

■ 흥산1교 대구방향(S1~S3) 상부 input

```

:-----
:
: MIDAS/Civil Text(MCT) File.
: Date : 2015/12/30
:-----
*VERSION
8.4.5
*UNIT      : Unit System
: FORCE, LENGTH, HEAT, TEMPER
KN      , M, KCAL, C
*REBAR-MATL-CODE      : Rebar Material Code
: CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
KS01-Civil(RC), SD300, KS01-Civil(RC), SD300
*NODE      : Nodes
: INO, X, Y, Z
1, 0, 0, 0
2, 8.004, 0, 0
3, 8.104, 0, 0
4, 11.232, 0, 0
5, 17.807, 0, 0
6, 17.907, 0, 0
7, 21.252, 0, 0
8, 24.238, 0, 0
9, 24.338, 0, 0
10, 35.738, 0, 0
11, 35.838, 0, 0
12, 37.538, 0, 0
13, 42.138, 0, 0
14, 42.238, 0, 0
15, 46.288, 0, 0
16, 47.938, 0, 0
17, 48.038, 0, 0
18, 53.088, 0, 0
19, 53.188, 0, 0
20, 69.088, 0, 0
21, 69.188, 0, 0
22, 74.488, 0, 0
23, 74.588, 0, 0
24, 79.538, 0, 0
25, 79.988, 0, 0
26, 5, 0, 0
27, 10, 0, 0
28, 15, 0, 0
29, 20, 0, 0
30, 25, 0, 0
31, 30, 0, 0
32, 35, 0, 0
33, 40, 0, 0
34, 45, 0, 0
35, 50, 0, 0
36, 55, 0, 0
37, 60, 0, 0
38, 65, 0, 0
39, 70, 0, 0
40, 75, 0, 0
41, 0, 3.9, 0
42, 8.004, 3.9, 0
43, 8.104, 3.9, 0
44, 11.232, 3.9, 0
45, 17.807, 3.9, 0
46, 17.907, 3.9, 0
47, 21.252, 3.9, 0
48, 24.238, 3.9, 0
49, 24.338, 3.9, 0
50, 35.738, 3.9, 0
51, 35.838, 3.9, 0
52, 37.538, 3.9, 0
53, 42.138, 3.9, 0
54, 42.238, 3.9, 0
55, 46.288, 3.9, 0
56, 47.938, 3.9, 0
57, 48.038, 3.9, 0
58, 53.088, 3.9, 0
59, 53.188, 3.9, 0
60, 69.088, 3.9, 0
61, 69.188, 3.9, 0
62, 74.488, 3.9, 0
63, 74.588, 3.9, 0
64, 79.538, 3.9, 0
65, 79.988, 3.9, 0
66, 5, 3.9, 0
67, 10, 3.9, 0
68, 15, 3.9, 0
69, 20, 3.9, 0
70, 25, 3.9, 0
71, 30, 3.9, 0
72, 35, 3.9, 0
73, 40, 3.9, 0
74, 45, 3.9, 0
75, 50, 3.9, 0
76, 55, 3.9, 0
77, 60, 3.9, 0
78, 65, 3.9, 0

```

```

79, 70, 3.9, 0
80, 75, 3.9, 0
81, 0, 7.8, 0
82, 8.004, 7.8, 0
83, 8.104, 7.8, 0
84, 11.232, 7.8, 0
85, 17.807, 7.8, 0
86, 17.907, 7.8, 0
87, 21.252, 7.8, 0
88, 24.238, 7.8, 0
89, 24.338, 7.8, 0
90, 35.738, 7.8, 0
91, 35.838, 7.8, 0
92, 37.538, 7.8, 0
93, 42.138, 7.8, 0
94, 42.238, 7.8, 0
95, 46.288, 7.8, 0
96, 47.938, 7.8, 0
97, 48.038, 7.8, 0
98, 53.088, 7.8, 0
99, 53.188, 7.8, 0
100, 69.088, 7.8, 0
101, 69.188, 7.8, 0
102, 74.488, 7.8, 0
103, 74.588, 7.8, 0
104, 79.538, 7.8, 0
105, 79.988, 7.8, 0
106, 5, 7.8, 0
107, 10, 7.8, 0
108, 15, 7.8, 0
109, 20, 7.8, 0
110, 25, 7.8, 0
111, 30, 7.8, 0
112, 35, 7.8, 0
113, 40, 7.8, 0
114, 45, 7.8, 0
115, 50, 7.8, 0
116, 55, 7.8, 0
117, 60, 7.8, 0
118, 65, 7.8, 0
119, 70, 7.8, 0
120, 75, 7.8, 0
121, -5, 7.8, 0
122, -8.004, 7.8, 0
123, -8.104, 7.8, 0
124, -10, 7.8, 0
125, -11.232, 7.8, 0
126, -15, 7.8, 0
127, -17.807, 7.8, 0
128, -17.907, 7.8, 0
129, -20, 7.8, 0
130, -21.252, 7.8, 0
131, -24.238, 7.8, 0
132, -24.338, 7.8, 0
133, -25, 7.8, 0
134, -30, 7.8, 0
135, -35, 7.8, 0
136, -35.738, 7.8, 0
137, -35.838, 7.8, 0
138, -37.538, 7.8, 0
139, -40, 7.8, 0
140, -42.138, 7.8, 0
141, -42.238, 7.8, 0
142, -45, 7.8, 0
143, -46.288, 7.8, 0
144, -47.938, 7.8, 0
145, -48.038, 7.8, 0
146, -50, 7.8, 0
147, -53.088, 7.8, 0
148, -53.188, 7.8, 0
149, -55, 7.8, 0
150, -60, 7.8, 0
151, -65, 7.8, 0
152, -69.088, 7.8, 0
153, -69.188, 7.8, 0
154, -70, 7.8, 0
155, -74.488, 7.8, 0
156, -74.588, 7.8, 0
157, -75, 7.8, 0
158, -79.538, 7.8, 0
159, -79.988, 7.8, 0
160, -5, 0, 0
161, -8.004, 0, 0
162, -8.104, 0, 0
163, -10, 0, 0
164, -11.232, 0, 0
165, -15, 0, 0
166, -17.807, 0, 0
167, -17.907, 0, 0
168, -20, 0, 0
169, -21.252, 0, 0
170, -24.238, 0, 0
171, -24.338, 0, 0
172, -25, 0, 0
173, -30, 0, 0
174, -35, 0, 0
175, -35.738, 0, 0

```

```

176, -35.838, 0, 0
177, -37.538, 0, 0
178, -40, 0, 0
179, -42.138, 0, 0
180, -42.238, 0, 0
181, -45, 0, 0
182, -46.288, 0, 0
183, -47.938, 0, 0
184, -48.038, 0, 0
185, -50, 0, 0
186, -53.088, 0, 0
187, -53.188, 0, 0
188, -55, 0, 0
189, -60, 0, 0
190, -65, 0, 0
191, -69.088, 0, 0
192, -69.188, 0, 0
193, -70, 0, 0
194, -74.488, 0, 0
195, -74.588, 0, 0
196, -75, 0, 0
197, -79.538, 0, 0
198, -79.988, 0, 0
199, -5, 3.9, 0
200, -8.004, 3.9, 0
201, -8.104, 3.9, 0
202, -10, 3.9, 0
203, -11.232, 3.9, 0
204, -15, 3.9, 0
205, -17.807, 3.9, 0
206, -17.907, 3.9, 0
207, -20, 3.9, 0
208, -21.252, 3.9, 0
209, -24.238, 3.9, 0
210, -24.338, 3.9, 0
211, -25, 3.9, 0
212, -30, 3.9, 0
213, -35, 3.9, 0
214, -35.738, 3.9, 0
215, -35.838, 3.9, 0
216, -37.538, 3.9, 0
217, -40, 3.9, 0
218, -42.138, 3.9, 0
219, -42.238, 3.9, 0
220, -45, 3.9, 0
221, -46.288, 3.9, 0
222, -47.938, 3.9, 0
223, -48.038, 3.9, 0
224, -50, 3.9, 0
225, -53.088, 3.9, 0
226, -53.188, 3.9, 0
227, -55, 3.9, 0
228, -60, 3.9, 0
229, -65, 3.9, 0
230, -69.088, 3.9, 0
231, -69.188, 3.9, 0
232, -70, 3.9, 0
233, -74.488, 3.9, 0
234, -74.588, 3.9, 0
235, -75, 3.9, 0
236, -79.538, 3.9, 0
237, -79.988, 3.9, 0
238, -61.238, 7.8, 0
239, -61.238, 0, 0
240, -61.238, 3.9, 0
241, 61.238, 7.8, 0
242, 61.238, 0, 0
243, 61.238, 3.9, 0
*ELEMENT      : Elements
: IEL, TYPE, IMAT, IPRO, IN1, IN2, ANGLE, ISUB, EXVAL,
IOPT(EXVAL2) : Frame Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, ANGLE, ISUB, EXVAL,
EXVAL2, bLMT : Comp/Tens Truss
: IEL, TYPE, IMAT, IPRO, IN1, IN2, IN3, IN4, ISUB, IWID ,
LCAXIS      : Planar Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, IN3, IN4, IN5, IN6, IN7,
IN8      : Solid Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, REF, RPX, RPY, RPZ,
ISUB, EXVAL : Frame(Ref. Point)
1, BEAM , 1, 5, 81, 106, 0, 0
2, BEAM , 1, 5, 106, 82, 0, 0
3, BEAM , 1, 14, 82, 83, 0, 0
4, BEAM , 1, 6, 83, 107, 0, 0
5, BEAM , 1, 6, 107, 84, 0, 0
6, BEAM , 1, 7, 84, 108, 0, 0
7, BEAM , 1, 7, 108, 85, 0, 0
8, BEAM , 1, 13, 85, 86, 0, 0
9, BEAM , 1, 9, 86, 109, 0, 0
10, BEAM , 1, 9, 109, 87, 0, 0
11, BEAM , 1, 10, 87, 88, 0, 0
12, BEAM , 1, 11, 88, 89, 0, 0
13, BEAM , 1, 12, 89, 110, 0, 0
14, BEAM , 1, 12, 110, 111, 0, 0
15, BEAM , 1, 12, 111, 112, 0, 0
16, BEAM , 1, 12, 112, 90, 0, 0
17, BEAM , 1, 11, 90, 91, 0, 0
18, BEAM , 1, 10, 91, 92, 0, 0

