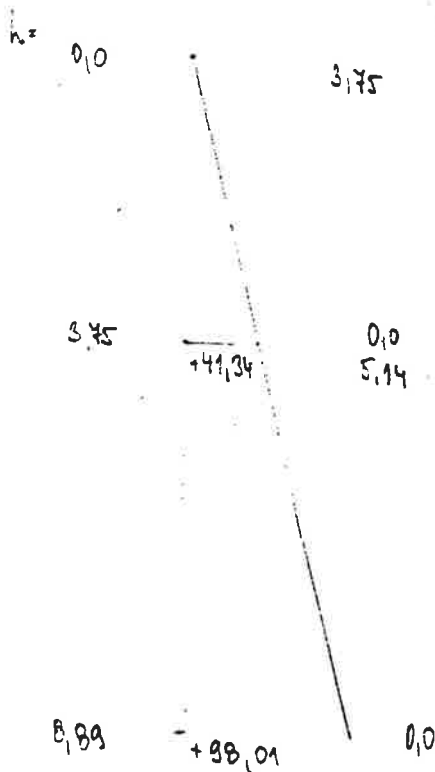


13, 18, 168, 169

$\bar{x} = 3,5m$

x

5,14

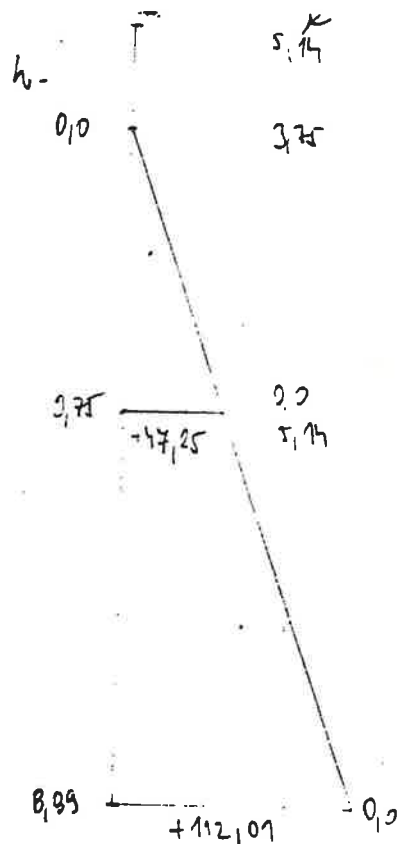


152, 153, 170, 171

$\bar{x} = 4,0m$

x

5,14



$$\begin{array}{r} 134, 137 \\ \hline h = 8,80 \end{array} \quad \begin{array}{l} \bar{x} = 2,5 \\ \bar{y} = 70,0 \\ x = 1,761 \end{array}$$

$$\begin{array}{r} 135, 136 \\ \hline \bar{y} = 112,01 \end{array}$$

$$10,34 \quad -81,43 \quad 0,0$$

$$130,28$$

$\pm Z$

$$\begin{array}{r} 148 (-), 149 (+) \\ \hline \bar{x} = 2,53 \end{array} \quad \begin{array}{l} \bar{y} = 4,5 \\ x = 2,19 \\ y = 0,0 \end{array}$$

$$\begin{array}{r} 144 (-), 142 (-), 145 (+), 143 (+) \\ \hline \bar{x} = 4,5 \end{array} \quad \begin{array}{l} \bar{y} = 17 \\ x = 2,19 \\ y = 0,0 \end{array}$$

$$\begin{array}{r} 138 (-), 141 (+) \\ \hline \bar{x} = 5,029 \end{array} \quad \begin{array}{l} \bar{y} = 4,5 \\ x = 2,19 \\ y = 0,0 \end{array}$$

$$\begin{array}{r} 147, 145 \\ \hline \bar{x} = 4,5 \end{array} \quad \begin{array}{l} \bar{y} = 17 \\ x = 2,19 \\ y = 0,0 \end{array}$$

$$\begin{array}{r} 128 (-), 129 (+) \\ \hline \bar{x} = 3,01 \end{array} \quad \begin{array}{l} \bar{y} = 3,01 \\ x = 6,24 \\ y = 0,0 \end{array}$$

$$\begin{array}{r} 126 - \\ 127 + \\ \hline \bar{x} = 5,03 \end{array} \quad \begin{array}{l} \bar{y} = 2,01 \\ x = 5,91 \\ y = 39,51 \end{array}$$

$$\begin{array}{r} 10,34 \\ \hline \bar{x} = 0,5 \end{array} \quad \begin{array}{l} \bar{y} = 0,5 \\ x = 0,0 \\ y = 16,29 \end{array}$$

130(-), 132(-), 131(+), 133(+)

h. 6,24 $\bar{x}$ $\pm 19,66$ 3,284 $\bar{I} = 1,0$

130, 131

8,89

$\pm 28,00$ 0,0 $\bar{I} = 1,0$
2,056

132, 133

10,34

$\pm 16,29$ 0,0 $\bar{I} = 0,5$

6. ZATÍŽENÍ VĚTREM

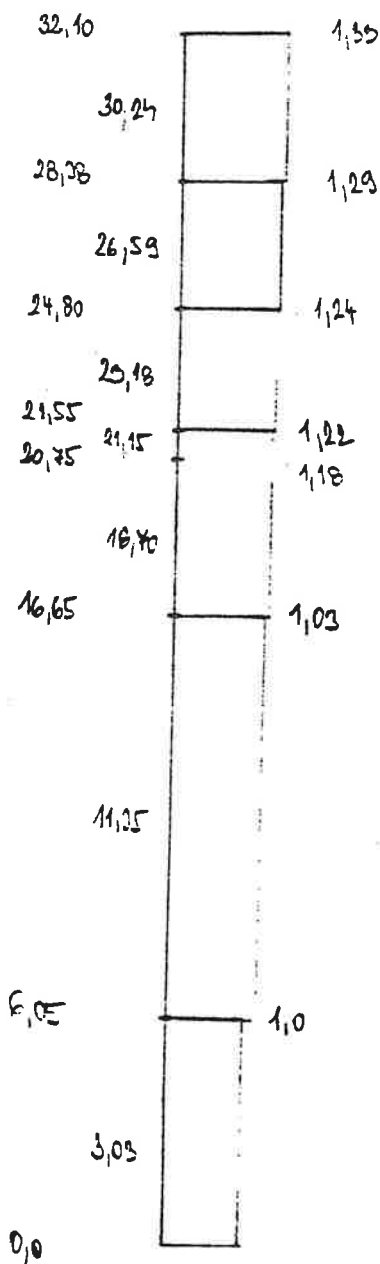
$$w_h = w_0 \cdot z_w \cdot C_w$$

$$\text{OBLAST III} \Rightarrow w_0 = 2,45 \text{ kN.m}^{-2}$$

$$C_w = 0,8$$

$$z_w = \left(\frac{z}{10} \right)^{0,26}$$

VÝŠKOVÁ PÁŤKA

 $w_h \text{ [kN.m}^{-2}\text{]}$


$$\underline{19,21,23} \quad 7,93 \text{ kN.m}^{-2}$$

$$\underline{118,149} \quad 1,94 \text{ kN.m}^{-2} \quad \underline{11,16} \quad 4,52 \text{ kN.m}^{-2}$$

$$\underline{150,151} \quad 5,16 \text{ kN.m}^{-2}$$

$$\underline{154,155} \quad 1,86 \text{ kN.m}^{-2} \quad \underline{10,15} \quad 9,00 \text{ kN.m}^{-2}$$

$$\underline{146,147} \quad 1,83 \text{ kN.m}^{-2}$$

$$\underline{9,14} \quad 10,62 \text{ kN.m}^{-2}$$

$$\underline{5,17} \quad 9,24 \text{ kN.m}^{-2}$$

$$\underline{1,3} \quad 9,00 \text{ kN.m}^{-2}$$

VSTUPNÍ ÚDAJE - ZATÍŽENÍ BH

(ENERGOPONTEX KATOWICE)

- OD ENERGOPONTEXU KATOWICE JIŽE OBRŽELI KOPII ČÁSTI
STATICKÉHO VÝPOČTU S UVEDENÍM CELKOVÝMI REAKCEMI,
V DALŠÍ FÁZI JIŽE OBRŽELI REAKCE ROZDĚLENÉ NA
JEDNOTLIVÉ ZATÍŽOVACÍ STAVY
- REAKCE OD OCELOVÉ KONSTRUKCE BH BYLO UŽITO. POČÍTAT
A UZÍT OMYLOVÉ MOMENTY OD EXCENTRICITY (KAŽDEHO
ZATÍŽOVACÍHO ÚZLU BETONOVÉ KONSTRUKCE ODPOVÍDÁ 4 ÚZLY
OCELOVÝCH PŘÍHRADOVÝCH SLOUPŮ VLOŽENÍ KONSTRUKCE BH)
- ROZDÍLY V SOUŘADNÝCH OSAČích:

ENERGOPONTEX KATOWICE
(OCELOVÁ KONSTRUKCE BH) X PONTEX - PŘEBRATÍ DEFOR
(ŽELEZOBETONOVÉ ZÁTM)

OSA X

OSA X

OSA Y

OSA Y

OSA Z

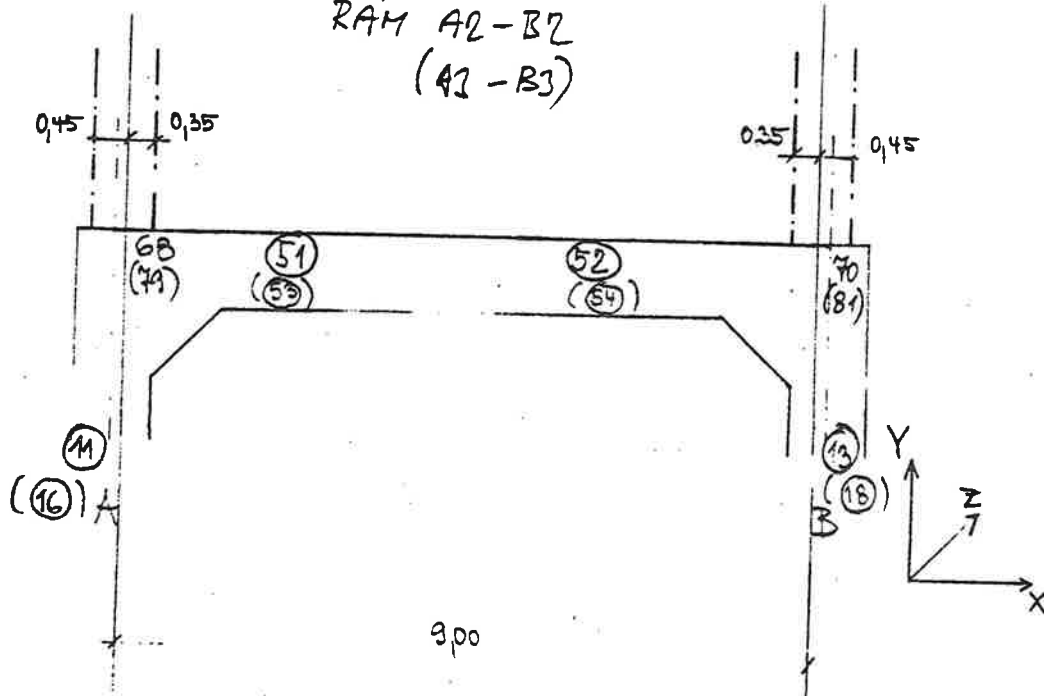
OSA Y

VSTUPNÍ ÚDAJE A SEČTENÉ REAKCE - viz. NÁSLEDUJÍCÍ
STRANĚ

VENECIE CD ZAGROUZE

POLOHA

RAH A2-B2
(A2-B3)