```

19. BEAM	, 1, 9, 92, 113, 0, 0	116. BEAM	, 2, 17, 80, 64, 0, 0	213. BEAM	, 1, 24, 181, 182, 0, 0
20. BEAM	, 1, 9, 113, 93, 0, 0	117. BEAM	, 2, 17, 64, 65, 0, 0	214. BEAM	, 1, 23, 182, 183, 0, 0
21. BEAM	, 1, 8, 93, 94, 0, 0	118. BEAM	, 2, 16, 111, 71, 0, 0	215. BEAM	, 1, 19, 183, 184, 0, 0
22. BEAM	, 1, 7, 94, 114, 0, 0	119. BEAM	, 2, 16, 71, 31, 0, 0	216. BEAM	, 1, 20, 184, 185, 0, 0
23. BEAM	, 1, 7, 114, 95, 0, 0	120. BEAM	, 2, 16, 104, 64, 0, 0	217. BEAM	, 1, 20, 185, 186, 0, 0
24. BEAM	, 1, 6, 95, 96, 0, 0	121. BEAM	, 2, 16, 64, 24, 0, 0	218. BEAM	, 1, 21, 186, 187, 0, 0
25. BEAM	, 1, 2, 96, 97, 0, 0	122. BEAM	, 2, 15, 120, 80, 0, 0	219. BEAM	, 1, 22, 187, 188, 0, 0
26. BEAM	, 1, 3, 97, 115, 0, 0	123. BEAM	, 2, 15, 80, 40, 0, 0	220. BEAM	, 1, 22, 188, 189, 0, 0
27. BEAM	, 1, 3, 115, 98, 0, 0	124. BEAM	, 2, 15, 119, 79, 0, 0	221. BEAM	, 1, 22, 189, 239, 0, 0
28. BEAM	, 1, 4, 98, 99, 0, 0	125. BEAM	, 2, 15, 79, 39, 0, 0	222. BEAM	, 1, 22, 190, 191, 0, 0
29. BEAM	, 1, 5, 99, 116, 0, 0	126. BEAM	, 2, 15, 118, 78, 0, 0	223. BEAM	, 1, 21, 191, 192, 0, 0
30. BEAM	, 1, 5, 116, 117, 0, 0	127. BEAM	, 2, 15, 78, 38, 0, 0	224. BEAM	, 1, 20, 192, 193, 0, 0
31. BEAM	, 1, 5, 117, 241, 0, 0	128. BEAM	, 2, 15, 117, 77, 0, 0	225. BEAM	, 1, 20, 193, 194, 0, 0
32. BEAM	, 1, 5, 118, 100, 0, 0	129. BEAM	, 2, 15, 77, 37, 0, 0	226. BEAM	, 1, 19, 194, 195, 0, 0
33. BEAM	, 1, 4, 100, 101, 0, 0	130. BEAM	, 2, 15, 116, 76, 0, 0	227. BEAM	, 1, 18, 195, 196, 0, 0
34. BEAM	, 1, 3, 101, 119, 0, 0	131. BEAM	, 2, 15, 76, 36, 0, 0	228. BEAM	, 1, 18, 196, 197, 0, 0
35. BEAM	, 1, 3, 119, 102, 0, 0	132. BEAM	, 2, 15, 115, 75, 0, 0	229. BEAM	, 1, 18, 197, 198, 0, 0
36. BEAM	, 1, 2, 102, 103, 0, 0	133. BEAM	, 2, 15, 75, 35, 0, 0	230. BEAM	, 2, 17, 41, 199, 0, 0
37. BEAM	, 1, 1, 103, 120, 0, 0	134. BEAM	, 2, 15, 114, 74, 0, 0	231. BEAM	, 2, 17, 199, 200, 0, 0
38. BEAM	, 1, 1, 120, 104, 0, 0	135. BEAM	, 2, 15, 74, 34, 0, 0	232. BEAM	, 2, 17, 200, 201, 0, 0
39. BEAM	, 1, 1, 104, 105, 0, 0	136. BEAM	, 2, 15, 113, 73, 0, 0	233. BEAM	, 2, 17, 201, 202, 0, 0
40. BEAM	, 1, 22, 1, 26, 0, 0	137. BEAM	, 2, 15, 73, 33, 0, 0	234. BEAM	, 2, 17, 202, 203, 0, 0
41. BEAM	, 1, 22, 26, 2, 0, 0	138. BEAM	, 2, 15, 112, 72, 0, 0	235. BEAM	, 2, 17, 203, 204, 0, 0
42. BEAM	, 1, 30, 2, 3, 0, 0	139. BEAM	, 2, 15, 72, 32, 0, 0	236. BEAM	, 2, 17, 204, 205, 0, 0
43. BEAM	, 1, 23, 3, 27, 0, 0	140. BEAM	, 2, 15, 110, 70, 0, 0	237. BEAM	, 2, 17, 205, 206, 0, 0
44. BEAM	, 1, 23, 27, 4, 0, 0	141. BEAM	, 2, 15, 70, 30, 0, 0	238. BEAM	, 2, 17, 206, 207, 0, 0
45. BEAM	, 1, 24, 4, 28, 0, 0	142. BEAM	, 2, 15, 109, 69, 0, 0	239. BEAM	, 2, 17, 207, 208, 0, 0
46. BEAM	, 1, 24, 28, 5, 0, 0	143. BEAM	, 2, 15, 69, 29, 0, 0	240. BEAM	, 2, 17, 208, 209, 0, 0
47. BEAM	, 1, 31, 5, 6, 0, 0	144. BEAM	, 2, 15, 108, 68, 0, 0	241. BEAM	, 2, 17, 209, 210, 0, 0
48. BEAM	, 1, 26, 6, 29, 0, 0	145. BEAM	, 2, 15, 68, 28, 0, 0	242. BEAM	, 2, 17, 210, 211, 0, 0
49. BEAM	, 1, 26, 29, 7, 0, 0	146. BEAM	, 2, 15, 107, 67, 0, 0	243. BEAM	, 2, 17, 211, 212, 0, 0
50. BEAM	, 1, 27, 7, 8, 0, 0	147. BEAM	, 2, 15, 67, 27, 0, 0	244. BEAM	, 2, 17, 212, 213, 0, 0
51. BEAM	, 1, 28, 8, 9, 0, 0	148. BEAM	, 2, 15, 106, 66, 0, 0	245. BEAM	, 2, 17, 213, 214, 0, 0
52. BEAM	, 1, 29, 9, 30, 0, 0	149. BEAM	, 2, 15, 66, 26, 0, 0	246. BEAM	, 2, 17, 214, 215, 0, 0
53. BEAM	, 1, 29, 30, 31, 0, 0	150. BEAM	, 2, 15, 81, 41, 0, 0	247. BEAM	, 2, 17, 215, 216, 0, 0
54. BEAM	, 1, 29, 31, 32, 0, 0	151. BEAM	, 2, 15, 41, 1, 0, 0	248. BEAM	, 2, 17, 216, 217, 0, 0
55. BEAM	, 1, 29, 32, 10, 0, 0	152. BEAM	, 1, 5, 81, 121, 0, 0	249. BEAM	, 2, 17, 217, 218, 0, 0
56. BEAM	, 1, 28, 10, 11, 0, 0	153. BEAM	, 1, 5, 121, 122, 0, 0	250. BEAM	, 2, 17, 218, 219, 0, 0
57. BEAM	, 1, 27, 11, 12, 0, 0	154. BEAM	, 1, 14, 122, 123, 0, 0	251. BEAM	, 2, 17, 219, 220, 0, 0
58. BEAM	, 1, 26, 12, 33, 0, 0	155. BEAM	, 1, 6, 123, 124, 0, 0	252. BEAM	, 2, 17, 220, 221, 0, 0
59. BEAM	, 1, 26, 33, 13, 0, 0	156. BEAM	, 1, 6, 124, 125, 0, 0	253. BEAM	, 2, 17, 221, 222, 0, 0
60. BEAM	, 1, 25, 13, 14, 0, 0	157. BEAM	, 1, 7, 125, 126, 0, 0	254. BEAM	, 2, 17, 222, 223, 0, 0
61. BEAM	, 1, 24, 14, 34, 0, 0	158. BEAM	, 1, 7, 126, 127, 0, 0	255. BEAM	, 2, 17, 223, 224, 0, 0
62. BEAM	, 1, 24, 34, 15, 0, 0	159. BEAM	, 1, 13, 127, 128, 0, 0	256. BEAM	, 2, 17, 224, 225, 0, 0
63. BEAM	, 1, 23, 15, 16, 0, 0	160. BEAM	, 1, 9, 128, 129, 0, 0	257. BEAM	, 2, 17, 225, 226, 0, 0
64. BEAM	, 1, 19, 16, 17, 0, 0	161. BEAM	, 1, 9, 129, 130, 0, 0	258. BEAM	, 2, 17, 226, 227, 0, 0
65. BEAM	, 1, 20, 17, 35, 0, 0	162. BEAM	, 1, 10, 130, 131, 0, 0	259. BEAM	, 2, 17, 227, 228, 0, 0
66. BEAM	, 1, 20, 35, 18, 0, 0	163. BEAM	, 1, 11, 131, 132, 0, 0	260. BEAM	, 2, 17, 228, 240, 0, 0
67. BEAM	, 1, 21, 18, 19, 0, 0	164. BEAM	, 1, 12, 132, 133, 0, 0	261. BEAM	, 2, 17, 229, 230, 0, 0
68. BEAM	, 1, 22, 19, 36, 0, 0	165. BEAM	, 1, 12, 133, 134, 0, 0	262. BEAM	, 2, 17, 230, 231, 0, 0
69. BEAM	, 1, 22, 36, 37, 0, 0	166. BEAM	, 1, 12, 134, 135, 0, 0	263. BEAM	, 2, 17, 231, 232, 0, 0
70. BEAM	, 1, 22, 37, 242, 0, 0	167. BEAM	, 1, 12, 135, 136, 0, 0	264. BEAM	, 2, 17, 232, 233, 0, 0
71. BEAM	, 1, 22, 38, 20, 0, 0	168. BEAM	, 1, 11, 136, 137, 0, 0	265. BEAM	, 2, 17, 233, 234, 0, 0
72. BEAM	, 1, 21, 20, 21, 0, 0	169. BEAM	, 1, 10, 137, 138, 0, 0	266. BEAM	, 2, 17, 234, 235, 0, 0
73. BEAM	, 1, 20, 21, 39, 0, 0	170. BEAM	, 1, 9, 138, 139, 0, 0	267. BEAM	, 2, 17, 235, 236, 0, 0
74. BEAM	, 1, 20, 39, 22, 0, 0	171. BEAM	, 1, 9, 139, 140, 0, 0	268. BEAM	, 2, 17, 236, 237, 0, 0
75. BEAM	, 1, 19, 22, 23, 0, 0	172. BEAM	, 1, 8, 140, 141, 0, 0	269. BEAM	, 2, 16, 134, 212, 0, 0
76. BEAM	, 1, 18, 23, 40, 0, 0	173. BEAM	, 1, 7, 141, 142, 0, 0	270. BEAM	, 2, 16, 212, 173, 0, 0
77. BEAM	, 1, 18, 40, 24, 0, 0	174. BEAM	, 1, 7, 142, 143, 0, 0	271. BEAM	, 2, 16, 158, 236, 0, 0
78. BEAM	, 1, 18, 24, 25, 0, 0	175. BEAM	, 1, 6, 143, 144, 0, 0	272. BEAM	, 2, 16, 236, 197, 0, 0
79. BEAM	, 2, 17, 41, 66, 0, 0	176. BEAM	, 1, 2, 144, 145, 0, 0	273. BEAM	, 2, 15, 157, 235, 0, 0
80. BEAM	, 2, 17, 66, 42, 0, 0	177. BEAM	, 1, 3, 145, 146, 0, 0	274. BEAM	, 2, 15, 235, 196, 0, 0
81. BEAM	, 2, 17, 42, 43, 0, 0	178. BEAM	, 1, 3, 146, 147, 0, 0	275. BEAM	, 2, 15, 154, 232, 0, 0
82. BEAM	, 2, 17, 43, 67, 0, 0	179. BEAM	, 1, 4, 147, 148, 0, 0	276. BEAM	, 2, 15, 232, 193, 0, 0
83. BEAM	, 2, 17, 67, 44, 0, 0	180. BEAM	, 1, 5, 148, 149, 0, 0	277. BEAM	, 2, 15, 151, 229, 0, 0
84. BEAM	, 2, 17, 44, 68, 0, 0	181. BEAM	, 1, 5, 149, 150, 0, 0	278. BEAM	, 2, 15, 229, 190, 0, 0
85. BEAM	, 2, 17, 68, 45, 0, 0	182. BEAM	, 1, 5, 150, 238, 0, 0	279. BEAM	, 2, 15, 150, 228, 0, 0
86. BEAM	, 2, 17, 45, 46, 0, 0	183. BEAM	, 1, 5, 151, 152, 0, 0	280. BEAM	, 2, 15, 228, 189, 0, 0
87. BEAM	, 2, 17, 46, 69, 0, 0	184. BEAM	, 1, 4, 152, 153, 0, 0	281. BEAM	, 2, 15, 149, 227, 0, 0
88. BEAM	, 2, 17, 69, 47, 0, 0	185. BEAM	, 1, 3, 153, 154, 0, 0	282. BEAM	, 2, 15, 227, 188, 0, 0
89. BEAM	, 2, 17, 47, 48, 0, 0	186. BEAM	, 1, 3, 154, 155, 0, 0	283. BEAM	, 2, 15, 146, 224, 0, 0
90. BEAM	, 2, 17, 48, 49, 0, 0	187. BEAM	, 1, 2, 155, 156, 0, 0	284. BEAM	, 2, 15, 224, 185, 0, 0
91. BEAM	, 2, 17, 49, 70, 0, 0	188. BEAM	, 1, 1, 156, 157, 0, 0	285. BEAM	, 2, 15, 142, 220, 0, 0
92. BEAM	, 2, 17, 70, 71, 0, 0	189. BEAM	, 1, 1, 157, 158, 0, 0	286. BEAM	, 2, 15, 220, 181, 0, 0
93. BEAM	, 2, 17, 71, 72, 0, 0	190. BEAM	, 1, 1, 158, 159, 0, 0	287. BEAM	, 2, 15, 139, 217, 0, 0
94. BEAM	, 2, 17, 72, 50, 0, 0	191. BEAM	, 1, 22, 1, 160, 0, 0	288. BEAM	, 2, 15, 217, 178, 0, 0
95. BEAM	, 2, 17, 50, 51, 0, 0	192. BEAM	, 1, 22, 160, 161, 0, 0	289. BEAM	, 2, 15, 135, 213, 0, 0
96. BEAM	, 2, 17, 51, 52, 0, 0	193. BEAM	, 1, 30, 161, 162, 0, 0	290. BEAM	, 2, 15, 213, 174, 0, 0
97. BEAM	, 2, 17, 52, 73, 0, 0	194. BEAM	, 1, 23, 162, 163, 0, 0	291. BEAM	, 2, 15, 133, 211, 0, 0
98. BEAM	, 2, 17, 73, 53, 0, 0	195. BEAM	, 1, 23, 163, 164, 0, 0	292. BEAM	, 2, 15, 211, 172, 0, 0
99. BEAM	, 2, 17, 53, 54, 0, 0	196. BEAM	, 1, 24, 164, 165, 0, 0	293. BEAM	, 2, 15, 129, 207, 0, 0
100. BEAM	, 2, 17, 54, 74, 0, 0	197. BEAM	, 1, 24, 165, 166, 0, 0	294. BEAM	, 2, 15, 207, 168, 0, 0
101. BEAM	, 2, 17, 74, 55, 0, 0	198. BEAM	, 1, 31, 166, 167, 0, 0	295. BEAM	, 2, 15, 126, 204, 0, 0
102. BEAM	, 2, 17, 55, 56, 0, 0	199. BEAM	, 1, 26, 167, 168, 0, 0	296. BEAM	, 2, 15, 204, 165, 0, 0
103. BEAM	, 2, 17, 56, 57, 0, 0	200. BEAM	, 1, 26, 168, 169, 0, 0	297. BEAM	, 2, 15, 124, 202, 0, 0
104. BEAM	, 2, 17, 57, 75, 0, 0	201. BEAM	, 1, 27, 169, 170, 0, 0	298. BEAM	, 2, 15, 202, 163, 0, 0
105. BEAM	, 2, 17, 75, 58, 0, 0	202. BEAM	, 1, 28, 170, 171, 0, 0	299. BEAM	, 2, 15, 121, 199, 0, 0
106. BEAM	, 2, 17, 58, 59, 0, 0	203. BEAM	, 1, 29, 171, 172, 0, 0	300. BEAM	, 2, 15, 199, 160, 0, 0
107. BEAM	, 2, 17, 59, 76, 0, 0	204. BEAM	, 1, 29, 172, 173, 0, 0	301. BEAM	, 2, 15, 81, 41, 0, 0
108. BEAM	, 2, 17, 76, 77, 0, 0	205. BEAM	, 1, 29, 173, 174, 0, 0	302. BEAM	, 2, 15, 41, 1, 0, 0
109. BEAM	, 2, 17, 77, 243, 0, 0	206. BEAM	, 1, 29, 174, 175, 0, 0	303. BEAM	, 1, 5, 238, 151, 0, 0
110. BEAM	, 2, 17, 78, 60, 0, 0	207. BEAM	, 1, 28, 175, 176, 0, 0	304. BEAM	, 1, 22, 239, 190, 0, 0
111. BEAM	, 2, 17, 60, 61, 0, 0	208. BEAM	, 1, 27, 176, 177, 0, 0	305. BEAM	, 2, 17, 240, 229, 0, 0
112. BEAM	, 2, 17, 61, 79, 0, 0	209. BEAM	, 1, 26, 177, 178, 0, 0	306. BEAM	, 1, 5, 241, 118, 0, 0
113. BEAM	, 2, 17, 79, 62, 0, 0	210. BEAM	, 1, 26, 178, 179, 0, 0	307. BEAM	, 1, 22, 242, 38, 0, 0
114. BEAM	, 2, 17, 62, 63, 0, 0	211. BEAM	, 1, 25, 179, 180, 0, 0	308. BEAM	, 2, 17, 243, 78, 0, 0
115. BEAM	, 2, 17, 63, 80, 0, 0	212. BEAM	, 1, 24, 180, 181, 0, 0	*MATERIAL : Material	

```
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA1] : STEEL, CONC,
USER
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA2], [DATA2] : SRC
: [DATA1] : 1, DB, NAME, CODE
: [DATA1] : 2, ELAST, POISN, THERMAL, DEN, MASS
: [DATA1] : 3, Ex, Ey, Ez, Tx, Ty, Tz, Sxy, Sxz, Syz,
Pxy, Pxz, Pyz, DEN, MASS : Orthotropic
: [DATA2] : 1, DB, NAME, CODE or 2, ELAST, POISN,
THERMAL, DEN, MASS
1, STEEL, SM490 , 0, 0, , C, NO, 0.02,
1, KS10-Civil(S), , SM490
2, STEEL, SM400 , 0, 0, , C, NO, 0.02,
1, KS10-Civil(S), , SM400
*MATL-COLOR
: iMAT, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
2, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
*SECTION : Section
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, ICEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERLOUT,
PERLIN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
DB, NAME1, NAME2
: 2nd line(STYPE=DB)
: [DIM1], [DIM2]
: 2nd line(STYPE=USER)
: D11, D12, D13, D14, D15, D16, D17, D18
: 2nd line(STYPE=VALUE)
: AREA1, ASy1, ASz1, lxx1, lyy1, lzz1
: 3rd line(STYPE=VALUE)
: CyP1, CyM1, CzP1, CzM1, QyB1, QzB1,
PERLOUT1, PERLIN1, Cy1, Cz1 : 4th
line(STYPE=VALUE)
: Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1,
Zyy2 : 5th line(STYPE=VALUE)
: D21, D22, D23, D24, D25, D26, D27, D28
: 6th line(STYPE=VALUE)
: AREA2, ASy2, ASz2, lxx2, lyy2, lzz2
: 7th line(STYPE=VALUE)
: CyP2, CyM2, CzP2, CzM2, QyB2, QzB2,
PERLOUT2, PERLIN2, Cy2, Cz2 : 8th
line(STYPE=VALUE)
: Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2,
Zzz2 : 9th line(STYPE=VALUE)
: OPT1, OPT2, [JOINT]
: 2nd line(STYPE=PSC)
: ELAST, DEN, POIS, POIC, THERMAL
: 2nd line(STYPE=PSC-CMPW)
: bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I],
[WT-J], WI, WJ, bSYM, bSIDEHOLE : 3rd
line(STYPE=PSC)
: bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I],
[CMPWEB-J] : 3rd
line(STYPE=PSC-CMPW)
: bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF,
[STIFF-I], [STIFF-J] : 4th line(STYPE=PSC)
: [SIZE-A]-I
: 5th line(STYPE=PSC)
: [SIZE-B]-I
: 6th line(STYPE=PSC)
: [SIZE-C]-I
: 7th line(STYPE=PSC)
: [SIZE-D]-I
: 8th line(STYPE=PSC)
: 9th line(STYPE=PSC)
: 10th line(STYPE=PSC)
: [SIZE-C]-J
: 11th line(STYPE=PSC)
: [SIZE-D]-J
: 12th line(STYPE=PSC)
: GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMULTI, EsEc-L, EsEc-S : 2nd
line(STYPE=CMP-B/I)
: SW_I, Hw_I, tw_I, B_I, Bf1_I, tf1_I, B2_I, Bf2_I,
```

```
: 3rd line(STYPE=CMP-B/I)
: SW_J, Hw_J, tw_J, B_J, Bf1_J, tf1_J, B2_J, Bf2_J,
tf2_J : 4th line(STYPE=CMP-B/I)
: N1, N2, Hr, Hr2, tr1, tr2
: 5th line(STYPE=CMP-B)
: GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb, Pgd,
Psb, bSYM, SW_J, SW_I : 2nd
line(STYPE=CMP-CI/CT)
: OPT1, OPT2, [JOINT]
: 3rd line(STYPE=CMP-CI/CT)
: [SIZE-A]-I
: 4th line(STYPE=CMP-CI/CT)
: [SIZE-B]-I
: 5th line(STYPE=CMP-CI/CT)
: [SIZE-C]-I
: 6th line(STYPE=CMP-CI/CT)
: [SIZE-D]-I
: 7th line(STYPE=CMP-CI/CT)
: [SIZE-A]-J
: 8th line(STYPE=CMP-CI/CT)
: [SIZE-B]-J
: 9th line(STYPE=CMP-CI/CT)
: [SIZE-C]-J
: 10th line(STYPE=CMP-CI/CT)
: [SIZE-D]-J
: iSEC, TYPE, SNAME, [OFFSET], bSD, STYPE1, STYPE2
: 1st line - CONSTRUCT
SHAPE, ...(same with other type data from shape)
: Before (STYPE1)
SHAPE, ...(same with other type data from shape)
: After (STYPE2)
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SB
: Hw, tw, B, Bf1, tf1, B2, Bf2, tf2
: 2nd line
: N1, N2, Hr, Hr2, tr1, tr2
: 3rd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SI
: Hw, tw, B, tf1, B2, tf2
: 2nd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 3rd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-CI/CT
: OPT1, OPT2, [JOINT]
: 2nd line
: [SIZE-A]
: 3rd line
: [SIZE-B]
: 4th line
: [SIZE-C]
: 5th line
: [SIZE-D]
: 6th line
: SW, GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb,
Pgd, Psb : 7th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - PSC
: OPT1, OPT2, [JOINT]
: 2nd line
: bSHEARCHK, [SCHK], [WT], WIDTH, bSYM,
bSIDEHOLE : 3rd line
: bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF,
[STIFF] : 4th line
: [SIZE-A]
: 5th line
: [SIZE-B]
: 6th line
: [SIZE-C]
: 7th line
: [SIZE-D]
: 8th line
: [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6,
D7, D8, D9, D10
: [DATA2] : CCSHAPE or ICEL or IN1, IN2
: [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4,
D5, D6, D7, D8, D9, D10, IN1, IN2
: [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
: [OFFSET] : OFFSET, ICENT, IREF, IHORZ, HUSER,
IVERT, VUSER
: [OFFSET2]: OFFSET, ICENT, IREF, IHORZ, HUSERI,
HUSERJ, IVERT, VUSERI, VUSERJ
: [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM),
8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL), 2(nCEL2)
: [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM),
6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL), 11(nCEL2)
: [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM),
6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL), 18(nCEL2)
: [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM),
10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL), 11(nCEL2)
: [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM),
7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL), 18(nCEL2)
: [STIFF] : AREA, ASy, ASz, lxx, lyy, lzz
```

```
: [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3
: [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1,
bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3
: [CMPWEB] : EFD, LRF, A, B, H, T
1, COMPOSITE , G1-1 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.01
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.41667, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
2, COMPOSITE , G1-2 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.014
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
3, COMPOSITE , G1-3 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.014
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
4, COMPOSITE , G1-4 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.016
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
5, COMPOSITE , G1-5 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.014, 2.5, 0.1, 0.016
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
6, COMPOSITE , G1-6 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
8, COMPOSITE , G1-8 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02
1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
7, COMPOSITE , G1-7 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012
1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
8, COMPOSITE , G1-8 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02
1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
```