RAH A2-B2

ŽATEČOVÁ STAV	DEL	R _x	R _y	R _z	M _z
10 Y +	68	-75,03	+70,2	-898,5	400,00
	70	-58,56	+39,3	-765,7	-82,41
11 Y -	68	-13,20	-74,8	-1138,84	566,05
	70	9,53	-50,07	-1176,5	-566,86
12 X +	68	40,62	-6,55	-961,90	249,74
	70	60,22	-3,50	-1009,2	-714,54
13 X -	68	-123,49	1,98	-1073,3	1021,87
	70	-103,84	-7,57	-977,16	39,52

RAH A3-B3

ZATĚŽOVACÍ STAV	UŽEL	R_x	R_z	R_y	M_z
10 Y^+	79	+51,61	+80,2	-451,2	138,44
	81	+68,38	+49,56	-808,2	-660,01
11 Y^-	79	-5,63	-65,80	-550,25	267,89
	81	-0,31	-65,85	-578,30	-254,63
12 X^+	79	107,32	3,20	-618,50	-198,14
	81	118,22	-5,26	-735,5	-846,66
13 X^-	79	-55,12	11,19	-720,0	562,08
	81	-43,93	-11,06	-655,9	-97,32

Pozn:

- VSTUPNÍ DATA - PODKLADY OD EP KATOVICE, ZDE NEJSOU POUŽITÝ
VEDENY (JSOU K UAKLÉDUTÍ U ZPRACOVATELE VÝPOČTU A TAKÉ
JSOU OBSAŽENY VE VÝPOČTU K2-K10, PONTEX IV/1997)

- VÝSIS ZATÍŽENÍ Z PROGRAMU DEFOR - DTTO [↑]

URČENÍ VNITŘNÍCH SIL

RADA AB - PROSTOROVY MODEL

SUPERPOSICE ZATEZOVACÍCH STAVŮ - POPIS KOMBINACÍ

NAZEV :

KOMB-KOMBINACE 1 - 1.1*STALE

Císlo kombinace: 1

POPIS SUPERPOSICI ZATEZOVACÍCH STAVŮ

ZAT. STAVY	1	2	3	4	5	6	7	8	9	10
SKUPINY :	0	0	1	0	0	0	2	3	4	5
KOEFICIENTY:	1.1	1.1	1.2	1.1	1.2	1.2	1.4	1.4	1.2	1.
ZAT. STAVY	11	12	13							
SKUPINY :	5	5	5							
KOEFICIENTY:	1.	1.	1.							

NAZEV :

KOMB-KOMBINACE 2 - 0.9*STALE

Císlo kombinace: 2

POPIS SUPERPOSICI ZATEZOVACÍCH STAVŮ

ZAT. STAVY	1	2	3	4	5	6	7	8	9	10
SKUPINY :	0	0	1	0	0	0	2	3	4	5
KOEFICIENTY:	.9	.9	1.2	.9	.9	.9	1.4	1.4	1.2	1.
ZAT. STAVY	11	12	13							
SKUPINY :	5	5	5							
KOEFICIENTY:	1.	1.	1.							

SEZNAM ZATEZOVACÍCH STAVŮ

- 1 - VLASTNÍ TIHA PRUTU
- 2 - DALŠÍ STALE
- 3 - UŽITNÉ
- 4 - REAKCE VZNIKU
- 5 - ZAHLŮVACÍ PASY
- 6 - OCELOVÁ ČÁST ZASOBNÍKU
- 7 - ÚHLÍ SVISLÝ TLAK
- 8 - ÚHLÍ VODOROVNÝ TLAK
- 9 - VÍTR
- 10 - Y+
- 11 - Y-
- 12 - X+
- 13 - X-

PONTEX s.r.o., PRAHA, Bezova 1658

str.

DEFOR plus V93 (c) FEM consulting Brno 15/10 1993

list 1

13. kveten 1994 (09:55)

RADA AB - PROSTOROVY MODEL

KOMB-KOMBINACE 1 - 1.1*STALE

SUPER-PRUTY 1,3

Seznam vyhodnocovanych prutu:

1 -1, 3 -3

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace								
PRUT	3	max N-x														
x=	7.95	-4019.18	78.63	-19.00	.34	-101.65	256.10	1	2	4	5	6	8	9		
PRUT	1	min N-x														
x=	.00	-11456.63	-181.63	60.97	1.30	-158.00	592.63	1	2	3	4	5	6	7	13	
PRUT	1					max M-y										
x=	7.95	-5943.55	-157.23	66.13	1.46	355.08	-597.82	1	2	3	4	5	6	8		
PRUT	3					min M-y										
x=	7.95	-6592.35	-152.67	-46.63	.37	-249.58	-586.14	1	2	3	4	5	6	8	11	
PRUT	1						max M-z									
x=	.00	-8457.40	-239.31	65.58	1.81	-169.06	810.84	1	2	3	4	5	6	8	13	
PRUT	3						min M-z									
x=	.00	-7944.12	288.10	-15.90	.10	41.39	-1322.65	1	2	4	5	6	7	9	12	

KOMB-KOMBINACE 1 - 1.1*STALE

SUPER-PRUTY 2,4

Seznam vyhodnocovanych prutu:

2 -2, 4 -4

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace								
PRUT	4	max N-x														
x=	7.95	-5008.97	37.36	-13.42	-1.47	-71.85	195.21	1	2	4	5	6				
PRUT	2	min N-x														
x=	.00	-13175.09	323.00	44.42	11.91	-120.74	-1371.38	1	2	3	4	5	6	7	8	9 12
PRUT	2					max M-y										
x=	7.95	-6243.41	116.04	60.91	3.96	325.02	597.00	1	2	3	4	5	6			
PRUT	4					min M-y										
x=	7.95	-6380.33	18.21	-44.89	.08	-240.61	304.86	1	2	3	4	5	6	8	13	
PRUT	4						max M-z									
x=	7.95	-8136.46	389.79	-43.07	-1.29	-230.70	1484.81	1	2	3	4	5	6	9	12	

PRUT	4	min M-2													
x=	.00	-8815.60	389.79	-43.07	-1.29	111.68	-1614.03	1	2	3	4	5	6	9	12

KOMB-KOMBINACE 1 - 1.1*STALE SUPER-PRUTY 5,7

Seznam vyhodnocovaných prutu:

5 -5, 7 -7

VNITRNI SILY V PRUTECH (kN, kNm)														
		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace						
PRUT	7	max N-x												
x=	10.60	-3202.16	-16.08	-29.54	1.09	-170.97	110.67	1	2	4	5	6	8	9
PRUT	5	min N-x												
x=	.00	-9033.64	-313.97	74.27	17.42	-377.81	1432.27	1	2	3	4	5	6	7 13
PRUT	5	max M-y												
x=	10.60	-6838.93	-160.25	76.44	15.08	422.25	-829.12	1	2	3	4	5	6	7 9
PRUT	7	min M-y												
x=	10.60	-7930.78	-226.79	-67.42	-3.38	-390.98	-1419.51	1	2	3	4	5	6	7 11
PRUT	5	max M-z												
x=	.00	-8932.20	-332.20	72.92	21.83	-372.74	1537.57	1	2	3	4	5	6	7 8 13
PRUT	5	min M-z												
x=	10.60	-8553.25	-332.20	72.92	21.83	400.18	-1983.77	1	2	3	4	5	6	7 8 13

KOMB-KOMBINACE 1 - 1.1*STALE SUPER-PRUTY 6,8

Seznam vyhodnocovaných prutu:

6 -6, 8 -8

VNITRNI SILY V PRUTECH (kN, kNm)		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace											
PRUT	8	max N-x																	
x=	10.60	-3978.99	79.47	-51.04	-21.94	-326.51	499.94	1	2	4	5	6							
PRUT	6	min N-x																	
x=	.00	-10762.42	401.61	132.24	77.86	-607.09	-1805.60	1	2	3	4	5	6	7	8	9	12		
PRUT	6	max M-y																	
x=	10.60	-9698.45	309.45	133.04	77.34	798.04	1936.15	1	2	3	4	5	6	7	8	9	10		
PRUT	8	min M-y																	
x=	10.60	-9359.94	374.50	-118.30	-46.17	-758.78	2347.61	1	2	3	4	5	6	7	9	11			
PRUT	8	max M-z																	
x=	10.60	-9948.40	465.98	-117.28	-44.94	-754.50	2860.06	1	2	3	4	5	6	7	9	12			
PRUT	8	min M-z																	
x=	.00	-10327.35	465.98	-117.28	-44.94	488.62	-2079.36	1	2	3	4	5	6	7	9	12			

KOMB-KOMBINACE 1 - 1.1*STALE

SUPER-PRUTY 9,10,11,14,15,16

Seznam vyhodnocovanych prutu:

9 -11, 14 -16

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace											
PRUT	16	max N-x																	
x=	3.58	-774.72	136.66	-129.53	-21.24	-233.31	15.69	1	2	4	5	6	8	9					
PRUT	9	min N-x																	
x=	.00	-5778.25	-199.16	67.05	24.38	-216.37	661.63	1	2	3	4	5	6	7	13				
PRUT	16	max M-y																	
x=	.00	-2067.00	-230.73	-377.67	-83.22	678.68	620.65	1	2	3	4	5	6	7	13				
PRUT	16	min M-y																	
x=	3.58	-1998.09	-230.73	-377.67	-83.22	-673.37	-205.36	1	2	3	4	5	6	7	13				
PRUT	14	max M-z																	
x=	.00	-4590.87	-282.08	-46.14	-15.25	159.80	865.83	1	2	3	4	5	6	7	8	12			
PRUT	10	min M-z																	
x=	3.25	-4132.04	-239.78	127.65	-141.96	334.67	-845.06	1	2	3	4	5	6	7	8	9	12		