[illegible]

[illegible]

NAME=L1, LANE, , 0, 0, BOTH, 3, 1.8, NO	0.166667, NO, 0	NO, 0
190, -0.19, 0.166667, YES, 0, 189, -0.19,	253, -1.355, 0.166667, NO, 0, 252, -1.355,	198, -0.79, 0.15, NO, 0, 197, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
188, -0.19, 0.166667, NO, 0, 187, -0.19,	251, -1.355, 0.166667, NO, 0, 250, -1.355,	196, -0.79, 0.15, NO, 0, 195, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
186, -0.19, 0.166667, NO, 0, 185, -0.19,	249, -1.355, 0.166667, NO, 0, 248, -1.355,	194, -0.79, 0.15, NO, 0, 193, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
184, -0.19, 0.166667, NO, 0, 183, -0.19,	247, -1.355, 0.166667, NO, 0, 246, -1.355,	192, -0.79, 0.15, NO, 0, 191, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
303, -0.19, 0.166667, NO, 0, 182, -0.19,	245, -1.355, 0.166667, NO, 0, 244, -1.355,	40, -0.79, 0.15, NO, 0, 41, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
181, -0.19, 0.166667, NO, 0, 180, -0.19,	243, -1.355, 0.15, NO, 0, 242, -1.355, 0.15,	42, -0.79, 0.15, NO, 0, 43, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
179, -0.19, 0.166667, NO, 0, 178, -0.19,	241, -1.355, 0.15, NO, 0, 240, -1.355, 0.15,	44, -0.79, 0.15, NO, 0, 45, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
177, -0.19, 0.166667, NO, 0, 176, -0.19,	239, -1.355, 0.15, NO, 0, 238, -1.355, 0.15,	46, -0.79, 0.15, NO, 0, 47, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
175, -0.19, 0.166667, NO, 0, 174, -0.19,	237, -1.355, 0.15, NO, 0, 236, -1.355, 0.15,	48, -0.79, 0.15, NO, 0, 49, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
173, -0.19, 0.166667, NO, 0, 172, -0.19,	235, -1.355, 0.15, NO, 0, 234, -1.355, 0.15,	50, -0.79, 0.15, NO, 0, 51, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
171, -0.19, 0.166667, NO, 0, 170, -0.19,	233, -1.355, 0.15, NO, 0, 232, -1.355, 0.15,	52, -0.79, 0.15, NO, 0, 53, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
169, -0.19, 0.166667, NO, 0, 168, -0.19,	231, -1.355, 0.15, NO, 0, 230, -1.355, 0.15,	54, -0.79, 0.166667, NO, 0, 55, -0.79,
0.166667, NO, 0	NO, 0	0.166667, NO, 0
167, -0.19, 0.166667, NO, 0, 166, -0.19,	79, -1.355, 0.15, NO, 0, 80, -1.355, 0.15,	56, -0.79, 0.166667, NO, 0, 57, -0.79,
0.166667, NO, 0	NO, 0	0.166667, NO, 0
165, -0.19, 0.15, NO, 0, 164, -0.19, 0.15,	81, -1.355, 0.15, NO, 0, 82, -1.355, 0.15,	58, -0.79, 0.166667, NO, 0, 59, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
163, -0.19, 0.15, NO, 0, 162, -0.19, 0.15,	83, -1.355, 0.15, NO, 0, 84, -1.355, 0.15,	60, -0.79, 0.166667, NO, 0, 61, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
161, -0.19, 0.15, NO, 0, 160, -0.19, 0.15,	85, -1.355, 0.15, NO, 0, 86, -1.355, 0.15,	62, -0.79, 0.166667, NO, 0, 63, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
159, -0.19, 0.15, NO, 0, 158, -0.19, 0.15,	87, -1.355, 0.15, NO, 0, 88, -1.355, 0.15,	64, -0.79, 0.166667, NO, 0, 65, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
157, -0.19, 0.15, NO, 0, 156, -0.19, 0.15,	89, -1.355, 0.15, NO, 0, 90, -1.355, 0.15,	66, -0.79, 0.166667, NO, 0, 67, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
155, -0.19, 0.15, NO, 0, 154, -0.19, 0.15,	91, -1.355, 0.15, NO, 0, 92, -1.355, 0.15,	68, -0.79, 0.166667, NO, 0, 69, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
153, -0.19, 0.15, NO, 0, 152, -0.19, 0.15,	93, -1.355, 0.166667, NO, 0, 94, -1.355,	70, -0.79, 0.166667, NO, 0, 307, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
1, -0.19, 0.15, NO, 0, 2, -0.19, 0.15,	95, -1.355, 0.166667, NO, 0, 96, -1.355,	71, -0.79, 0.166667, NO, 0, 72, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
3, -0.19, 0.15, NO, 0, 4, -0.19, 0.15,	97, -1.355, 0.166667, NO, 0, 98, -1.355,	73, -0.79, 0.166667, NO, 0, 74, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
5, -0.19, 0.15, NO, 0, 6, -0.19, 0.15,	99, -1.355, 0.166667, NO, 0, 100, -1.355,	75, -0.79, 0.166667, NO, 0, 76, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
7, -0.19, 0.15, NO, 0, 8, -0.19, 0.15,	101, -1.355, 0.166667, NO, 0, 102, -1.355,	77, -0.79, 0.166667, NO, 0, 78, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
9, -0.19, 0.15, NO, 0, 10, -0.19, 0.15,	103, -1.355, 0.166667, NO, 0, 104, -1.355,	*VEHICLE : Vehicles
NO, 0	0.166667, NO, 0	: if Moving Load Code is China
11, -0.19, 0.15, NO, 0, 12, -0.19, 0.15,	105, -1.355, 0.166667, NO, 0, 106, -1.355,	: NAME=NAME, 1, TYPE=NAME, CODE
NO, 0	0.166667, NO, 0	: : standard
13, -0.19, 0.15, NO, 0, 14, -0.19, 0.15,	107, -1.355, 0.166667, NO, 0, 108, -1.355,	: NAME=NAME, 2, LTYPE, [TRUCK/LANE] or
NO, 0	0.166667, NO, 0	[TRAIN/SUBWAY] or [CROWD] : user: line 1
15, -0.19, 0.166667, NO, 0, 16, -0.19,	109, -1.355, 0.166667, NO, 0, 308, -1.355,	: LOAD1, DIST1, LOAD2, DIST2, ...
0.166667, NO, 0	0.166667, NO, 0	: : user: from line 2
17, -0.19, 0.166667, NO, 0, 18, -0.19,	110, -1.355, 0.166667, NO, 0, 111, -1.355,	: [TRUCK/LANE] : 1, P, Qm, Qq
0.166667, NO, 0	0.166667, NO, 0	: : truck(JTG)
19, -0.19, 0.166667, NO, 0, 20, -0.19,	112, -1.355, 0.166667, NO, 0, 113, -1.355,	: [TRUCK/LANE] : 2, P, Qm, Qq
0.166667, NO, 0	0.166667, NO, 0	: : lane load1
21, -0.19, 0.166667, NO, 0, 22, -0.19,	114, -1.355, 0.166667, NO, 0, 115, -1.355,	: [TRUCK/LANE] : 3, Qk, Pk1, L1, Pk2, L2
0.166667, NO, 0	0.166667, NO, 0	: : lane load2
23, -0.19, 0.166667, NO, 0, 24, -0.19,	116, -1.355, 0.166667, NO, 0, 117, -1.355,	: [TRUCK/LANE] : 4, dW, dD
0.166667, NO, 0	0.166667, NO, 0	: : crawler type
25, -0.19, 0.166667, NO, 0, 26, -0.19,	NAME=L3, LANE, , 0, 0, BOTH, 3, 1.8, NO	: [TRUCK/LANE] : 5
0.166667, NO, 0	229, -0.79, 0.166667, YES, 0, 228, -0.79,	: : GC type load
27, -0.19, 0.166667, NO, 0, 28, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : ITYPE, W1, D1, W2, D2
0.166667, NO, 0	227, -0.79, 0.166667, NO, 0, 226, -0.79,	: : train-type1,3
29, -0.19, 0.166667, NO, 0, 30, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : ITYPE, DD, FD, BD, MAINCOUNT
0.166667, NO, 0	225, -0.79, 0.166667, NO, 0, 224, -0.79,	: : train-type2
31, -0.19, 0.166667, NO, 0, 306, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : 4, P1, P2, D2, P3, D3, P4, dD,
0.166667, NO, 0	223, -0.79, 0.166667, NO, 0, 222, -0.79,	Po, n, IFR : subway
32, -0.19, 0.166667, NO, 0, 33, -0.19,	0.166667, NO, 0	: [CROWD] : 1, dW1
0.166667, NO, 0	304, -0.79, 0.166667, NO, 0, 221, -0.79,	: : crowd-type1
34, -0.19, 0.166667, NO, 0, 35, -0.19,	0.166667, NO, 0	: [CROWD] : 2, dW1, dL1, dW2, dL2, WIDTH
0.166667, NO, 0	220, -0.79, 0.166667, NO, 0, 219, -0.79,	: : crowd-type2
36, -0.19, 0.166667, NO, 0, 37, -0.19,	0.166667, NO, 0	: if Moving Load Type is India
0.166667, NO, 0	218, -0.79, 0.166667, NO, 0, 217, -0.79,	: NAME=NAME, 1, TYPE=NAME, CODE
38, -0.19, 0.166667, NO, 0, 39, -0.19,	0.166667, NO, 0	: : standard
0.166667, NO, 0	216, -0.79, 0.166667, NO, 0, 215, -0.79,	: NAME=NAME, 2, bWTB, P, D, Pb, Db, dD1, dD2, NDIST
NAME=L2, LANE, , 0, 0, BOTH, 3, 1.8, NO	0.166667, NO, 0	: : user: line 1
268, -1.355, 0.166667, YES, 0, 267, -1.355,	214, -0.79, 0.166667, NO, 0, 213, -0.79,	: NAME=NAME, 2, bWTB, dD1, dD2, NDIST
0.166667, NO, 0	0.166667, NO, 0	: : user: line 1
266, -1.355, 0.166667, NO, 0, 265, -1.355,	212, -0.79, 0.166667, NO, 0, 211, -0.79,	: LOAD1, DIST1, LOAD2, DIST2, ...
0.166667, NO, 0	0.166667, NO, 0	: : user: from line 2
264, -1.355, 0.166667, NO, 0, 263, -1.355,	210, -0.79, 0.166667, NO, 0, 209, -0.79,	: if Moving Load Code is CANADA
0.166667, NO, 0	0.166667, NO, 0	: NAME=NAME, 1, TYPE=NAME, DLA, CODE, [DYNA]
262, -1.355, 0.166667, NO, 0, 261, -1.355,	208, -0.79, 0.166667, NO, 0, 207, -0.79,	: : standard
0.166667, NO, 0	0.166667, NO, 0	: NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2),
305, -1.355, 0.166667, NO, 0, 260, -1.355,	206, -0.79, 0.166667, NO, 0, 205, -0.79,	PLV(D2), NDIST, [DYNA] : user: line 1
0.166667, NO, 0	0.166667, NO, 0	: LOAD1, DIST1, LOAD2, DIST2, ...
259, -1.355, 0.166667, NO, 0, 258, -1.355,	204, -0.79, 0.15, NO, 0, 203, -0.79, 0.15,	: : user: from line 2
0.166667, NO, 0	NO, 0	: [DYNA] : nDYNA, FACT1AXLE, FACT2AXLE, FACT3AXLE
257, -1.355, 0.166667, NO, 0, 256, -1.355,	202, -0.79, 0.15, NO, 0, 201, -0.79, 0.15,	: : Dynamic Load Allowance
0.166667, NO, 0	NO, 0	: if Moving Load Code is BS
255, -1.355, 0.166667, NO, 0, 254, -1.355,	200, -0.79, 0.15, NO, 0, 199, -0.79, 0.15,	: NAME=NAME, 1, TYPE=NAME, CODE, UNITNUM

```

; standard
: NAME=nLane, FACTOR1, FACTOR2, FACTOR3, FACTOR4
; HA, HA & HB, HA & HB(Auto)
: NAME=NAME, 2, ISTYPE, W1, W2, W3, L, Pa, Pb, D1,
D2, d, UNITNUM ; user(BS 5400)
; NAME=NAME, 2, ISTYPE, [BD37/01-HA],
[BS-DATA-LF] ; user(HA)
: NAME=NAME, 2, ISTYPE, [BS-DATA-HB]
; user(HB)
: NAME=NAME, 2, ISTYPE, [BD37/01-HA2],
[BS-DATA-HB2], [BS-DATA-LF] ; user(HA&HB)
: NAME=NAME, 2, ISTYPE, [BD37/01-HA],
[BD37/01-HB], [BS-DATA-LF] ;
user(HA&HB(AUTO))
: NAME=NAME, 2, ISTYPE, W, L
; user(Pedestrian)
: NAME=NAME, 2, ISTYPE, V, AN, MINS, MAXS, P1, D1,
P2, D2, ... ; user(Special Vehicle)
: [BS-DATA-HA] : W1, W2, W3, EXP, EXP2, L1, L2, Pa
: [BS-DATA-HA2] : W1, W2, W3, EXP, EXP2, L1, L2
: [BS-DATA-HB] : Pb, D1, D2, d, UNITNUM
: [BS-DATA-HB2] : Pb, D1, D2, d, dd, UNITNUM
: [BS-DATA-LF] : nLT, LF1, LF2, LF3, LF4
; if Moving Load Code is EUROCODE
: NAME=NAME, 1, ITYPE, TYPE=NAME, PSY1, PSY2, PHI,
[AF7] ; standard (LM1, FLM1)
: NAME=NAME, 1, ITYPE, TYPE=NAME, bDF, bU, PHI,
PSY, ADJ, IN ; standard (others)
: NAME=NAME, 2, 1, [AF7]
; user(Type 1)
: [LOAD7], D, PHI, TPSY, UPSY
; user(Type 1): line 2
: NAME=NAME, 2, 2, ALP, TPSY, W, BET, LPSY, P1, D1,
P2, D2, ... ; user(Type 2)
: NAME=NAME, 2, 3
; user(Type 3)
: [LOADCASE1]
; user(Type 3): line 2
: [LOADCASE2]
; user(Type 3): line 3
: [LOADCASE3]
; user(Type 3): line 4
: NAME=NAME, 2, 4, WS, V, AN, MINS, MAXS, DYF, UI,
F, P1, D1, P2, D2, ... ; user(Type 4)
: NAME=NAME, 2, 5, INT, bPHI1, PHI1, bPHI2, PHI2
; user(Type 5)
: [VEHICLE1]
; user(Type 5): line 2
: [VEHICLE2]
; user(Type 5): line 3
: [VEHICLE3]
; user(Type 5): line 4
: [AF7] : TF1, TF2, TF3, UF1, UF2, UF3, UF4
; adjustment factor
: [LOAD7] : TL1, TL2, TL3, UL1, UL2, UL3, UL4
; tandem/udl loads
: [LOADCASE] : bUSE, N, bDF, bUI, PHI, P1, L1, P2, L2,
... ; load case
: [VEHICLE] : bUSE, N, P1, L1, P2, L2, ...
; vehicle
; if Moving Load Code is RUSSIA
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (SK)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (SK
FATIGUE)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
dDYNAFAC_UDL
; bFATI, nLOADFAC, dLOADFAC,
dLOADFAC_UDL, s1, s1_UDL ; standard (AK)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC,
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; standard (N14)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC,
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; standard (N11)
: NAME=NAME, 1, ITYPE, nDYNAFAC, dDYNAFAC,
dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; standard (SUBWAY TRAINS)
: NAME=NAME, 1, ITYPE, VARIABLE, nDYNAFAC,
dDYNAFAC, dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; standard (TRAMCARS)
: NAME=NAME, 1, ITYPE, nDYNAFAC, dDYNAFAC, bFATI,
nLOADFAC, dLOADFAC ; standard (NK-80)
: NAME=NAME, 1, ITYPE, W, D, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (NG-60)
: NAME=NAME, 1, ITYPE, BRIDGETYPE, W, bFATI,
nLOADFAC, dLOADFAC ; standard (UNIFORM
LOAD)
: NAME=NAME, 1, ITYPE, BRIDGETYPE, W, bFATI,
nLOADFAC, dLOADFAC ; standard (UNIFORM
LOAD(W/O OTHER LOADS))
: NAME=NAME, 1, ITYPE, BRIDGETYPE, P

```

```

; standard (CONCENTRATED LOAD
(W/O OTHER LOADS))
: NAME=NAME, 2, ITYPE, W, nDYNAFAC, dDYNAFAC,
dDYNAFAC_UDL
; bFATI, nLOADFAC, dLOADFAC,
dLOADFAC_UDL, s1, s1_UDL ; user (Type 1)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; user (Type 2)
: NAME=NAME, 2, ITYPE, Variable, nDYNAFAC,
dDYNAFAC, dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; user (Type 3)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC
;
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; user (Type 4)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC
;
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; user (Type 5)
: NAME=NAME, 2, ITYPE, W, D, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; user (Type 6)
: NAME=NAME, 2, ITYPE, P, W, bFATI, nLOADFAC,
dLOADFAC ; user (Type 7)
; if Moving Load Code is KSCE-LSD15
: NAME=NAME, 1, TYPE=NAME, nLANETYPE, dDYNAFAC,
CODE ; standard
: NAME=NAME, 2, 8, L1, W1, W2, EXP
; user: line 1 (Type 1)
: NAME=NAME, 2, 1, W1, W2, D1, D2
; user: line 1 (Type 2)
: NAME=NAME, 2, 6, LOADNUM, DIST, W, L
; user: line 1 (Type 3)
: LOAD1, DIST1, LOAD2, DIST2, ...
; user: from line 2
; if Moving Load Code is AASHTO LRFD, CANADA and
Load Type is Permit Truck
: NAME=NAME, 3, AXLE=TYPE=NUM, IMP=FACTOR
; user(Permit Truck)
: AXLE=TYPE=NAME1, bEDWL1, bSV1, P1, D1, P2,
D2, ..., Pn, Dn ; user(from line 2)
;
: AXLE=TYPE=NAMEn, bEDWLn, bSVn, P1, D1, P2,
D2, ..., Pn, Dn
: AXLE=TYPE1, SPACING1, bVS1, AXLE=TYPE2,
SPACING2, bVS2 ... ; line 2+AXLE=TYPE=NUM
; if Moving Load Code is not one of those specified
above.
: NAME=NAME, 1, TYPE=NAME, DLA, CODE
; standard
: NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2),
PLV(D2), NDIST ; user: line 1
: LOAD1, DIST1, LOAD2, DIST2, ...
; user: from line 2
NAME=DB-24, 1, DB-24, 0, KS-RB
NAME=DL-24, 1, DL-24, 0, KS-RB
*MVLDLDCASE : Moving Load Cases
: NAME=NAME, bLCPV, SCALE1, SCALE2, SCALE3,
SCALE4, SCALE5, SCALE6, COMB, DESC, LCOM, SERIAL
; 1st line
: nLTYPE, 2LFACTOR1, 2LFACTOR2, 3LFACTOR1,
3LFACTOR2, 3LFACTOR3, 3LFACTOR4
; 2st line
: TYPE1, VCLASS1, SCALE1, iMIN1, iMAX1, LANE11,
LANE12, ... ; 3nd line
;
; TYPEEn, VCLASSn, SCALEn, iMINn, iMAXn, LANEn1,
LANEn2, ... ; n+1th line
: NAME=NAME, bLCPV, VEHICLE, REFLANE, ECCEN,
SCALE, DESC
; Permit
NAME=활하중, NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 1
1, 1, 1, 1, 1, 0.5, 0.25
VL, DB-24, 1, 1, 3, L1, L2, L3
VL, DL-24, 1, 1, 3, L1, L2, L3
NAME=화하중(BD), NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 2
1, 1, 1, 1, 1, 0.5, 0.25
VL, DB-24, 1, 1, 3, L1, L2, L3
NAME=활하중(DL), NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 3
1, 1, 1, 1, 1, 0.5, 0.25
VL, DL-24, 1, 1, 3, L1, L2, L3
*SM-GROUP : Settlement Group
: GRNAME, DISPLACEMENT, NODE_LIST
A1, -0.01, 158 197