KOMB-KOMBINACE 1 - 1.1*STALE

SUPER-PRUTY 12,13,17,18,168,169

Seznam vyhodnocovanych prutu:

12 -13, 17 -18, 168 -169

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace											
PRUT	18	max N-x																	
x=	5.14	-1000.21	55.63	-67.48	6.76	-234.84	316.58	1	2	4	5	6							
PRUT	12	min N-x																	
x=	.00	-6308.87	-31.39	467.88	-22.41	-118.10	-472.42	1	2	3	4	5	6	7	8	9	12		
PRUT	169	max M-y																	
x=	.00	-2667.41	595.25	-161.85	5.48	585.17	-1417.30	1	2	3	4	5	6	7	8	9	12		
PRUT	168	min M-y																	
x=	.00	-3301.34	584.48	179.38	-9.37	-608.15	-1377.11	1	2	3	4	5	6	7	8	9	12		
PRUT	18	max M-z																	
x=	5.14	-1453.60	155.18	-122.23	12.96	-426.20	719.30	1	2	3	4	5	6	7	9				
PRUT	168	min M-z																	
x=	.00	-2329.12	611.02	175.30	-8.44	-595.07	-1442.49	1	2	3	4	5	6	7	8	9			

KOMB-KOMBINACE 2 - 0.9*STALE

SUPER-PRUTY 1,3

Seznam vyhodnocovanych prutu:

PRUT	7	max N-x																
x=	10.60	-2520.65	-2.46	-24.10	1.22	-139.28	193.63	1	2	4	5	6	8	9				

PRUT	5	min N-x																
x=	.00	-8286.25	-299.47	68.42	16.50	-348.45	1367.17	1	2	3	4	5	6	7	13			

PRUT	5					max M-y												
x=	10.60	-6160.44	-145.76	70.59	14.16	389.62	-740.55	1	2	3	4	5	6	7	9			

PRUT	7					min M-y												
x=	10.60	-7249.28	-213.17	-61.98	-3.25	-359.30	-1336.55	1	2	3	4	5	6	7	11			

PRUT	5						max M-z											
x=	.00	-8184.81	-317.71	67.07	20.91	-343.37	1472.47	1	2	3	4	5	6	7	8	13		

PRUT	5						min M-z											
x=	10.60	-7874.76	-317.71	67.07	20.91	367.55	-1895.20	1	2	3	4	5	6	7	8	13		

KOMB-KOMBINACE 2 - 0.9*STALE SUPER-PRUTY 6,8

Seznam vyhodnocovanych prutu:

6 -6, 8 -8

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace
PRUT	8	max N-x						
x=	10.60	-3237.83	64.95	-41.54	-17.83	-265.54	408.56	1 2 4 5 6
PRUT	6	min N-x						
x=	.00	-9932.83	388.02	122.14	72.02	-562.25	-1747.81	1 2 3 4 5 6 7 8 9 12
PRUT	6					max M-y		
x=	10.60	-8937.76	295.86	122.95	71.50	735.85	1849.85	1 2 3 4 5 6 7 8 9 10
PRUT	8					min M-y		
x=	10.60	-8618.79	359.98	-108.80	-42.07	-697.81	2256.23	1 2 3 4 5 6 7 9 11
PRUT	8						max M-z	
x=	10.60	-9207.24	451.46	-107.78	-40.84	-693.53	2768.67	1 2 3 4 5 6 7 9 12
PRUT	8						min M-z	
x=	.00	-9517.29	451.46	-107.78	-40.84	448.92	-2016.84	1 2 3 4 5 6 7 9 12

KOMB-KOMBINACE 2 - 0.9*STALE SUPER-PRUTY 9,10,11,14,15,16

Seznam vyhodnocovanych prutu:

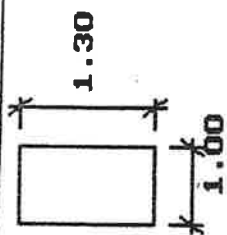
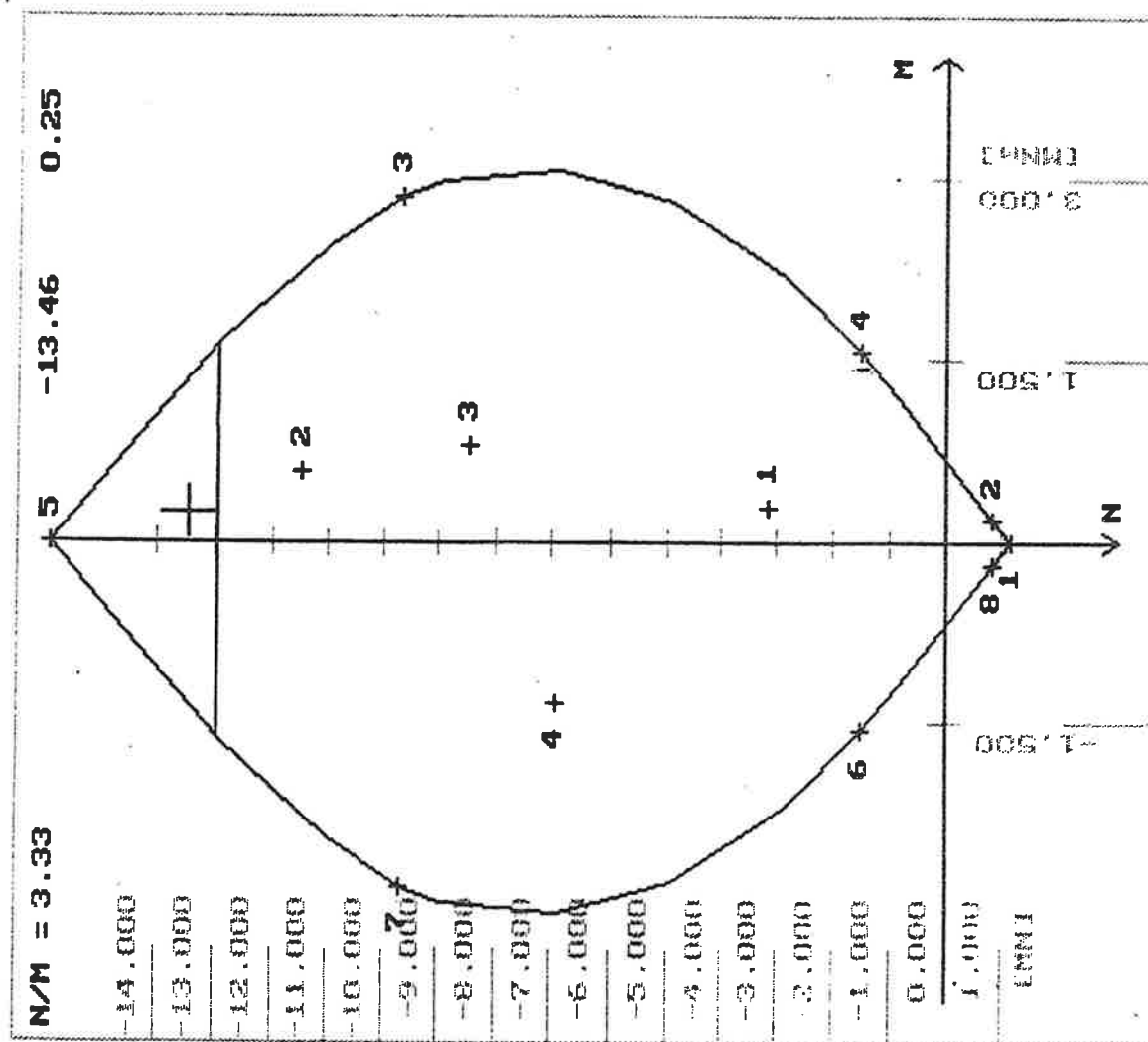
9 -11, 14 -16

VNITRNI SILY V PRUTECH (kN, kNm)

		N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace
PRUT	16	max N-x						
x=	3.58	-616.39	151.82	-100.99	-16.01	-182.13	72.08	1 2 4 5 6 8 9

		N-x	Q-y	Q-z	M-x	M-y	M-z	Konbinace									
PRUT	18	max N-x															
x=	5.14	-810.78	44.30	-54.89	5.46	-191.04	250.81	1	2	4	5	6					
PRUT	12	min N-x															
x=	.00	-5817.37	-33.34	426.11	-22.27	-109.31	-441.29	1	2	3	4	5	6	7	8	9	12
PRUT	169					max M-y											
x=	.00	-2411.75	584.90	-147.82	3.95	534.77	-1371.41	1	2	3	4	5	6	7	8	9	12
PRUT	168					min M-y											
x=	.00	-3005.26	574.34	164.36	-7.25	-556.57	-1331.60	1	2	3	4	5	6	7	8	9	12
PRUT	18						max M-z										
x=	5.14	-1264.17	143.85	-109.65	11.65	-382.40	653.52	1	2	3	4	5	6	7	9		
PRUT	168						min M-z										
x=	.00	-2033.03	600.88	160.28	-6.32	-543.48	-1396.99	1	2	3	4	5	6	7	8	9	

INTERAKSI DIAGRAM PUTY 13



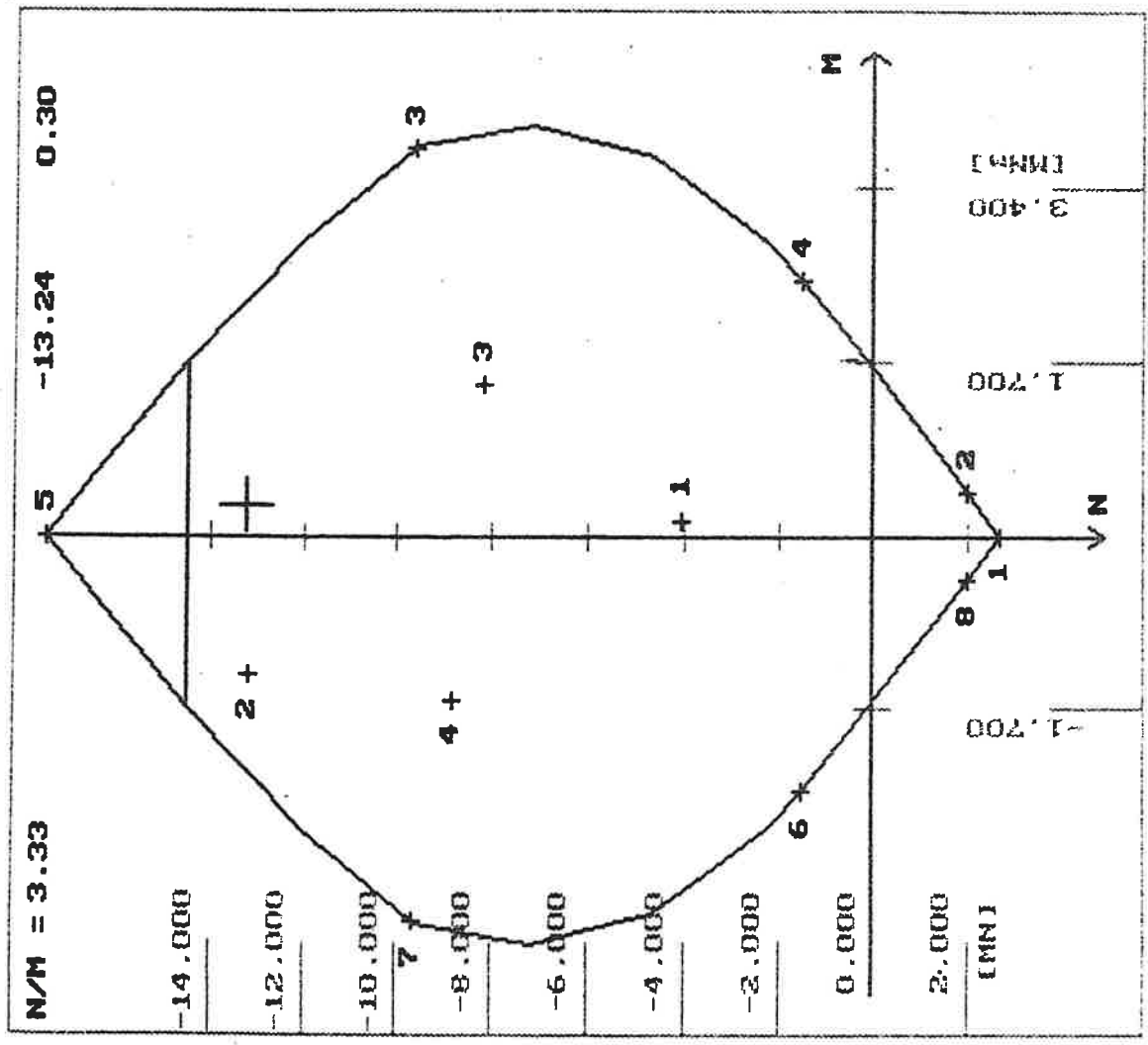
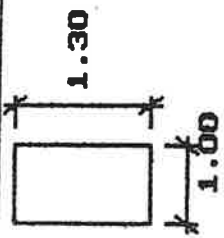
As1:3308.1 As2:3308.1

As1:3308.1 As2:3308.1

1	-0.0000	1.1733
2	0.1877	0.8604
3	2.8554	-9.6479
4	1.5760	-1.4950
5	0.0000	-15.901
6	-1.5761	-1.4950
7	-2.8554	-9.6479
8	-0.1877	0.8604

1	0.2893	-3.1451
2	0.5926	-11.456
3	0.8108	-8.4574
4	-1.3369	-6.9388

INTERAKCII DIAŁAN DŁUGY 2,4



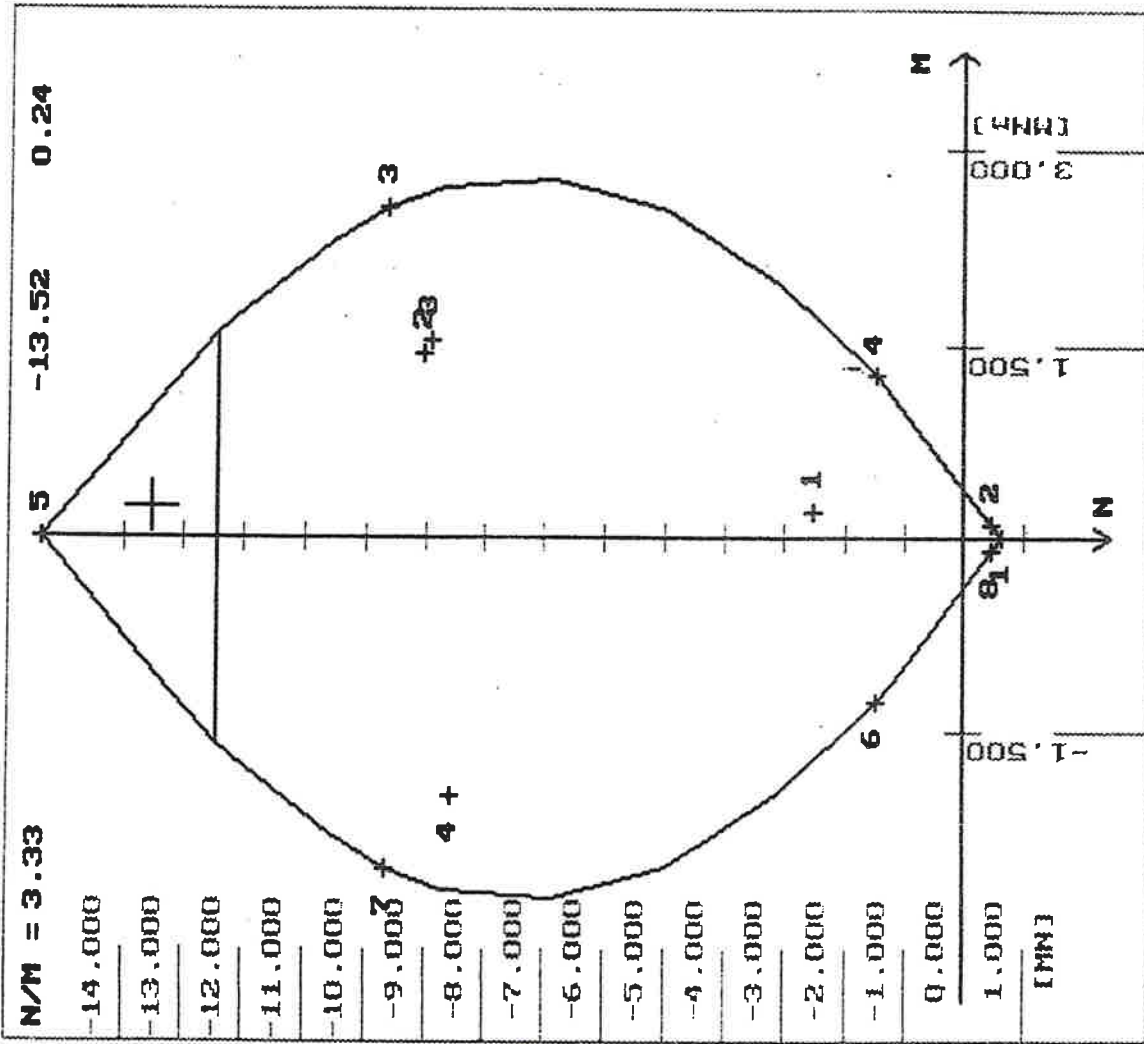
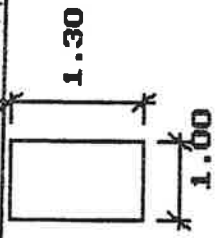
As1:7637.2 As2:7637.2

1	-0.0000	2.7087
2	0.4334	1.9864
3	3.7766	-9.6479
4	2.4973	-1.4950
5	0.0000	-17.437
6	-2.4973	-1.4950
7	-3.7766	-9.6479
8	-0.4334	1.9864

1	0.1598	-4.0805
2	-1.3714	-13.175
3	1.4848	-8.1365
4	-1.6140	-8.8156

PgDn --> <- PgUp <- --> Esc KONEC F1 BW/COL. F2 BOD

INTERAKČNÍ DIAGRAM PLOTY 5,4

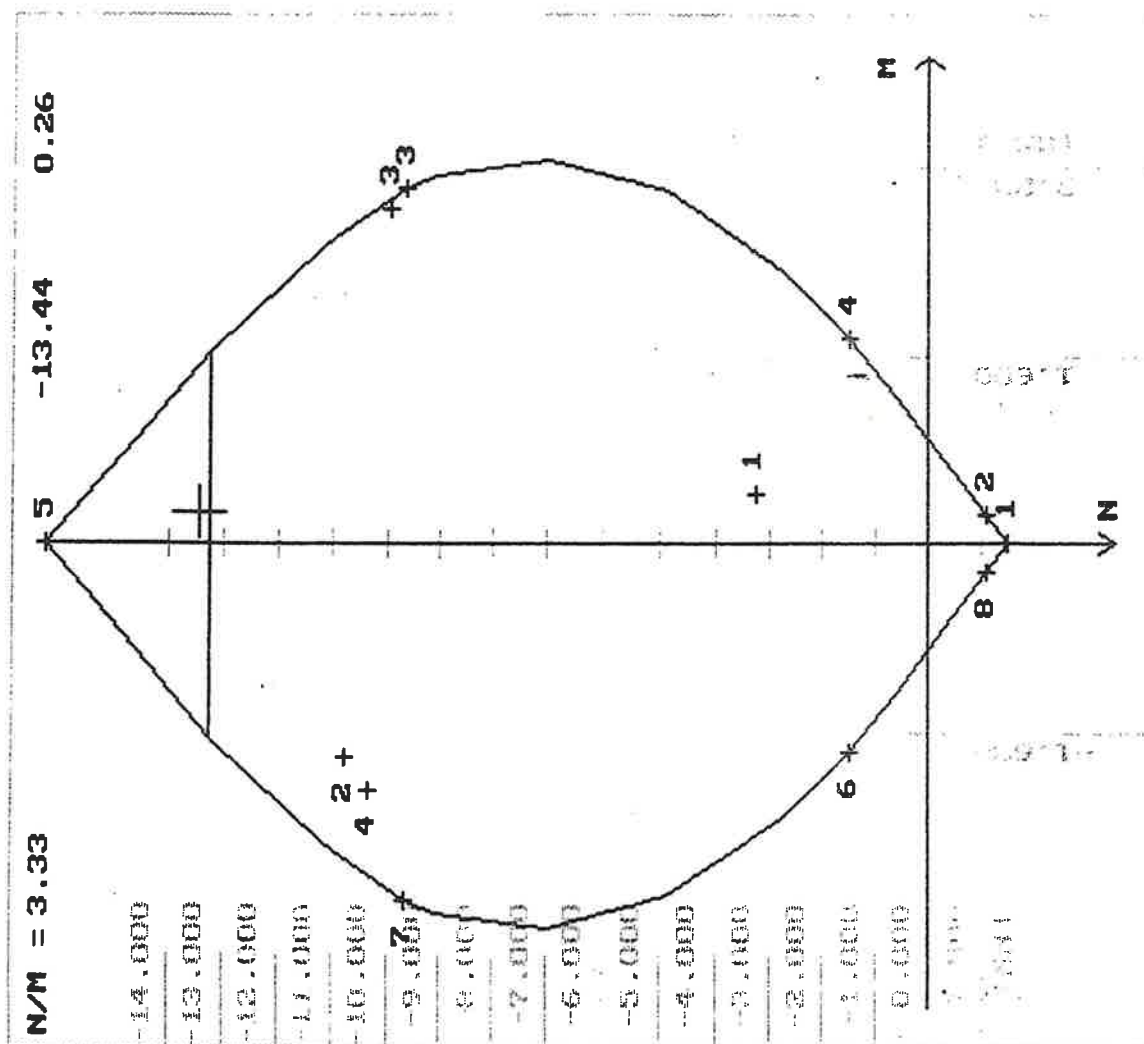


As1: 1837.8 As2: 1837.8

1	-0.0000	0.6518
2	0.1043	0.4780
3	2.5425	-9.6479
4	1.2632	-1.4950
5	0.0000	-15.380
6	-1.2632	-1.4950
7	-2.5425	-9.6479
8	-0.1043	0.4780