```

```

P1, -0.01, 134 173
P2, -0.01, 31 111
A2, -0.01, 24 104
*SMLDCASE : Settlement Load Cases
: NAME=NAME, iSMIN, iSMAX, SCALE, DESC ; line 1
; GRNAME1, GRNAME2, ... ; from line 2
NAME=지점침하, 1, 3, 1,
A1, P1, P2, A2
*LOADCOMB : Combinations
: NAME=NAME, KIND, ACTIVE, bES, ITYPE, DESC,
ISERV=TYPE, nLCOMTYPE ; line 1
; ANAL1, LCNAME1, FACT1, ...
; from line 2
NAME=활성전, GEN, ACTIVE, 0, 0, , 0, 0
ST, 자중, 1, ST, 슬래브하중, 1
NAME=활성후, GEN, ACTIVE, 0, 0, , 0, 0
ST, "포장, 방호벽 하중", 1
NAME=고정하중, GEN, ACTIVE, 0, 0, , 0, 0
CB, 활성전, 1, CB, 활성후, 1
*LC-COLOR : Diagram Color for Load Case
: ANAL, LCNAME, iR1(ALL), iG1(ALL), iB1(ALL), iR2(MIN),
iG2(MIN), iB2(MIN), iR3(MAX), iG2(MAX), iB2(MAX)
ST, 자중, 255, 192, 160, 85, 192, 0, 255, 87, 87
ST, 슬래브하중, 160, 192, 255, 255, 255, 87, 0, 128, 57
ST, "포장, 방호벽 하중", 192, 192, 192, 160, 255, 255,
0, 157, 192
ST, 단위모멘트, 146, 0, 255, 255, 255, 255, 93, 255, 87
MV, 활하중, 255, 0, 192, 255, 87, 128, 255, 192, 160
CB, 활성전, 148, 87, 255, 148, 87, 255, 146, 0, 255
CB, 활성후, 255, 255, 87, 78, 0, 255, 0, 128, 255
SM, 지점침하, 128, 192, 0, 212, 160, 255, 93, 255, 87
MV, 화하중(BD), 255, 0, 128, 0, 128, 128, 255, 192, 87
MV, 활하중(DL), 160, 192, 255, 0, 192, 128, 255, 87, 87
CB, 고정하중, 192, 0, 192, 163, 160, 255, 160, 255, 255
*DGN-MATL : Modify Steel(Concrete) Material
: iMAT, TYPE, MNAME, [DATA1]
; STEEL
: iMAT, TYPE, MNAME, [DATA2], [R-DATA], FCI, bSERV,
SHORT, LONG ; CONC
: iMAT, TYPE, MNAME, [DATA3], [DATA2], [R-DATA]
; SRC
: iMAT, TYPE, MNAME, [DATA5]
; STEEL(None) & KSCE-ASD05
: [DATA1] : 1, DB, CODE, NAME or 2, ELAST, POISN,
FU, FY1, FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV, AFV2,
AFV3
: [DATA2] : 1, DB, CODE, NAME or 2, FC, CHK,
LAMBD A
: [DATA3] : 1, DB, CODE, NAME or 2, ELAST, FU, FY1,
FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV,
AFV2, AFV3
: [DATA4] : 1, DB, CODE, NAME or 2, FC
: [DATA5] : 3, ELAST, POISN, AL1, AL2, AL3, AL4, AL5,
AL6, AL7, AL8, AL9, AL10
; MIN1, MIN2, MIN3
: [R-DATA]: RBCODE, RBMAIN, RBSUB, FY(R), FYS
1, STEEL, SM490 , 1, KS10-Civil(S),
, SM490 , 1, KS01-Civil(RC),
, , , 0, 0, NO.0.0000e+000, 0., 0, 0, 0, 0,
0.0, 0, 0.0, 0, 0.0, 0, 0.0000e+000, 0., 0, 0.0, 0,
0.0, 0, 0.0, 0, 0.0, 0, 0.0000e+000, 0., 0, 0.0, 0,
0.0, 0, 0.0, 0, 0.0, 0,
2, STEEL, SM400 , 1, KS10-Civil(S),
, SM400 , 1, KS01-Civil(RC),
, , , 0, 0, NO.0.0000e+000, 0., 0, 0.0, 0, 0,
0.0, 0, 0.0, 0, 0.0, 0, 0.0000e+000, 0., 0, 0.0, 0,
0.0, 0, 0.0, 0, 0.0, 0, 0.0000e+000, 0., 0, 0.0, 0,
0.0, 0, 0.0, 0, 0.0, 0,
*SECTION MANAGER-GROUP & PART : Section
Manager - Group & Part
: SECT = NO, bSAMEJ
; line 1
: GRPDISIZE, GRPDJSIZE, PARTISIZE, PARTJSIZE
; line 2
;
; LOOP UTIL (GRPDISIZE, GRPDJSIZE)
;
: GROUPID, GROUPNAME, GROUPTYPE
; line n
;
; LOOP UTIL (PARTISIZE, PARTJSIZE)
;
: PARTTYPE, GROUPID, PARTNAME, PARTSHAPE,
bSTIFFENER ; line n
; LINESIZE, LINEINDEX[i].....
; line n
;
SECT=1, YES
0, 0, 0, 0
SECT=2, YES
0, 0, 0, 0
SECT=3, YES

```

```

0, 0, 0, 0
  SECT=4, YES
0, 0, 0, 0
  SECT=5, YES
0, 0, 0, 0
  SECT=6, YES
0, 0, 0, 0
  SECT=7, YES
0, 0, 0, 0
  SECT=8, YES
0, 0, 0, 0
  SECT=9, YES
0, 0, 0, 0
  SECT=10, YES
0, 0, 0, 0
  SECT=11, YES
0, 0, 0, 0
  SECT=12, YES
0, 0, 0, 0
  SECT=13, YES
0, 0, 0, 0
  SECT=14, YES
0, 0, 0, 0
  SECT=18, YES
0, 0, 0, 0
  SECT=19, YES
0, 0, 0, 0
  SECT=20, YES
0, 0, 0, 0
  SECT=21, YES
0, 0, 0, 0
  SECT=22, YES
0, 0, 0, 0
  SECT=23, YES
0, 0, 0, 0
  SECT=24, YES
0, 0, 0, 0
  SECT=25, YES
0, 0, 0, 0
  SECT=26, YES
0, 0, 0, 0
  SECT=27, YES
0, 0, 0, 0
  SECT=28, YES
0, 0, 0, 0
  SECT=29, YES
0, 0, 0, 0
  SECT=30, YES
0, 0, 0, 0
  SECT=31, YES
0, 0, 0, 0
  SECT=32, YES
0, 0, 0, 0
*SECTION MANAGER-STIFFENER      ; Section Manager -
Stiffener
;      SECT      =      NO,      bSAMEJ
;                  ; line 1
;      STFNSIZE,  STFNJSIZE
;                  ; line 2
; .....      ;
;      LOOP UTIL (STFNJSIZE, STFNJSIZE)
;
;      TYPE, Z, STANDREF, POSLINE, STANDREFL,
NUM, CTC      ; line n
;      STIFFTYPE, dSIZE(0 ~ 20)
;                  ; line n
;      LINESIZE, LINEINDEX[i].....
;                  ; line n
; .....      ;

  SECT=1, YES
0, 0
  SECT=2, YES
0, 0
  SECT=3, YES
0, 0
  SECT=4, YES
0, 0
  SECT=5, YES
0, 0
  SECT=6, YES
0, 0
  SECT=7, YES
0, 0
  SECT=8, YES
0, 0
  SECT=9, YES
0, 0
  SECT=10, YES
0, 0
  SECT=11, YES
0, 0
  SECT=12, YES
0, 0
  SECT=13, YES
0, 0

```

```

  SECT=14, YES
0, 0
  SECT=18, YES
0, 0
  SECT=19, YES
0, 0
  SECT=20, YES
0, 0
  SECT=21, YES
0, 0
  SECT=22, YES
0, 0
  SECT=23, YES
0, 0
  SECT=24, YES
0, 0
  SECT=25, YES
0, 0
  SECT=26, YES
0, 0
  SECT=27, YES
0, 0
  SECT=28, YES
0, 0
  SECT=29, YES
0, 0
  SECT=30, YES
0, 0
  SECT=31, YES
0, 0
  SECT=32, YES
0, 0
*ENDDATA

```

■ 흥산1교 대구방향(S1~S3) 상부 input

```

:-----
:
: MIDAS/Civil Text(MCT) File.
: Date : 2015/12/30
:-----
*VERSION
8.4.5
*UNIT : Unit System
: FORCE, LENGTH, HEAT, TEMPER
KN , M, KCAL, C
*REBAR-MATL-CODE : Rebar Material Code
: CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
KS01-Civil(RC), SD300, KS01-Civil(RC), SD300
*NODE : Nodes
: INO, X, Y, Z
1, 0, 0, 0
2, 8.004, 0, 0
3, 8.104, 0, 0
4, 11.232, 0, 0
5, 17.807, 0, 0
6, 17.907, 0, 0
7, 21.252, 0, 0
8, 24.238, 0, 0
9, 24.338, 0, 0
10, 35.738, 0, 0
11, 35.838, 0, 0
12, 37.538, 0, 0
13, 42.138, 0, 0
14, 42.238, 0, 0
15, 46.288, 0, 0
16, 47.938, 0, 0
17, 48.038, 0, 0
18, 53.088, 0, 0
19, 53.188, 0, 0
20, 69.088, 0, 0
21, 69.188, 0, 0
22, 74.488, 0, 0
23, 74.588, 0, 0
24, 79.538, 0, 0
25, 79.988, 0, 0
26, 5, 0, 0
27, 10, 0, 0
28, 15, 0, 0
29, 20, 0, 0
30, 25, 0, 0
31, 30, 0, 0
32, 35, 0, 0
33, 40, 0, 0
34, 45, 0, 0
35, 50, 0, 0
36, 55, 0, 0
37, 60, 0, 0
38, 65, 0, 0
39, 70, 0, 0
40, 75, 0, 0
41, 0, 3.9, 0
42, 8.004, 3.9, 0
43, 8.104, 3.9, 0
44, 11.232, 3.9, 0
45, 17.807, 3.9, 0
46, 17.907, 3.9, 0
47, 21.252, 3.9, 0
48, 24.238, 3.9, 0
49, 24.338, 3.9, 0
50, 35.738, 3.9, 0
51, 35.838, 3.9, 0
52, 37.538, 3.9, 0
53, 42.138, 3.9, 0
54, 42.238, 3.9, 0
55, 46.288, 3.9, 0
56, 47.938, 3.9, 0
57, 48.038, 3.9, 0
58, 53.088, 3.9, 0
59, 53.188, 3.9, 0
60, 69.088, 3.9, 0
61, 69.188, 3.9, 0
62, 74.488, 3.9, 0
63, 74.588, 3.9, 0
64, 79.538, 3.9, 0
65, 79.988, 3.9, 0
66, 5, 3.9, 0
67, 10, 3.9, 0
68, 15, 3.9, 0
69, 20, 3.9, 0
70, 25, 3.9, 0
71, 30, 3.9, 0
72, 35, 3.9, 0
73, 40, 3.9, 0
74, 45, 3.9, 0
75, 50, 3.9, 0
76, 55, 3.9, 0
77, 60, 3.9, 0
78, 65, 3.9, 0

```

```

79, 70, 3.9, 0
80, 75, 3.9, 0
81, 0, 7.8, 0
82, 8.004, 7.8, 0
83, 8.104, 7.8, 0
84, 11.232, 7.8, 0
85, 17.807, 7.8, 0
86, 17.907, 7.8, 0
87, 21.252, 7.8, 0
88, 24.238, 7.8, 0
89, 24.338, 7.8, 0
90, 35.738, 7.8, 0
91, 35.838, 7.8, 0
92, 37.538, 7.8, 0
93, 42.138, 7.8, 0
94, 42.238, 7.8, 0
95, 46.288, 7.8, 0
96, 47.938, 7.8, 0
97, 48.038, 7.8, 0
98, 53.088, 7.8, 0
99, 53.188, 7.8, 0
100, 69.088, 7.8, 0
101, 69.188, 7.8, 0
102, 74.488, 7.8, 0
103, 74.588, 7.8, 0
104, 79.538, 7.8, 0
105, 79.988, 7.8, 0
106, 5, 7.8, 0
107, 10, 7.8, 0
108, 15, 7.8, 0
109, 20, 7.8, 0
110, 25, 7.8, 0
111, 30, 7.8, 0
112, 35, 7.8, 0
113, 40, 7.8, 0
114, 45, 7.8, 0
115, 50, 7.8, 0
116, 55, 7.8, 0
117, 60, 7.8, 0
118, 65, 7.8, 0
119, 70, 7.8, 0
120, 75, 7.8, 0
121, -5, 7.8, 0
122, -8.004, 7.8, 0
123, -8.104, 7.8, 0
124, -10, 7.8, 0
125, -11.232, 7.8, 0
126, -15, 7.8, 0
127, -17.807, 7.8, 0
128, -17.907, 7.8, 0
129, -20, 7.8, 0
130, -21.252, 7.8, 0
131, -24.238, 7.8, 0
132, -24.338, 7.8, 0
133, -25, 7.8, 0
134, -30, 7.8, 0
135, -35, 7.8, 0
136, -35.738, 7.8, 0
137, -35.838, 7.8, 0
138, -37.538, 7.8, 0
139, -40, 7.8, 0
140, -42.138, 7.8, 0
141, -42.238, 7.8, 0
142, -45, 7.8, 0
143, -46.288, 7.8, 0
144, -47.938, 7.8, 0
145, -48.038, 7.8, 0
146, -50, 7.8, 0
147, -53.088, 7.8, 0
148, -53.188, 7.8, 0
149, -55, 7.8, 0
150, -60, 7.8, 0
151, -65, 7.8, 0
152, -69.088, 7.8, 0
153, -69.188, 7.8, 0
154, -70, 7.8, 0
155, -74.488, 7.8, 0
156, -74.588, 7.8, 0
157, -75, 7.8, 0
158, -79.538, 7.8, 0
159, -79.988, 7.8, 0
160, -5, 0, 0
161, -8.004, 0, 0
162, -8.104, 0, 0
163, -10, 0, 0
164, -11.232, 0, 0
165, -15, 0, 0
166, -17.807, 0, 0
167, -17.907, 0, 0
168, -20, 0, 0
169, -21.252, 0, 0
170, -24.238, 0, 0
171, -24.338, 0, 0
172, -25, 0, 0
173, -30, 0, 0
174, -35, 0, 0
175, -35.738, 0, 0

```

```

176, -35.838, 0, 0
177, -37.538, 0, 0
178, -40, 0, 0
179, -42.138, 0, 0
180, -42.238, 0, 0
181, -45, 0, 0
182, -46.288, 0, 0
183, -47.938, 0, 0
184, -48.038, 0, 0
185, -50, 0, 0
186, -53.088, 0, 0
187, -53.188, 0, 0
188, -55, 0, 0
189, -60, 0, 0
190, -65, 0, 0
191, -69.088, 0, 0
192, -69.188, 0, 0
193, -70, 0, 0
194, -74.488, 0, 0
195, -74.588, 0, 0
196, -75, 0, 0
197, -79.538, 0, 0
198, -79.988, 0, 0
199, -5, 3.9, 0
200, -8.004, 3.9, 0
201, -8.104, 3.9, 0
202, -10, 3.9, 0
203, -11.232, 3.9, 0
204, -15, 3.9, 0
205, -17.807, 3.9, 0
206, -17.907, 3.9, 0
207, -20, 3.9, 0
208, -21.252, 3.9, 0
209, -24.238, 3.9, 0
210, -24.338, 3.9, 0
211, -25, 3.9, 0
212, -30, 3.9, 0
213, -35, 3.9, 0
214, -35.738, 3.9, 0
215, -35.838, 3.9, 0
216, -37.538, 3.9, 0
217, -40, 3.9, 0
218, -42.138, 3.9, 0
219, -42.238, 3.9, 0
220, -45, 3.9, 0
221, -46.288, 3.9, 0
222, -47.938, 3.9, 0
223, -48.038, 3.9, 0
224, -50, 3.9, 0
225, -53.088, 3.9, 0
226, -53.188, 3.9, 0
227, -55, 3.9, 0
228, -60, 3.9, 0
229, -65, 3.9, 0
230, -69.088, 3.9, 0
231, -69.188, 3.9, 0
232, -70, 3.9, 0
233, -74.488, 3.9, 0
234, -74.588, 3.9, 0
235, -75, 3.9, 0
236, -79.538, 3.9, 0
237, -79.988, 3.9, 0
238, -61.238, 7.8, 0
239, -61.238, 0, 0
240, -61.238, 3.9, 0
241, 61.238, 7.8, 0
242, 61.238, 0, 0
243, 61.238, 3.9, 0
*ELEMENT : Elements
: IEL, TYPE, IMAT, IPRO, IN1, IN2, ANGLE, ISUB, EXVAL,
IOPT(EXVAL2) : Frame Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, ANGLE, ISUB, EXVAL,
EXVAL2, bLMT : Comp/Tens Truss
: IEL, TYPE, IMAT, IPRO, IN1, IN2, IN3, IN4, ISUB, IWID ,
LCAXIS : Planar Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, IN3, IN4, IN5, IN6, IN7,
IN8 : Solid Element
: IEL, TYPE, IMAT, IPRO, IN1, IN2, REF, RPX, RPY, RPZ,
ISUB, EXVAL : Frame(Ref. Point)
1, BEAM , 1, 5, 81, 106, 0, 0
2, BEAM , 1, 5, 106, 82, 0, 0
3, BEAM , 1, 14, 82, 83, 0, 0
4, BEAM , 1, 6, 83, 107, 0, 0
5, BEAM , 1, 6, 107, 84, 0, 0
6, BEAM , 1, 7, 84, 108, 0, 0
7, BEAM , 1, 7, 108, 85, 0, 0
8, BEAM , 1, 13, 85, 86, 0, 0
9, BEAM , 1, 9, 86, 109, 0, 0
10, BEAM , 1, 9, 109, 87, 0, 0
11, BEAM , 1, 10, 87, 88, 0, 0
12, BEAM , 1, 11, 88, 89, 0, 0
13, BEAM , 1, 12, 89, 110, 0, 0
14, BEAM , 1, 12, 110, 111, 0, 0
15, BEAM , 1, 12, 111, 112, 0, 0
16, BEAM , 1, 12, 112, 90, 0, 0
17, BEAM , 1, 11, 90, 91, 0, 0
18, BEAM , 1, 10, 91, 92, 0, 0