1	0.1936	-2.5206
2	1.4323	-9.0336
3	1.5376	-8.9322
4	-1.9838	-8.5532

INTERAKTIF DIAGRAM PLY 6,8



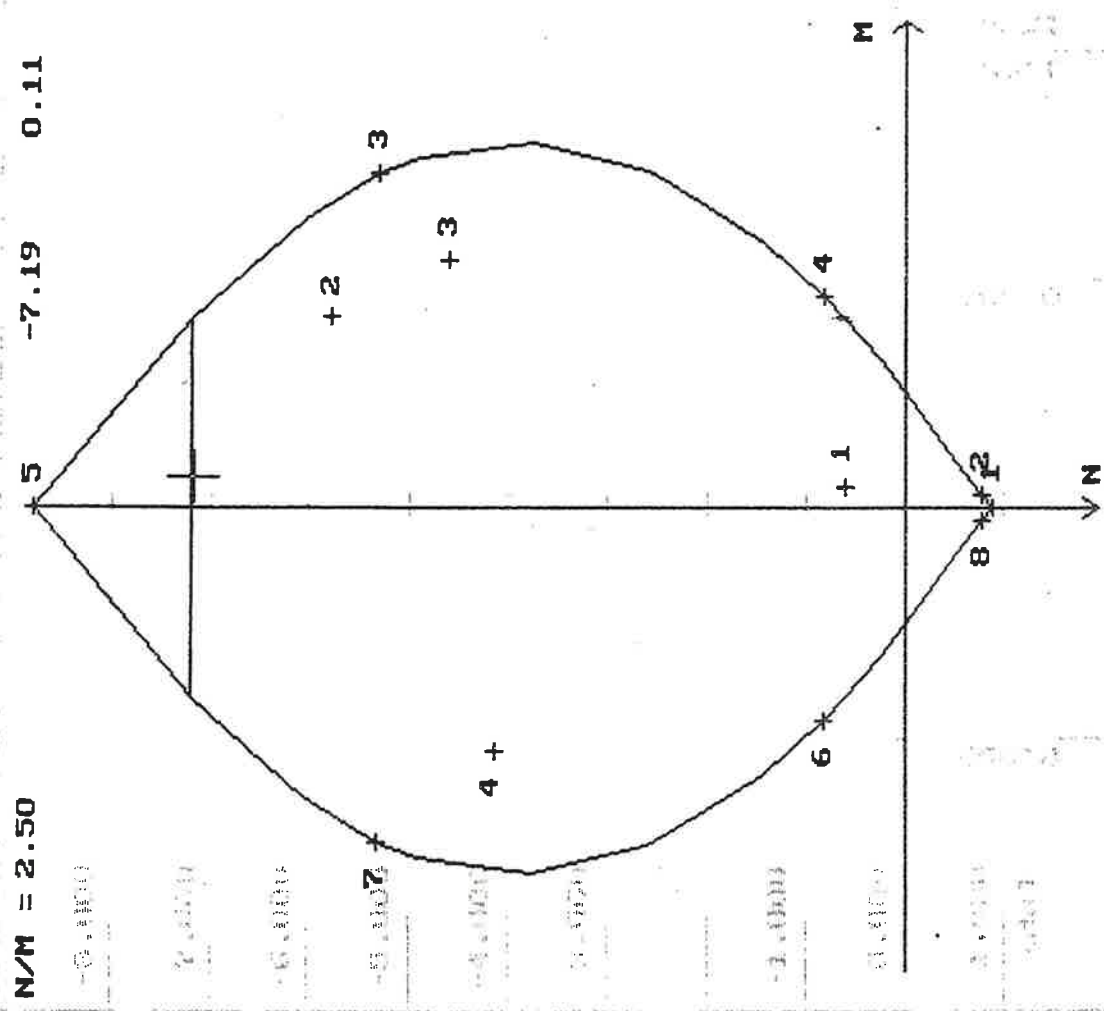
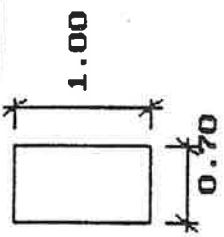
As1:4165.8 As2:4165.8

1	0.0000	1.4775
2	0.2364	1.0835
3	3.0379	-9.6479
4	1.7586	-1.4950
5	0.0000	-16.206
6	-1.7586	-1.4950
7	-3.0379	-9.6479
8	-0.2364	1.0835

1	0.4086	-3.2378
2	-1.8056	-10.762
3	2.8601	-9.9484
4	-2.0794	-10.327

INTERAKČNÍ DIAGRAM PRŮTÝ 9-11, 14-16

N/M = 2.50 -7.19 0.11

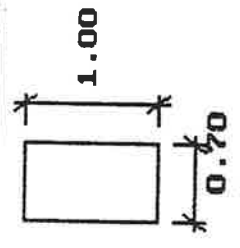
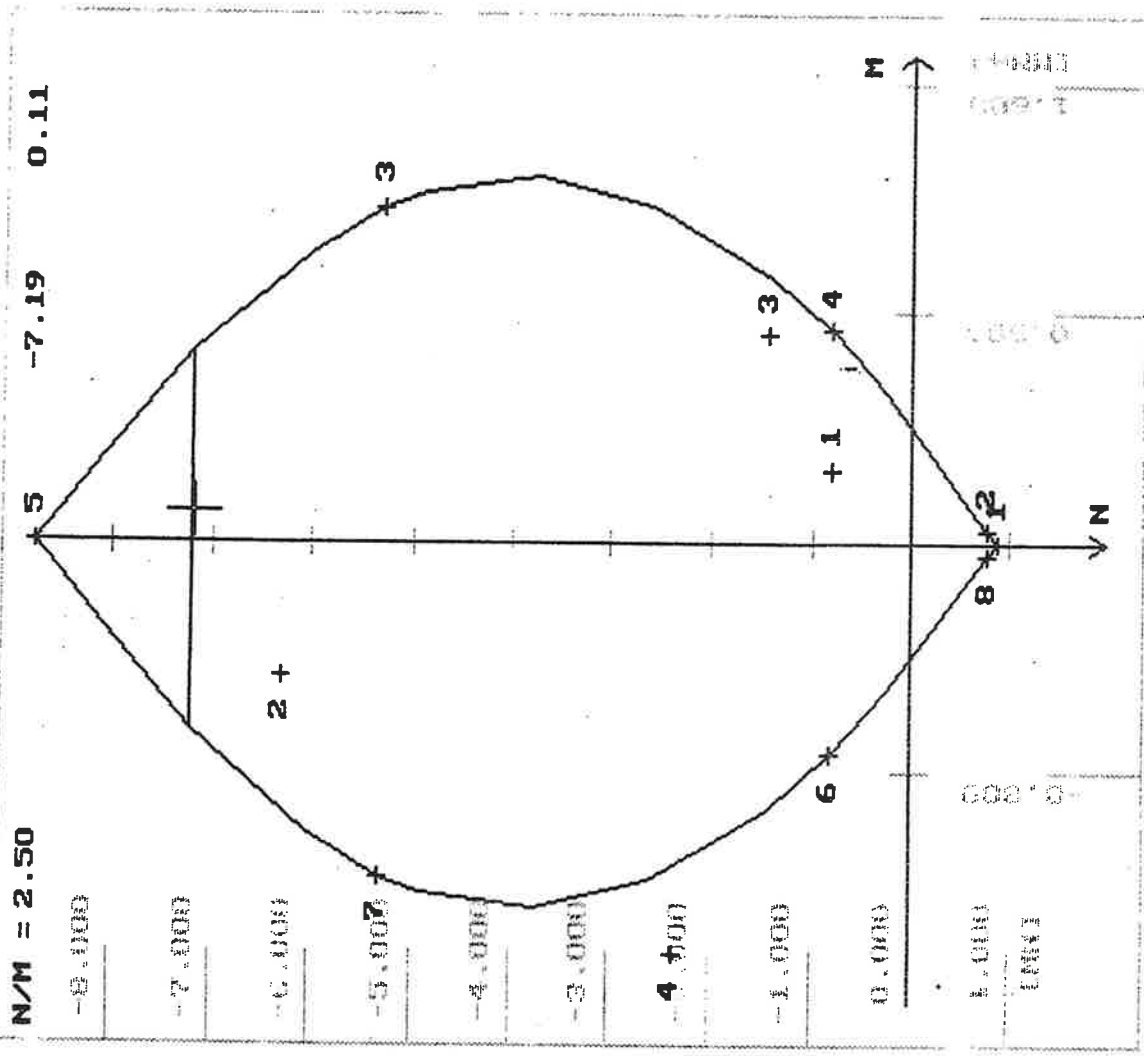


As1:2827.4 As2:2199.1

1	0.0000	0.8875
2	0.0482	0.7805
3	1.1732	-5.3084
4	0.7362	-0.8050
5	0.0000	-8.7842
6	-0.7362	-0.8050
7	-1.1732	-5.3084
8	-0.0482	0.7805
1	0.0721	-0.6164
2	0.6616	-5.7783
3	0.8658	-4.5909
4	-0.8451	-4.1320

PgDn -> <- PgUp <- -> Esc KONEC F1 BM/COL. F2 BOD

INTERACTION DIAGRAM PRD 12, 13, 17, 18, 68, 163



12, 13, 17, 18, 68, 163
 12, 13, 17, 18, 68, 163
 12, 13, 17, 18, 68, 163

As1:2827.4 As2:2199.1

1	0.0000	0.8875
2	0.0482	0.7805
3	1.1732	-5.3084
4	0.7362	-0.8050
5	0.0000	-8.7842
6	-0.7362	-0.8050
7	-1.1732	-5.3084
8	-0.0482	0.7805

12, 13, 17, 18, 68, 163
 12, 13, 17, 18, 68, 163
 12, 13, 17, 18, 68, 163

1	0.2508	-0.8108
2	-0.4724	-6.3089
3	0.7193	-1.4536
4	-1.4425	-2.3291

NE VIBLOW/E

PgDn -> <- PgUp <- -> Esc KONEC F1 BW/COL. F2 BOD

Závěrečné posouzení rozhodujícího průřezu - prut 168

RADA AB - PROSTOROVY MODEL (VEŠKERÉ ZATÍŽENÍ KROMĚ ZAPOUZE)

EXTREMNI UCINKY NA ROZHODUJICI SLOUP VCETNE - SOUCINITELU ZATIZENI
 - SOUCINITELU KOMBINACE
 - ZMENSENI ZASOBNIKU UHLI - KOEFICIENT 0.9

SUPER - KOMENTOVANY OTISK VSTUPNICH DAT

SUPERPOSICE ZATEZOVACICH STAVU - POPIS KOMBINACI

NAZEV :

KOMB-1

Cislo kombinace: 1

POPIS SUPERPOSICI ZATEZOVACICH STAVU

ZAT. STAVY	1	2	3	4	5	6	7	8	9
SKUPINY :	0	0	1	0	0	0	2	3	4
KOEFICIENTY:	1.1	1.1	.96	1.1	1.08	1.08	1.01	1.01	.96

NAZEV :

KOMB-2

Cislo kombinace: 2

POPIS SUPERPOSICI ZATEZOVACICH STAVU

ZAT. STAVY	1	2	3	4	5	6	7	8	9
SKUPINY :	0	0	1	0	0	0	2	3	4
KOEFICIENTY:	0.9	0.9	.96	0.9	0.9	0.9	1.01	1.01	.96

- 1 - VLASTNI TIHA PRUTU
- 2 - DALSI STALE
- 3 - UZITNE
- 4 - REAKCE VAZNIKU
- 5 - ZAHLUVACI PASY
- 6 - OCELOVA CAST ZASOBNIKU
- 7 - UHLI SVISLY TLAK
- 8 - UHLI VODOROVNY TLAK
- 9 - VITR

ZÁVERECNE POSOUZENÍ - ROZHODUJÍCÍ PRŮŘEZ, PRŮT 168, ZACÁTEK
(VŠEKRE ZATÍŽENÍ KROMĚ BAGHOUSE)

RADA AB - PROSTOROVÝ MODEL

KOMB-1

SUPER-168

VNITRNÍ SILY V PRŮTECH (kN, kNm)

	N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace								
PRŮT 168, x-lok = .00															
ZS. 01	-708.43	30.84	42.20	-6.29	-146.17	-147.73									
ZS. 02	-386.79	2.25	22.29	-3.23	-74.53	-18.51									
ZS. 03	-124.40	14.68	5.55	-.79	-19.18	-56.19									
ZS. 04	-234.67	-2.90	3.02	-.34	-10.75	8.38									
ZS. 05	-94.80	12.94	3.26	-.25	-11.41	-41.73									
ZS. 06	-5.57	.75	1.79	-.26	-6.23	-4.71									
ZS. 07	-303.37	42.44	52.93	-3.84	-185.16	-321.48									
ZS. 08	-105.69	341.76	8.79	7.24	-21.68	-473.66									
ZS. 09	-19.87	4.91	1.59	-.67	-5.60	-27.09									
max N-x	-1571.27	47.98	79.73	-11.39	-273.65	-223.79	1	2	4	5	6				
min N-x	-2122.92	454.83	148.91	-9.36	-506.34	-1106.83	1	2	3	4	5	6	7	8	9
max M-z	-1571.27	47.98	79.73	-11.39	-273.65	-223.79	1	2	4	5	6				
min M-z	-2122.92	454.83	148.91	-9.36	-506.34	-1106.83	1	2	3	4	5	6	7	8	9

KOMB-2

SUPER-168

VNITRNÍ SILY V PRŮTECH (kN, kNm)

	N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace								
PRŮT 168, x-lok = .00															
ZS. 01	-708.43	30.84	42.20	-6.29	-146.17	-147.73									
ZS. 02	-386.79	2.25	22.29	-3.23	-74.53	-18.51									
ZS. 03	-124.40	14.68	5.55	-.79	-19.18	-56.19									
ZS. 04	-234.67	-2.90	3.02	-.34	-10.75	8.38									
ZS. 05	-94.80	12.94	3.26	-.25	-11.41	-41.73									
ZS. 06	-5.57	.75	1.79	-.26	-6.23	-4.71									
ZS. 07	-303.37	42.44	52.93	-3.84	-185.16	-321.48									
ZS. 08	-105.69	341.76	8.79	7.24	-21.68	-473.66									
ZS. 09	-19.87	4.91	1.59	-.67	-5.60	-27.09									
max N-x	-1287.23	39.48	65.31	-9.33	-224.18	-183.86	1	2	4	5	6				
min N-x	-1838.88	446.33	134.50	-7.29	-456.87	-1066.90	1	2	3	4	5	6	7	8	9
max M-z	-1287.23	39.48	65.31	-9.33	-224.18	-183.86	1	2	4	5	6				
min M-z	-1838.88	446.33	134.50	-7.29	-456.87	-1066.90	1	2	3	4	5	6	7	8	9

POZN.: SNÍŽENÉ ZATÍŽENÍ UHLIM - ÚPRAVA VNITRKU ZASOBNÍKU, K=0.9

RADA AB - PROSTOROVY MODEL (KOMBINACE JEDNOTLIVYCH SLOZEK BAGHOUSE)

SUPERPOSICE ZATEZOVACICH STAVU - POPIS KOMBINACI

NAZEV :

KOMB-1

Cislo kombinace: 1

POPIS SUPERPOSICI ZATEZOVACICH STAVU

ZAT. STAVY	1	2	3	4	5	6	7	8	9	10
SKUPINY :	0	1	2	2	3	4	5	5	5	5
KOEFICIENTY:	1.	.67	.8	.8	.8	.8	.8	.8	.8	.8

NAZEV :

KOMB-2

Cislo kombinace: 2

POPIS SUPERPOSICI ZATEZOVACICH STAVU

ZAT. STAVY	1	2	3	4	5	6	7	8	9	10
SKUPINY :	0	1	2	2	3	4	5	5	5	5
KOEFICIENTY:	1.	.83	.6	.6	.6	.6	.8	.8	.8	.8

NAZEV :

KOMB-3

Cislo kombinace: 3

POPIS SUPERPOSICI ZATEZOVACICH STAVU

ZAT. STAVY	1	2	3	4	5	6	7	8	9	10
SKUPINY :	0	1	2	2	3	4	5	5	5	5
KOEFICIENTY:	1.	.67	.6	.6	.6	.6	1.	1.	1.	1.

- 1 - BAGHOUSE - STALE
- 2 - BAGHOUSE - UZITNE
- 3 - BAGHOUSE - VENTILATOR +
- 4 - BAGHOUSE - VENTILATOR -
- 5 - BAGHOUSE - DEMAG
- 6 - BAGHOUSE - SMIH
- 7 - BAGHOUSE - VITR Y+
- 8 - BAGHOUSE - VITR Y-
- 9 - BAGHOUSE - VITR X+
- 10 - BAGHOUSE - VITR X-

POPIS ZATEZOVACICH STAVU - ZS 1
BAGHOUSE - STALE

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.	VELIKOST			
V SERII		ZATIZENI			
PRVNI POSL.	T1	T2	SMER		
68	0	0	0	1	-25.95
79	0	0	0	1	16.13
70	0	0	0	1	-13.64
81	0	0	0	1	23.45
68	0	0	0	3	-3.3
79	0	0	0	3	6.46
70	0	0	0	3	-2.47
81	0	0	0	3	-5.04
68	0	0	0	2	-654.97
79	0	0	0	2	-449.52
70	0	0	0	2	-628.83
81	0	0	0	2	-469.15
68	0	0	1	3	404.44
79	0	0	1	3	126.83
70	0	0	1	3	-218.47
81	0	0	1	3	-309.80

POPIS ZATEZOVACICH STAVU - ZS 2
BAGHOUSE - UZITNE

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.	VELIKOST			
V SERII		ZATIZENI			
PRVNI POSL.	T1	T2	SMER		
68	0	0	0	1	-13.13
79	0	0	0	1	7.55
70	0	0	0	1	-5.50
81	0	0	0	1	11.08
68	0	0	0	3	0.41
79	0	0	0	3	0.27
70	0	0	0	3	-1.74
81	0	0	0	3	-2.62
68	0	0	0	2	-366.09
79	0	0	0	2	-207.44
70	0	0	0	2	-350.26
81	0	0	0	2	-211.04
68	0	0	1	3	222.51
79	0	0	1	3	60.14
70	0	0	1	3	-133.41
81	0	0	1	3	-143.74

POPIS ZATEZOVACICH STAVU - ZS 3
BAGHOUSE - VENTILATOR +

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.	VELIKOST			
V SERII		ZATIZENI			
PRVNI POSL.	T1 T2 SMER				
68	0 0 0 1	-0.460			
79	0 0 0 1	0.150			
70	0 0 0 1	-0.210			
81	0 0 0 1	0.040			
68	0 0 0 3	-2.23			
79	0 0 0 3	-2.24			
70	0 0 0 3	-1.76			
81	0 0 0 3	-2.21			
68	0 0 0 2	-12.470			
79	0 0 0 2	-0.4100			
70	0 0 0 2	-14.050			
81	0 0 0 2	-2.0700			
68	0 0 1 3	7.6500			
79	0 0 1 3	-0.470			
70	0 0 1 3	-5.4000			
81	0 0 1 3	-1.1300			