```

19. BEAM	, 1, 9, 92, 113, 0, 0	116. BEAM	, 2, 17, 80, 64, 0, 0	213. BEAM	, 1, 24, 181, 182, 0, 0
20. BEAM	, 1, 9, 113, 93, 0, 0	117. BEAM	, 2, 17, 64, 65, 0, 0	214. BEAM	, 1, 23, 182, 183, 0, 0
21. BEAM	, 1, 8, 93, 94, 0, 0	118. BEAM	, 2, 16, 111, 71, 0, 0	215. BEAM	, 1, 19, 183, 184, 0, 0
22. BEAM	, 1, 7, 94, 114, 0, 0	119. BEAM	, 2, 16, 71, 31, 0, 0	216. BEAM	, 1, 20, 184, 185, 0, 0
23. BEAM	, 1, 7, 114, 95, 0, 0	120. BEAM	, 2, 16, 104, 64, 0, 0	217. BEAM	, 1, 20, 185, 186, 0, 0
24. BEAM	, 1, 6, 95, 96, 0, 0	121. BEAM	, 2, 16, 64, 24, 0, 0	218. BEAM	, 1, 21, 186, 187, 0, 0
25. BEAM	, 1, 2, 96, 97, 0, 0	122. BEAM	, 2, 15, 120, 80, 0, 0	219. BEAM	, 1, 22, 187, 188, 0, 0
26. BEAM	, 1, 3, 97, 115, 0, 0	123. BEAM	, 2, 15, 80, 40, 0, 0	220. BEAM	, 1, 22, 188, 189, 0, 0
27. BEAM	, 1, 3, 115, 98, 0, 0	124. BEAM	, 2, 15, 119, 79, 0, 0	221. BEAM	, 1, 22, 189, 239, 0, 0
28. BEAM	, 1, 4, 98, 99, 0, 0	125. BEAM	, 2, 15, 79, 39, 0, 0	222. BEAM	, 1, 22, 190, 191, 0, 0
29. BEAM	, 1, 5, 99, 116, 0, 0	126. BEAM	, 2, 15, 118, 78, 0, 0	223. BEAM	, 1, 21, 191, 192, 0, 0
30. BEAM	, 1, 5, 116, 117, 0, 0	127. BEAM	, 2, 15, 78, 38, 0, 0	224. BEAM	, 1, 20, 192, 193, 0, 0
31. BEAM	, 1, 5, 117, 241, 0, 0	128. BEAM	, 2, 15, 117, 77, 0, 0	225. BEAM	, 1, 20, 193, 194, 0, 0
32. BEAM	, 1, 5, 118, 100, 0, 0	129. BEAM	, 2, 15, 77, 37, 0, 0	226. BEAM	, 1, 19, 194, 195, 0, 0
33. BEAM	, 1, 4, 100, 101, 0, 0	130. BEAM	, 2, 15, 116, 76, 0, 0	227. BEAM	, 1, 18, 195, 196, 0, 0
34. BEAM	, 1, 3, 101, 119, 0, 0	131. BEAM	, 2, 15, 76, 36, 0, 0	228. BEAM	, 1, 18, 196, 197, 0, 0
35. BEAM	, 1, 3, 119, 102, 0, 0	132. BEAM	, 2, 15, 115, 75, 0, 0	229. BEAM	, 1, 18, 197, 198, 0, 0
36. BEAM	, 1, 2, 102, 103, 0, 0	133. BEAM	, 2, 15, 75, 35, 0, 0	230. BEAM	, 2, 17, 41, 199, 0, 0
37. BEAM	, 1, 1, 103, 120, 0, 0	134. BEAM	, 2, 15, 114, 74, 0, 0	231. BEAM	, 2, 17, 199, 200, 0, 0
38. BEAM	, 1, 1, 120, 104, 0, 0	135. BEAM	, 2, 15, 74, 34, 0, 0	232. BEAM	, 2, 17, 200, 201, 0, 0
39. BEAM	, 1, 1, 104, 105, 0, 0	136. BEAM	, 2, 15, 113, 73, 0, 0	233. BEAM	, 2, 17, 201, 202, 0, 0
40. BEAM	, 1, 22, 1, 26, 0, 0	137. BEAM	, 2, 15, 73, 33, 0, 0	234. BEAM	, 2, 17, 202, 203, 0, 0
41. BEAM	, 1, 22, 26, 2, 0, 0	138. BEAM	, 2, 15, 112, 72, 0, 0	235. BEAM	, 2, 17, 203, 204, 0, 0
42. BEAM	, 1, 30, 2, 3, 0, 0	139. BEAM	, 2, 15, 72, 32, 0, 0	236. BEAM	, 2, 17, 204, 205, 0, 0
43. BEAM	, 1, 23, 3, 27, 0, 0	140. BEAM	, 2, 15, 110, 70, 0, 0	237. BEAM	, 2, 17, 205, 206, 0, 0
44. BEAM	, 1, 23, 27, 4, 0, 0	141. BEAM	, 2, 15, 70, 30, 0, 0	238. BEAM	, 2, 17, 206, 207, 0, 0
45. BEAM	, 1, 24, 4, 28, 0, 0	142. BEAM	, 2, 15, 109, 69, 0, 0	239. BEAM	, 2, 17, 207, 208, 0, 0
46. BEAM	, 1, 24, 28, 5, 0, 0	143. BEAM	, 2, 15, 69, 29, 0, 0	240. BEAM	, 2, 17, 208, 209, 0, 0
47. BEAM	, 1, 31, 5, 6, 0, 0	144. BEAM	, 2, 15, 108, 68, 0, 0	241. BEAM	, 2, 17, 209, 210, 0, 0
48. BEAM	, 1, 26, 6, 29, 0, 0	145. BEAM	, 2, 15, 68, 28, 0, 0	242. BEAM	, 2, 17, 210, 211, 0, 0
49. BEAM	, 1, 26, 29, 7, 0, 0	146. BEAM	, 2, 15, 107, 67, 0, 0	243. BEAM	, 2, 17, 211, 212, 0, 0
50. BEAM	, 1, 27, 7, 8, 0, 0	147. BEAM	, 2, 15, 67, 27, 0, 0	244. BEAM	, 2, 17, 212, 213, 0, 0
51. BEAM	, 1, 28, 8, 9, 0, 0	148. BEAM	, 2, 15, 106, 66, 0, 0	245. BEAM	, 2, 17, 213, 214, 0, 0
52. BEAM	, 1, 29, 9, 30, 0, 0	149. BEAM	, 2, 15, 66, 26, 0, 0	246. BEAM	, 2, 17, 214, 215, 0, 0
53. BEAM	, 1, 29, 30, 31, 0, 0	150. BEAM	, 2, 15, 81, 41, 0, 0	247. BEAM	, 2, 17, 215, 216, 0, 0
54. BEAM	, 1, 29, 31, 32, 0, 0	151. BEAM	, 2, 15, 41, 1, 0, 0	248. BEAM	, 2, 17, 216, 217, 0, 0
55. BEAM	, 1, 29, 32, 10, 0, 0	152. BEAM	, 1, 5, 81, 121, 0, 0	249. BEAM	, 2, 17, 217, 218, 0, 0
56. BEAM	, 1, 28, 10, 11, 0, 0	153. BEAM	, 1, 5, 121, 122, 0, 0	250. BEAM	, 2, 17, 218, 219, 0, 0
57. BEAM	, 1, 27, 11, 12, 0, 0	154. BEAM	, 1, 14, 122, 123, 0, 0	251. BEAM	, 2, 17, 219, 220, 0, 0
58. BEAM	, 1, 26, 12, 33, 0, 0	155. BEAM	, 1, 6, 123, 124, 0, 0	252. BEAM	, 2, 17, 220, 221, 0, 0
59. BEAM	, 1, 26, 33, 13, 0, 0	156. BEAM	, 1, 6, 124, 125, 0, 0	253. BEAM	, 2, 17, 221, 222, 0, 0
60. BEAM	, 1, 25, 13, 14, 0, 0	157. BEAM	, 1, 7, 125, 126, 0, 0	254. BEAM	, 2, 17, 222, 223, 0, 0
61. BEAM	, 1, 24, 14, 34, 0, 0	158. BEAM	, 1, 7, 126, 127, 0, 0	255. BEAM	, 2, 17, 223, 224, 0, 0
62. BEAM	, 1, 24, 34, 15, 0, 0	159. BEAM	, 1, 13, 127, 128, 0, 0	256. BEAM	, 2, 17, 224, 225, 0, 0
63. BEAM	, 1, 23, 15, 16, 0, 0	160. BEAM	, 1, 9, 128, 129, 0, 0	257. BEAM	, 2, 17, 225, 226, 0, 0
64. BEAM	, 1, 19, 16, 17, 0, 0	161. BEAM	, 1, 9, 129, 130, 0, 0	258. BEAM	, 2, 17, 226, 227, 0, 0
65. BEAM	, 1, 20, 17, 35, 0, 0	162. BEAM	, 1, 10, 130, 131, 0, 0	259. BEAM	, 2, 17, 227, 228, 0, 0
66. BEAM	, 1, 20, 35, 18, 0, 0	163. BEAM	, 1, 11, 131, 132, 0, 0	260. BEAM	, 2, 17, 228, 240, 0, 0
67. BEAM	, 1, 21, 18, 19, 0, 0	164. BEAM	, 1, 12, 132, 133, 0, 0	261. BEAM	, 2, 17, 229, 230, 0, 0
68. BEAM	, 1, 22, 19, 36, 0, 0	165. BEAM	, 1, 12, 133, 134, 0, 0	262. BEAM	, 2, 17, 230, 231, 0, 0
69. BEAM	, 1, 22, 36, 37, 0, 0	166. BEAM	, 1, 12, 134, 135, 0, 0	263. BEAM	, 2, 17, 231, 232, 0, 0
70. BEAM	, 1, 22, 37, 242, 0, 0	167. BEAM	, 1, 12, 135, 136, 0, 0	264. BEAM	, 2, 17, 232, 233, 0, 0
71. BEAM	, 1, 22, 38, 20, 0, 0	168. BEAM	, 1, 11, 136, 137, 0, 0	265. BEAM	, 2, 17, 233, 234, 0, 0
72. BEAM	, 1, 21, 20, 21, 0, 0	169. BEAM	, 1, 10, 137, 138, 0, 0	266. BEAM	, 2, 17, 234, 235, 0, 0
73. BEAM	, 1, 20, 21, 39, 0, 0	170. BEAM	, 1, 9, 138, 139, 0, 0	267. BEAM	, 2, 17, 235, 236, 0, 0
74. BEAM	, 1, 20, 39, 22, 0, 0	171. BEAM	, 1, 9, 139, 140, 0, 0	268. BEAM	, 2, 17, 236, 237, 0, 0
75. BEAM	, 1, 19, 22, 23, 0, 0	172. BEAM	, 1, 8, 140, 141, 0, 0	269. BEAM	, 2, 16, 134, 212, 0, 0
76. BEAM	, 1, 18, 23, 40, 0, 0	173. BEAM	, 1, 7, 141, 142, 0, 0	270. BEAM	, 2, 16, 212, 173, 0, 0
77. BEAM	, 1, 18, 40, 24, 0, 0	174. BEAM	, 1, 7, 142, 143, 0, 0	271. BEAM	, 2, 16, 158, 236, 0, 0
78. BEAM	, 1, 18, 24, 25, 0, 0	175. BEAM	, 1, 6, 143, 144, 0, 0	272. BEAM	, 2, 16, 236, 197, 0, 0
79. BEAM	, 2, 17, 41, 66, 0, 0	176. BEAM	, 1, 2, 144, 145, 0, 0	273. BEAM	, 2, 15, 157, 235, 0, 0
80. BEAM	, 2, 17, 66, 42, 0, 0	177. BEAM	, 1, 3, 145, 146, 0, 0	274. BEAM	, 2, 15, 235, 196, 0, 0
81. BEAM	, 2, 17, 42, 43, 0, 0	178. BEAM	, 1, 3, 146, 147, 0, 0	275. BEAM	, 2, 15, 154, 232, 0, 0
82. BEAM	, 2, 17, 43, 67, 0, 0	179. BEAM	, 1, 4, 147, 148, 0, 0	276. BEAM	, 2, 15, 232, 193, 0, 0
83. BEAM	, 2, 17, 67, 44, 0, 0	180. BEAM	, 1, 5, 148, 149, 0, 0	277. BEAM	, 2, 15, 151, 229, 0, 0
84. BEAM	, 2, 17, 44, 68, 0, 0	181. BEAM	, 1, 5, 149, 150, 0, 0	278. BEAM	, 2, 15, 229, 190, 0, 0
85. BEAM	, 2, 17, 68, 45, 0, 0	182. BEAM	, 1, 5, 150, 238, 0, 0	279. BEAM	, 2, 15, 150, 228, 0, 0
86. BEAM	, 2, 17, 45, 46, 0, 0	183. BEAM	, 1, 5, 151, 152, 0, 0	280. BEAM	, 2, 15, 228, 189, 0, 0
87. BEAM	, 2, 17, 46, 69, 0, 0	184. BEAM	, 1, 4, 152, 153, 0, 0	281. BEAM	, 2, 15, 149, 227, 0, 0
88. BEAM	, 2, 17, 69, 47, 0, 0	185. BEAM	, 1, 3, 153, 154, 0, 0	282. BEAM	, 2, 15, 227, 188, 0, 0
89. BEAM	, 2, 17, 47, 48, 0, 0	186. BEAM	, 1, 3, 154, 155, 0, 0	283. BEAM	, 2, 15, 146, 224, 0, 0
90. BEAM	, 2, 17, 48, 49, 0, 0	187. BEAM	, 1, 2, 155, 156, 0, 0	284. BEAM	, 2, 15, 224, 185, 0, 0
91. BEAM	, 2, 17, 49, 70, 0, 0	188. BEAM	, 1, 1, 156, 157, 0, 0	285. BEAM	, 2, 15, 142, 220, 0, 0
92. BEAM	, 2, 17, 70, 71, 0, 0	189. BEAM	, 1, 1, 157, 158, 0, 0	286. BEAM	, 2, 15, 220, 181, 0, 0
93. BEAM	, 2, 17, 71, 72, 0, 0	190. BEAM	, 1, 1, 158, 159, 0, 0	287. BEAM	, 2, 15, 139, 217, 0, 0
94. BEAM	, 2, 17, 72, 50, 0, 0	191. BEAM	, 1, 22, 1, 160, 0, 0	288. BEAM	, 2, 15, 217, 178, 0, 0
95. BEAM	, 2, 17, 50, 51, 0, 0	192. BEAM	, 1, 22, 160, 161, 0, 0	289. BEAM	, 2, 15, 135, 213, 0, 0
96. BEAM	, 2, 17, 51, 52, 0, 0	193. BEAM	, 1, 30, 161, 162, 0, 0	290. BEAM	, 2, 15, 213, 174, 0, 0
97. BEAM	, 2, 17, 52, 73, 0, 0	194. BEAM	, 1, 23, 162, 163, 0, 0	291. BEAM	, 2, 15, 133, 211, 0, 0
98. BEAM	, 2, 17, 73, 53, 0, 0	195. BEAM	, 1, 23, 163, 164, 0, 0	292. BEAM	, 2, 15, 211, 172, 0, 0
99. BEAM	, 2, 17, 53, 54, 0, 0	196. BEAM	, 1, 24, 164, 165, 0, 0	293. BEAM	, 2, 15, 129, 207, 0, 0
100. BEAM	, 2, 17, 54, 74, 0, 0	197. BEAM	, 1, 24, 165, 166, 0, 0	294. BEAM	, 2, 15, 207, 168, 0, 0