POPIS ZATEZOVACICH STAVU - ZS 4
BAGHOUSE - VENTILATOR -

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.	VELIKOST			
V SERII		ZATIZENI			
PRVNI POSL.	T1 T2 SMER				
68	0 0 0 1	0.460			
79	0 0 0 1	-0.15			
70	0 0 0 1	0.210			
81	0 0 0 1	-0.04			
68	0 0 0 3	2.23			
79	0 0 0 3	2.24			
70	0 0 0 3	1.76			
81	0 0 0 3	2.21			
68	0 0 0 2	12.47			
79	0 0 0 2	0.41			
70	0 0 0 2	14.05			
81	0 0 0 2	2.07			
68	0 0 1 3	-7.65			
79	0 0 1 3	0.47			
70	0 0 1 3	5.40			
81	0 0 1 3	1.13			

POPIS ZATEZOVACICH STAVU - ZS 5
BAGHOUSE - DEMAG

ZATIZENI UZLU [kN,kNm], [mm, mm/m]
CISLO UZLU TYPY ZATIZ. VELIKOST
V SERII ZATIZENI
PRVNI POSL. T1 T2 SMER

68	0	0	0	1	-2.11
79	0	0	0	1	2.10
70	0	0	0	1	-2.26
81	0	0	0	1	2.27
68	0	0	0	3	0.63
79	0	0	0	3	0.67
70	0	0	0	3	-0.21
81	0	0	0	3	-0.27
68	0	0	0	2	3.71
79	0	0	0	2	-4.70
70	0	0	0	2	5.86
81	0	0	0	2	-7.30
68	0	0	1	3	7.63
79	0	0	1	3	-7.13
70	0	0	1	3	12.58
81	0	0	1	3	-13.29

POPIS ZATEZOVACICH STAVU - ZS 6
BAGHOUSE - SNIE

ZATIZENI UZLU [kN,kNm], [mm, mm/m]
CISLO UZLU TYPY ZATIZ. VELIKOST
V SERII ZATIZENI
PRVNI POSL. T1 T2 SMER

68	0	0	0	1	-0.91
79	0	0	0	1	0.57
70	0	0	0	1	-0.46
81	0	0	0	1	0.80
68	0	0	0	3	0.22
79	0	0	0	3	0.21
70	0	0	0	3	0.01
81	0	0	0	3	-0.02
68	0	0	0	2	-21.72
79	0	0	0	2	-12.58
70	0	0	0	2	-20.87
81	0	0	0	2	-13.63
68	0	0	1	3	13.77
79	0	0	1	3	3.27
70	0	0	1	3	-7.36
81	0	0	1	3	-9.65

POPIS ZATEZOVACICH STAVU - ZS 7
BAGHOUSE - VITR Y+

ZATIZENI UZLU [kN,kNm], [mm, mm/m]
CISLO UZLU TYPY ZATIZ. VELIKOST
V SERII ZATIZENI

PRVNI	POSL.	T1	T2	SMER	
68	0	0	0	1	-31.00
79	0	0	0	1	29.90
70	0	0	0	1	-34.09
81	0	0	0	1	35.20
68	0	0	0	3	63.31
79	0	0	0	3	63.89
70	0	0	0	3	38.43
81	0	0	0	3	49.64
68	0	0	0	2	113.11
79	0	0	0	2	-112.79
70	0	0	0	2	192.20
81	0	0	0	2	-114.89
68	0	0	1	3	85.52
79	0	0	1	3	-80.78
70	0	0	1	3	236.48
81	0	0	1	3	-206.53

POPIS ZATEZOVACICH STAVU - ZS 8
BAGHOUSE - VITR Y-

ZATIZENI UZLU [kN,kNm], [mm, mm/m]
CISLO UZLU TYPY ZATIZ. VELIKOST
V SERII ZATIZENI

PRVNI	POSL.	T1	T2	SMER	
68	0	0	0	1	31.01
79	0	0	0	1	-29.90
70	0	0	0	1	34.09
81	0	0	0	1	-35.20
68	0	0	0	3	-63.31
79	0	0	0	3	-63.89
70	0	0	0	3	-38.43
81	0	0	0	3	-49.64
68	0	0	0	2	-113.11
79	0	0	0	2	112.79
70	0	0	0	2	-192.21
81	0	0	0	2	114.80
68	0	0	1	3	-85.53
79	0	0	1	3	80.80
70	0	0	1	3	-236.49
81	0	0	1	3	206.54

POPIS ZATEZOVACICH STAVU - ZS 9
BAGHOUSE - VITR X+

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.		VELIKOST		
V SERII			ZATIZENI		
PRVNI POSL.	T1	T2	SMER		
68	0	0	0	1	77.81
79	0	0	0	1	69.06
70	0	0	0	1	77.69
81	0	0	0	1	68.94
68	0	0	0	3	-2.27
79	0	0	0	3	-1.93
70	0	0	0	3	0.40
81	0	0	0	3	0.64
68	0	0	0	2	54.00
79	0	0	0	2	46.00
70	0	0	0	2	-38.10
81	0	0	0	2	-38.00
68	0	0	1	3	-366.70
79	0	0	1	3	-324.54
70	0	0	1	3	-358.99
81	0	0	1	3	-320.46

POPIS ZATEZOVACICH STAVU - ZS 10
BAGHOUSE - VITR X-

ZATIZENI UZLU [kN,kNm], [mm, mm/m]					
CISLO UZLU	TYPY ZATIZ.		VELIKOST		
V SERII			ZATIZENI		
PRVNI POSL.	T1	T2	SMER		
68	0	0	0	1	-77.70
79	0	0	0	1	-68.70
70	0	0	0	1	-77.60
81	0	0	0	1	-68.59
68	0	0	0	3	2.29
79	0	0	0	3	1.96
70	0	0	0	3	-0.43
81	0	0	0	3	-0.67
68	0	0	0	2	-54.00
79	0	0	0	2	-45.90
70	0	0	0	2	37.90
81	0	0	0	2	37.70
68	0	0	1	3	366.22
79	0	0	1	3	322.98
70	0	0	1	3	358.50
81	0	0	1	3	318.81

RADA AB - PROSTOROVY MODEL

JEDNOTLIVÉ SLOŽEN ZATÍŽENÍ OD BAGTOUSE

KOMB-1

SUPER-1

VNITRNI SILY V PRUTECH (kN, kNm)

	N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace
PRUT 168, x-lok = .00							
ZS. 01	-549.74	-20.03	.47	.21	-.94	81.44	
ZS. 02	-307.15	-11.46	.05	.16	.26	45.86	
ZS. 03	-12.36	-.44	-.03	.02	.10	1.74	
ZS. 04	12.36	.44	.03	-.02	-.10	-1.74	
ZS. 05	6.70	.28	.04	.03	-.18	-.34	
ZS. 06	-18.23	-.67	.01	.01	.00	2.74	
ZS. 07	195.19	6.90	.77	.22	-3.15	-14.71	
ZS. 08	-195.20	-6.90	-.77	-.22	3.14	14.71	
ZS. 09	-117.97	3.91	3.15	-1.27	-10.89	-55.71	
ZS. 10	117.63	-3.90	-3.14	1.27	10.85	55.57	
max N-x	-378.34	-13.94	1.14	.40	-3.68	68.01	1 4 5 7
min N-x	-936.16	-34.12	-.13	.17	1.83	127.51	1 2 3 6 8
max M-z	-685.90	-31.71	-2.02	1.36	8.00	160.19	1 2 3 6 10
min M-z	-628.87	-16.33	3.04	-.79	-9.88	35.21	1 4 5 9

KOMB-2

SUPER-1

VNITRNI SILY V PRUTECH (kN, kNm)

	N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace
PRUT 168, x-lok = .00							
ZS. 01	-549.74	-20.03	.47	.21	-.94	81.44	
ZS. 02	-307.15	-11.46	.05	.16	.26	45.86	
ZS. 03	-12.36	-.44	-.03	.02	.10	1.74	
ZS. 04	12.36	.44	.03	-.02	-.10	-1.74	
ZS. 05	6.70	.28	.04	.03	-.18	-.34	
ZS. 06	-18.23	-.67	.01	.01	.00	2.74	
ZS. 07	195.19	6.90	.77	.22	-3.15	-14.71	
ZS. 08	-195.20	-6.90	-.77	-.22	3.14	14.71	
ZS. 09	-117.97	3.91	3.15	-1.27	-10.89	-55.71	
ZS. 10	117.63	-3.90	-3.14	1.27	10.85	55.57	
max N-x	-382.15	-14.08	1.13	.40	-3.62	68.42	1 4 5 7
min N-x	-979.19	-35.73	-.12	.19	1.85	133.95	1 2 3 6 8
max M-z	-728.92	-33.32	-2.01	1.38	8.02	166.63	1 2 3 6 10
min M-z	-632.68	-16.47	3.03	-.80	-9.82	35.62	1 4 5 9

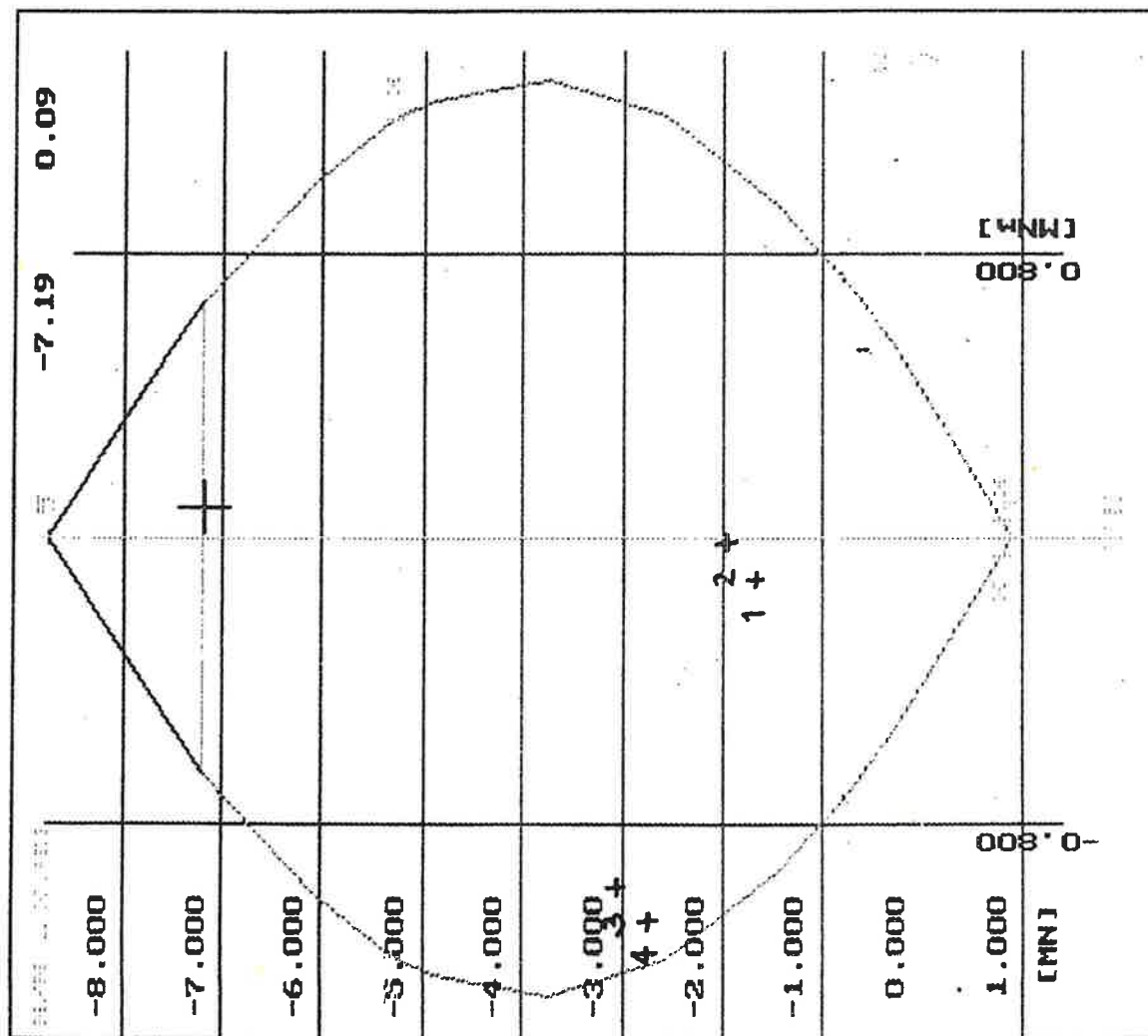
KOMB-3

SUPER-1

VNITRNI SILY V PROTECH (kN, kNm)

	N-x	Q-y	Q-z	M-x	M-y	M-z	Kombinace			
PRUT 168, x-lok = .00										
ZS. 01	-549.74	-20.03	.47	.21	-.94	81.44				
ZS. 02	-307.15	-11.46	.05	.16	.26	45.86				
ZS. 03	-12.36	-.44	-.03	.02	.10	1.74				
ZS. 04	12.36	.44	.03	-.02	-.10	-1.74				
ZS. 05	6.70	.28	.04	.03	-.18	-.34				
ZS. 06	-18.23	-.67	.01	.01	.00	2.74				
ZS. 07	195.19	6.90	.77	.22	-3.15	-14.71				
ZS. 08	-195.20	-6.90	-.77	-.22	3.14	14.71				
ZS. 09	-117.97	3.91	3.15	-1.27	-10.89	-55.71				
ZS. 10	117.63	-3.90	-3.14	1.27	10.85	55.57				
max N-x	-343.12	-12.70	1.28	.44	-4.25	65.48	1	4	5	7
min N-x	-969.08	-35.27	-.28	.12	2.44	129.55	1	2	3	6 8
max M-z	-656.26	-32.27	-2.64	1.61	10.15	170.41	1	2	3	6 10
min M-z	-656.28	-15.69	3.66	-1.05	-12.00	24.48	1	4	5	9

AB - 20200001 Marvel



POSOBJEN, izdano v Ljubljani
Prejeto -> PROST 16.3.1948

-EXTRÉME- L'INDIC

--- DOUG. NIVELLE 1897 (2211)

-SOUNINGITE 1017-1018

$$-k = 0,9 \text{ FeO } \text{ und } 1,1$$

(1) WATER WATER

10/10/2020

Učelný odbor Zlatkovice

 $V_{\text{COH316AC1}}$ As1:2827.4 As2:2199.1

1	0.0000	0.8875
2	0.0482	0.7805
3	1.1732	-5.3084
4	0.7362	-0.8050
5	0.0000	-8.7842
6	-0.7362	-0.8050
7	-1.1732	-5.3084
8	-0.0482	0.7805

1	-0.1154	-1.6694
2	-0.9793	-3.0591
3	-0.0172	-1.9731
4	-1.0712	-2.7556

RESERVA V OHLBOVENI MONETU NA ÚČASTI

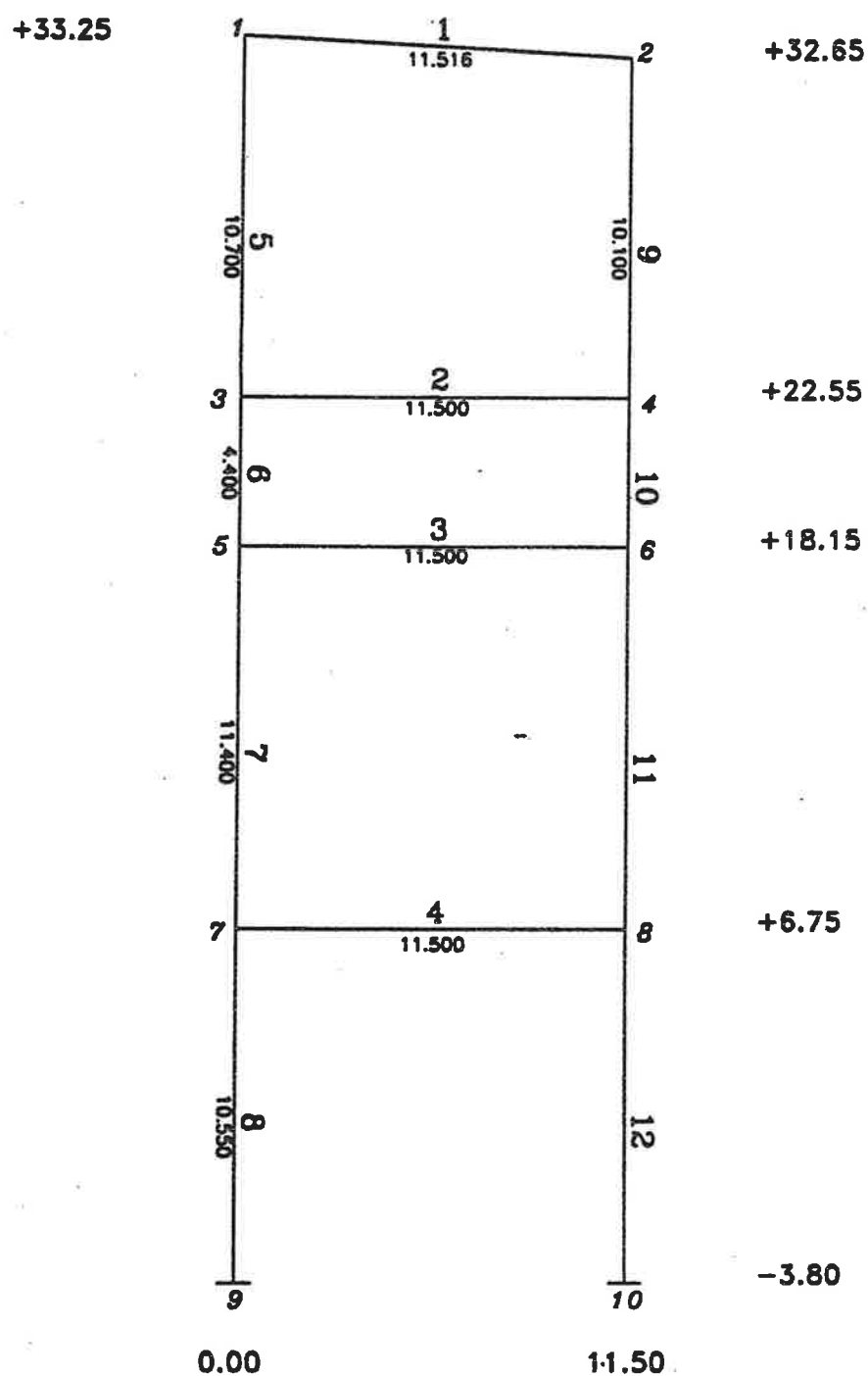
THE PLANT A SPECTROSCOPIC $\Delta H = 125 \text{ kJ. mol}^{-1}$

Page -> Page <-> Esc KONEC F1 BW/COL. F5 BOD

POSOUZENÍ VNITŘNÍHO RÁMU CD

ROVINNÝ MODEL

STATICKE SCHEMA



KOMORANY - RAM CD

ZÁKLADNÍ VSTUPNÍ DATA

KOMORANY - VNITRNI RAM CD

TYP KONSTRUKCE 2= rovinný ram
 POCET UZLU 10
 POCET PRUTU 12
 POCET PODPOR 2

POPIS SOURADNIC UZLU

CISLO PODP.	SOURADNICE	SOURADNICE
UZLU	UZEL	UZLU
	X [m]	Y [m]
1	0	0.
2	0	11.5
3	0	0.
4	0	11.5
5	0	0.
6	0	11.5
7	0	0.
8	0	11.5
9	1	0.
10	1	11.5

POPIS KODOVYCH CISEL PRUTU

CISLO PRUTU	CISLO POCAT. UZLU	CISLO KONC. UZLU
1	1	2
2	3	4
3	5	6
4	7	8
5	1	3
6	3	5
7	5	7
8	7	9
9	2	4
10	4	6
11	6	8
12	8	10

POPIS FYZIKALNICH VELICIN PRUTU

CISLO PRUTU	MODUL PRUZ.	MODUL PRUZ.
V SERII	PRUZNOSTI	VE SHYKU
PRVNI POSL.	E [MPa]	G [MPa]
1 12	27000.	11250.

POPIS PRUREZOVYCH VELICIN PRUTU [m²]

CISLO PRUTU	PRUREZOVA	SHYKOVA	MOMENT
V SERII	PLOCHA	PLOCHA	SETRVACNOSTI
PRVNI POSL.			
	A(1,n)	A(2,n)	A(3,n)
1	0	1.01	.65
2	0	1.88	1.52
3	0	1.4	1.04
4	0	1.88	1.52
5	0	1.05	.875
6	8	1.8	1.5
9	0	.84	.7
10	0	1.5	1.25
11	12	1.8	1.5

SEZNAM AKČNÍCH ČASŮ

číslo	akce	čas	čas	čas
1	SEZNAM	1,1 / 0,9	0	0
2	TECHNOLIE	1,0 / 0,0	1	1
3	SEZNAM	1,4 / 0,0	2	2
4			2	2
5			2	2
6			2	2
7	SEZNAM, VÍTR	1,8 / 0,0	3	3
8			3	3
9			4	4
10	SEZNAM	1,0 / 0,0	4	4
11			4	4
12			4	4

SEZNAM č. 1-3 DLA SEZNAMU S VÍTRU K1

SEZNAM č. 12 DLA SEZNAMU NOVÉ DLE PODKLADU
OP ENERGOVÝCH KATOVCE