101. BEAM	, 2, 17, 74, 55, 0, 0	198. BEAM	, 1, 31, 166, 167, 0, 0	295. BEAM	, 2, 15, 126, 204, 0, 0
102. BEAM	, 2, 17, 55, 56, 0, 0	199. BEAM	, 1, 26, 167, 168, 0, 0	296. BEAM	, 2, 15, 204, 165, 0, 0
103. BEAM	, 2, 17, 56, 57, 0, 0	200. BEAM	, 1, 26, 168, 169, 0, 0	297. BEAM	, 2, 15, 124, 202, 0, 0
104. BEAM	, 2, 17, 57, 75, 0, 0	201. BEAM	, 1, 27, 169, 170, 0, 0	298. BEAM	, 2, 15, 202, 163, 0, 0
105. BEAM	, 2, 17, 75, 58, 0, 0	202. BEAM	, 1, 28, 170, 171, 0, 0	299. BEAM	, 2, 15, 121, 199, 0, 0
106. BEAM	, 2, 17, 58, 59, 0, 0	203. BEAM	, 1, 29, 171, 172, 0, 0	300. BEAM	, 2, 15, 199, 160, 0, 0
107. BEAM	, 2, 17, 59, 76, 0, 0	204. BEAM	, 1, 29, 172, 173, 0, 0	301. BEAM	, 2, 15, 81, 41, 0, 0
108. BEAM	, 2, 17, 76, 77, 0, 0	205. BEAM	, 1, 29, 173, 174, 0, 0	302. BEAM	, 2, 15, 41, 1, 0, 0
109. BEAM	, 2, 17, 77, 243, 0, 0	206. BEAM	, 1, 29, 174, 175, 0, 0	303. BEAM	, 1, 5, 238, 151, 0, 0
110. BEAM	, 2, 17, 78, 60, 0, 0	207. BEAM	, 1, 28, 175, 176, 0, 0	304. BEAM	, 1, 22, 239, 190, 0, 0
111. BEAM	, 2, 17, 60, 61, 0, 0	208. BEAM	, 1, 27, 176, 177, 0, 0	305. BEAM	, 2, 17, 240, 229, 0, 0
112. BEAM	, 2, 17, 61, 79, 0, 0	209. BEAM	, 1, 26, 177, 178, 0, 0	306. BEAM	, 1, 5, 241, 118, 0, 0
113. BEAM	, 2, 17, 79, 62, 0, 0	210. BEAM	, 1, 26, 178, 179, 0, 0	307. BEAM	, 1, 22, 242, 38, 0, 0
114. BEAM	, 2, 17, 62, 63, 0, 0	211. BEAM	, 1, 25, 179, 180, 0, 0	308. BEAM	, 2, 17, 243, 78, 0, 0
115. BEAM	, 2, 17, 63, 80, 0, 0	212. BEAM	, 1, 24, 180, 181, 0, 0	*MATERIAL : Material	

```
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA1] : STEEL, CONC,
USER
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA2], [DATA2] : SRC
: [DATA1] : 1, DB, NAME, CODE
: [DATA1] : 2, ELAST, POISN, THERMAL, DEN, MASS
: [DATA1] : 3, Ex, Ey, Ez, Tx, Ty, Tz, Sxy, Sxz, Syz,
Pxy, Pxz, Pyz, DEN, MASS : Orthotropic
: [DATA2] : 1, DB, NAME, CODE or 2, ELAST, POISN,
THERMAL, DEN, MASS
1, STEEL, SM490 , 0, 0, , C, NO, 0.02,
1, KS10-Civil(S), , SM490
2, STEEL, SM400 , 0, 0, , C, NO, 0.02,
1, KS10-Civil(S), , SM400
*MATL-COLOR
: iMAT, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
2, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
*SECTION : Section
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, ICEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERLOUT,
PERLIN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
DB, NAME1, NAME2
: 2nd line(STYPE=DB)
[DIM1], [DIM2]
: 2nd line(STYPE=USER)
D11, D12, D13, D14, D15, D16, D17, D18
: 2nd line(STYPE=VALUE)
AREA1, ASy1, ASz1, lxx1, lyy1, lzz1
: 3rd line(STYPE=VALUE)
CyP1, CyM1, CzP1, CzM1, QyB1, QzB1,
PERLOUT1, PERLIN1, Cy1, Cz1 : 4th
line(STYPE=VALUE)
Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1,
Zyy2 : 5th line(STYPE=VALUE)
D21, D22, D23, D24, D25, D26, D27, D28
: 6th line(STYPE=VALUE)
AREA2, ASy2, ASz2, lxx2, lyy2, lzz2
: 7th line(STYPE=VALUE)
CyP2, CyM2, CzP2, CzM2, QyB2, QzB2,
PERLOUT2, PERLIN2, Cy2, Cz2 : 8th
line(STYPE=VALUE)
Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2,
Zzz2 : 9th line(STYPE=VALUE)
OPT1, OPT2, [JOINT]
: 2nd line(STYPE=PSC)
ELAST, DEN, POIS, POIC, THERMAL
: 2nd line(STYPE=PSC-CMPW)
bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I],
[WT-J], WI, WJ, bSYM, bSIDEHOLE : 3rd
line(STYPE=PSC)
bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I],
[CMPWEB-J] : 3rd
line(STYPE=PSC-CMPW)
bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF,
[STIFF-I], [STIFF-J] : 4th line(STYPE=PSC)
: [SIZE-A]-I
: 5th line(STYPE=PSC)
: [SIZE-B]-I
: 6th line(STYPE=PSC)
: [SIZE-C]-I
: 7th line(STYPE=PSC)
: [SIZE-D]-I
: 8th line(STYPE=PSC)
: [SIZE-A]-J
: 9th line(STYPE=PSC)
: [SIZE-B]-J
: 10th line(STYPE=PSC)
: [SIZE-C]-J
: 11th line(STYPE=PSC)
: [SIZE-D]-J
: 12th line(STYPE=PSC)
GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMULTI, EsEc-L, EsEc-S : 2nd
line(STYPE=CMP-B/I)
SW_I, Hw_I, tw_I, B_I, Bf1_I, tf1_I, B2_I, Bf2_I,
```

```
: 3rd line(STYPE=CMP-B/I)
SW_J, Hw_J, tw_J, B_J, Bf1_J, tf1_J, B2_J, Bf2_J,
tf2_J : 4th line(STYPE=CMP-B/I)
N1, N2, Hr, Hr2, tr1, tr2
: 5th line(STYPE=CMP-B)
GN, CTC, Bc, Tc, Hh, EgdEsb, DgdDsb, Pgd,
Psb, bSYM, SW_J, SW_I : 2nd
line(STYPE=CMP-CI/CT)
OPT1, OPT2, [JOINT]
: 3rd line(STYPE=CMP-CI/CT)
: [SIZE-A]-I
: 4th line(STYPE=CMP-CI/CT)
: [SIZE-B]-I
: 5th line(STYPE=CMP-CI/CT)
: [SIZE-C]-I
: 6th line(STYPE=CMP-CI/CT)
: [SIZE-D]-I
: 7th line(STYPE=CMP-CI/CT)
: 8th line(STYPE=CMP-CI/CT)
: [SIZE-B]-J
: 9th line(STYPE=CMP-CI/CT)
: [SIZE-C]-J
: 10th line(STYPE=CMP-CI/CT)
: [SIZE-D]-J
: iSEC, TYPE, SNAME, [OFFSET], bSD, STYPE1, STYPE2
: 1st line - CONSTRUCT
SHAPE, ...(same with other type data from shape)
: Before (STYPE1)
SHAPE, ...(same with other type data from shape)
: After (STYPE2)
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SB
Hw, tw, B, Bf1, tf1, B2, Bf2, tf2
: 2nd line
N1, N2, Hr, Hr2, tr1, tr2
: 3rd line
SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SI
Hw, tw, B, tf1, B2, tf2
: 2nd line
SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 3rd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-CI/CT
OPT1, OPT2, [JOINT]
: 2nd line
: [SIZE-A]
: 3rd line
: [SIZE-B]
: 4th line
: [SIZE-C]
: 5th line
: [SIZE-D]
: 6th line
SW, GN, CTC, Bc, Tc, Hh, EgdEsb, DgdDsb,
Pgd, Psb : 7th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - PSC
OPT1, OPT2, [JOINT]
: 2nd line
bSHEARCHK, [SCHK], [WT], WIDTH, bSYM,
bSIDEHOLE : 3rd line
bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF,
[STIFF] : 4th line
: [SIZE-A]
: 5th line
: [SIZE-B]
: 6th line
: [SIZE-C]
: 7th line
: [SIZE-D]
: 8th line
: [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6,
D7, D8, D9, D10
: [DATA2] : CCSHAPE or ICEL or IN1, IN2
: [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4,
D5, D6, D7, D8, D9, D10, IN1, IN2
: [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
: [OFFSET] : OFFSET, ICENT, IREF, IHORZ, HUSER,
IVERT, VUSER
: [OFFSET2]: OFFSET, ICENT, IREF, IHORZ, HUSERI,
HUSERJ, IVERT, VUSERI, VUSERJ
: [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM),
8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL), 2(nCEL2)
: [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM),
6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL), 11(nCEL2)
: [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM),
6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL), 18(nCEL2)
: [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM),
10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL), 11(nCEL2)
: [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM),
7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL), 18(nCEL2)
: [STIFF] : AREA, ASy, ASz, lxx, lyy, lzz
```

```
: [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3
: [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1,
bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3
: [CMPWEB] : EFD, LRF, A, B, H, T
1, COMPOSITE , G1-1 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.01
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.41667, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
2, COMPOSITE , G1-2 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.014
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
3, COMPOSITE , G1-3 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.014
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
4, COMPOSITE , G1-4 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.016
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
5, COMPOSITE , G1-5 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.014, 2.5, 0.1, 0.016
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
6, COMPOSITE , G1-6 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012
1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
8, COMPOSITE , G1-8 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02
1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,
8, COMPOSITE , G1-8 , CC, 0, 0, 0, 0,
0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02
1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0
0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO,
```


0, 0, YES, B	0.18, 1.2, NO, ,	2.7, 0.012, 2.5, 0.1, 0.014, 2.5, 0.1, 0.016	13, COMPOSITE , G1-13	2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02	2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012
1, 0, 0, 0, 3, 5	0, 0, YES, B	1, 0, 0, 0, 3, 5	, CC, 0, 0, 0, 0,	1, 0, 0, 0, 5, 5	1, 0, 0, 0, 3, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0	0, 0, YES, B	1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0		1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0	1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0	0	0		0	0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO	0	3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO		0	3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO	0.416, 0, NO, 0.416, 0, NO	5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		0.416, 0, NO, 0.416, 0, NO	5, 0.416, 0, NO, 0.41667, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,	0.18, 1.2, NO, ,	12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,		0.18, 1.2, NO, ,	12.15, 2, 7.8, 6.08, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,	6, COMPOSITE , G1-6	0.18, 1.2, NO, ,		0.18, 1.2, NO, ,	0.18, 1.2, NO, ,
0, 0, YES, B	, CC, 0, 0, 0, 0,	0, 0, YES, B		0, 0, YES, B	24, COMPOSITE , G2-7
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012		2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012		2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012	, CC, 0, 0, 0, 0,
1, 0, 0, 0, 3, 5		1, 0, 0, 0, 3, 5		1, 0, 0, 0, 3, 5	0, 0, YES, B
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0		1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0		1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0	2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012
0		0		0	1, 0, 0, 0, 5, 5
0		0		0	1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO		3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO		3, 0.625, 0, NO, 0.625, 0, NO, 0.625, 0, NO	0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0	5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO
0.416, 0, NO, 0.416, 0, NO		0.416, 0, NO, 0.416, 0, NO		0	0.416, 0, NO, 0.416, 0, NO
12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,		12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,		0	12.15, 2, 7.8, 6.08, 0.2, 0.1, 7.94851, 0, 0.3,
0.18, 1.2, NO, ,		0.18, 1.2, NO, ,		0.416, 0, NO, 0.416, 0, NO	0.18, 1.2, NO, ,
7, COMPOSITE , G1-7		7, COMPOSITE , G1-7		0.416, 0, NO, 0.416, 0, NO	25, COMPOSITE , G2-8
, CC, 0, 0, 0, 0,		, CC, 0, 0, 0, 0,		12.15, 2, 7.8, 6.07, 0.2, 0.1, 7.94851, 0, 0.3,	, CC, 0, 0, 0, 0,
0, 0, YES, B		0, 0, YES, B		0.18, 1.2, NO, ,	0, 0, YES, B
2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012		2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.012		15, DBUSER , Cross Beam-월반	2.7, 0.012, 2.5, 0.1, 0.01, 2.5, 0.1, 0.02
1, 0, 0, 0, 5, 5		1, 0, 0, 0, 5, 5		, CC, 0, 0, 0, 0,	1, 0, 0, 0, 5, 5
1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0		1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0		0, 0, YES, H , 2, 1.5, 0.3, 0.01, 0.01, 0.3, 0.01, 0, 0,	1, RIB, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
0		0		0, 0	0
0		0		16, DBUSER , "Cross Beam-1,11,23,33", CC, 0, 0,	0
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		0, 0, 0, 0, YES, H , 2, 1.5, 0.3, 0.012, 0.012, 0.3,	5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO
0.416, 0, NO, 0.416, 0, NO		0.416, 0, NO, 0.416, 0, NO		0.012, 0, 0, 0, 0	0.416, 0, NO, 0.416, 0, NO
5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		5, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO		17, DBUSER , Stringer	5, 0.416, 0, NO, 0.41667, 0, NO, 0.416, 0, NO, 0.416, 0, NO, 0.416, 0, NO

[illegible]

NAME=L1, LANE, , 0, 0, BOTH, 3, 1.8, NO	0.166667, NO, 0	NO, 0
190, -0.19, 0.166667, YES, 0, 189, -0.19,	253, -1.355, 0.166667, NO, 0, 252, -1.355,	198, -0.79, 0.15, NO, 0, 197, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
188, -0.19, 0.166667, NO, 0, 187, -0.19,	251, -1.355, 0.166667, NO, 0, 250, -1.355,	196, -0.79, 0.15, NO, 0, 195, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
186, -0.19, 0.166667, NO, 0, 185, -0.19,	249, -1.355, 0.166667, NO, 0, 248, -1.355,	194, -0.79, 0.15, NO, 0, 193, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
184, -0.19, 0.166667, NO, 0, 183, -0.19,	247, -1.355, 0.166667, NO, 0, 246, -1.355,	192, -0.79, 0.15, NO, 0, 191, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
303, -0.19, 0.166667, NO, 0, 182, -0.19,	245, -1.355, 0.166667, NO, 0, 244, -1.355,	40, -0.79, 0.15, NO, 0, 41, -0.79, 0.15,
0.166667, NO, 0	0.166667, NO, 0	NO, 0
181, -0.19, 0.166667, NO, 0, 180, -0.19,	243, -1.355, 0.15, NO, 0, 242, -1.355, 0.15,	42, -0.79, 0.15, NO, 0, 43, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
179, -0.19, 0.166667, NO, 0, 178, -0.19,	241, -1.355, 0.15, NO, 0, 240, -1.355, 0.15,	44, -0.79, 0.15, NO, 0, 45, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
177, -0.19, 0.166667, NO, 0, 176, -0.19,	239, -1.355, 0.15, NO, 0, 238, -1.355, 0.15,	46, -0.79, 0.15, NO, 0, 47, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
175, -0.19, 0.166667, NO, 0, 174, -0.19,	237, -1.355, 0.15, NO, 0, 236, -1.355, 0.15,	48, -0.79, 0.15, NO, 0, 49, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
173, -0.19, 0.166667, NO, 0, 172, -0.19,	235, -1.355, 0.15, NO, 0, 234, -1.355, 0.15,	50, -0.79, 0.15, NO, 0, 51, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
171, -0.19, 0.166667, NO, 0, 170, -0.19,	233, -1.355, 0.15, NO, 0, 232, -1.355, 0.15,	52, -0.79, 0.15, NO, 0, 53, -0.79, 0.15,
0.166667, NO, 0	NO, 0	NO, 0
169, -0.19, 0.166667, NO, 0, 168, -0.19,	231, -1.355, 0.15, NO, 0, 230, -1.355, 0.15,	54, -0.79, 0.166667, NO, 0, 55, -0.79,
0.166667, NO, 0	NO, 0	0.166667, NO, 0
167, -0.19, 0.166667, NO, 0, 166, -0.19,	79, -1.355, 0.15, NO, 0, 80, -1.355, 0.15,	56, -0.79, 0.166667, NO, 0, 57, -0.79,
0.166667, NO, 0	NO, 0	0.166667, NO, 0
165, -0.19, 0.15, NO, 0, 164, -0.19, 0.15,	81, -1.355, 0.15, NO, 0, 82, -1.355, 0.15,	58, -0.79, 0.166667, NO, 0, 59, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
163, -0.19, 0.15, NO, 0, 162, -0.19, 0.15,	83, -1.355, 0.15, NO, 0, 84, -1.355, 0.15,	60, -0.79, 0.166667, NO, 0, 61, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
161, -0.19, 0.15, NO, 0, 160, -0.19, 0.15,	85, -1.355, 0.15, NO, 0, 86, -1.355, 0.15,	62, -0.79, 0.166667, NO, 0, 63, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
159, -0.19, 0.15, NO, 0, 158, -0.19, 0.15,	87, -1.355, 0.15, NO, 0, 88, -1.355, 0.15,	64, -0.79, 0.166667, NO, 0, 65, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
157, -0.19, 0.15, NO, 0, 156, -0.19, 0.15,	89, -1.355, 0.15, NO, 0, 90, -1.355, 0.15,	66, -0.79, 0.166667, NO, 0, 67, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
155, -0.19, 0.15, NO, 0, 154, -0.19, 0.15,	91, -1.355, 0.15, NO, 0, 92, -1.355, 0.15,	68, -0.79, 0.166667, NO, 0, 69, -0.79,
NO, 0	NO, 0	0.166667, NO, 0
153, -0.19, 0.15, NO, 0, 152, -0.19, 0.15,	93, -1.355, 0.166667, NO, 0, 94, -1.355,	70, -0.79, 0.166667, NO, 0, 307, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
1, -0.19, 0.15, NO, 0, 2, -0.19, 0.15,	95, -1.355, 0.166667, NO, 0, 96, -1.355,	71, -0.79, 0.166667, NO, 0, 72, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
3, -0.19, 0.15, NO, 0, 4, -0.19, 0.15,	97, -1.355, 0.166667, NO, 0, 98, -1.355,	73, -0.79, 0.166667, NO, 0, 74, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
5, -0.19, 0.15, NO, 0, 6, -0.19, 0.15,	99, -1.355, 0.166667, NO, 0, 100, -1.355,	75, -0.79, 0.166667, NO, 0, 76, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
7, -0.19, 0.15, NO, 0, 8, -0.19, 0.15,	101, -1.355, 0.166667, NO, 0, 102, -1.355,	77, -0.79, 0.166667, NO, 0, 78, -0.79,
NO, 0	0.166667, NO, 0	0.166667, NO, 0
9, -0.19, 0.15, NO, 0, 10, -0.19, 0.15,	103, -1.355, 0.166667, NO, 0, 104, -1.355,	*VEHICLE : Vehicles
NO, 0	0.166667, NO, 0	: if Moving Load Code is China
11, -0.19, 0.15, NO, 0, 12, -0.19, 0.15,	105, -1.355, 0.166667, NO, 0, 106, -1.355,	: NAME=NAME, 1, TYPE=NAME, CODE
NO, 0	0.166667, NO, 0	: : standard
13, -0.19, 0.15, NO, 0, 14, -0.19, 0.15,	107, -1.355, 0.166667, NO, 0, 108, -1.355,	: NAME=NAME, 2, LTYPE, [TRUCK/LANE] or
NO, 0	0.166667, NO, 0	[TRAIN/SUBWAY] or [CROWD] : user: line 1
15, -0.19, 0.166667, NO, 0, 16, -0.19,	109, -1.355, 0.166667, NO, 0, 308, -1.355,	: LOAD1, DIST1, LOAD2, DIST2, ...
0.166667, NO, 0	0.166667, NO, 0	: : user: from line 2
17, -0.19, 0.166667, NO, 0, 18, -0.19,	110, -1.355, 0.166667, NO, 0, 111, -1.355,	: [TRUCK/LANE] : 1, P, Qm, Qq
0.166667, NO, 0	0.166667, NO, 0	: : truck(JTG)
19, -0.19, 0.166667, NO, 0, 20, -0.19,	112, -1.355, 0.166667, NO, 0, 113, -1.355,	: [TRUCK/LANE] : 2, P, Qm, Qq
0.166667, NO, 0	0.166667, NO, 0	: : lane load1
21, -0.19, 0.166667, NO, 0, 22, -0.19,	114, -1.355, 0.166667, NO, 0, 115, -1.355,	: [TRUCK/LANE] : 3, Qk, Pk1, L1, Pk2, L2
0.166667, NO, 0	0.166667, NO, 0	: : lane load2
23, -0.19, 0.166667, NO, 0, 24, -0.19,	116, -1.355, 0.166667, NO, 0, 117, -1.355,	: [TRUCK/LANE] : 4, dW, dD
0.166667, NO, 0	0.166667, NO, 0	: : crawler type
25, -0.19, 0.166667, NO, 0, 26, -0.19,	NAME=L3, LANE, , 0, 0, BOTH, 3, 1.8, NO	: [TRUCK/LANE] : 5
0.166667, NO, 0	229, -0.79, 0.166667, YES, 0, 228, -0.79,	: : GC type load
27, -0.19, 0.166667, NO, 0, 28, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : ITYPE, W1, D1, W2, D2
0.166667, NO, 0	227, -0.79, 0.166667, NO, 0, 226, -0.79,	: : train-type1,3
29, -0.19, 0.166667, NO, 0, 30, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : ITYPE, DD, FD, BD, MAINCOUNT
0.166667, NO, 0	225, -0.79, 0.166667, NO, 0, 224, -0.79,	: : train-type2
31, -0.19, 0.166667, NO, 0, 306, -0.19,	0.166667, NO, 0	: [TRAIN/SUBWAY] : 4, P1, P2, D2, P3, D3, P4, dD,
0.166667, NO, 0	223, -0.79, 0.166667, NO, 0, 222, -0.79,	Po, n, IFR : subway
32, -0.19, 0.166667, NO, 0, 33, -0.19,	0.166667, NO, 0	: [CROWD] : 1, dW1
0.166667, NO, 0	304, -0.79, 0.166667, NO, 0, 221, -0.79,	: : crowd-type1
34, -0.19, 0.166667, NO, 0, 35, -0.19,	0.166667, NO, 0	: [CROWD] : 2, dW1, dL1, dW2, dL2, WIDTH
0.166667, NO, 0	220, -0.79, 0.166667, NO, 0, 219, -0.79,	: : crowd-type2
36, -0.19, 0.166667, NO, 0, 37, -0.19,	0.166667, NO, 0	: if Moving Load Type is India
0.166667, NO, 0	218, -0.79, 0.166667, NO, 0, 217, -0.79,	: NAME=NAME, 1, TYPE=NAME, CODE
38, -0.19, 0.166667, NO, 0, 39, -0.19,	0.166667, NO, 0	: : standard
0.166667, NO, 0	216, -0.79, 0.166667, NO, 0, 215, -0.79,	: NAME=NAME, 2, bWTB, P, D, Pb, Db, dD1, dD2, NDIST
NAME=L2, LANE, , 0, 0, BOTH, 3, 1.8, NO	0.166667, NO, 0	: : user: line 1
268, -1.355, 0.166667, YES, 0, 267, -1.355,	214, -0.79, 0.166667, NO, 0, 213, -0.79,	: NAME=NAME, 2, bWTB, dD1, dD2, NDIST
0.166667, NO, 0	0.166667, NO, 0	: : user: line 1
266, -1.355, 0.166667, NO, 0, 265, -1.355,	212, -0.79, 0.166667, NO, 0, 211, -0.79,	: LOAD1, DIST1, LOAD2, DIST2, ...
0.166667, NO, 0	0.166667, NO, 0	: : user: from line 2
264, -1.355, 0.166667, NO, 0, 263, -1.355,	210, -0.79, 0.166667, NO, 0, 209, -0.79,	: if Moving Load Code is CANADA
0.166667, NO, 0	0.166667, NO, 0	: NAME=NAME, 1, TYPE=NAME, DLA, CODE, [DYNA]
262, -1.355, 0.166667, NO, 0, 261, -1.355,	208, -0.79, 0.166667, NO, 0, 207, -0.79,	: : standard
0.166667, NO, 0	0.166667, NO, 0	: NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2),
305, -1.355, 0.166667, NO, 0, 260, -1.355,	206, -0.79, 0.166667, NO, 0, 205, -0.79,	PLV(D2), NDIST, [DYNA] : user: line 1
0.166667, NO, 0	0.166667, NO, 0	: LOAD1, DIST1, LOAD2, DIST2, ...
259, -1.355, 0.166667, NO, 0, 258, -1.355,	204, -0.79, 0.15, NO, 0, 203, -0.79, 0.15,	: : user: from line 2
0.166667, NO, 0	NO, 0	: [DYNA] : nDYNA, FACT1AXLE, FACT2AXLE, FACT3AXLE
257, -1.355, 0.166667, NO, 0, 256, -1.355,	202, -0.79, 0.15, NO, 0, 201, -0.79, 0.15,	: : Dynamic Load Allowance
0.166667, NO, 0	NO, 0	: if Moving Load Code is BS
255, -1.355, 0.166667, NO, 0, 254, -1.355,	200, -0.79, 0.15, NO, 0, 199, -0.79, 0.15,	: NAME=NAME, 1, TYPE=NAME, CODE, UNITNUM

```

; standard
: NAME=nLane, FACTOR1, FACTOR2, FACTOR3, FACTOR4
; HA, HA & HB, HA & HB(Auto)
: NAME=NAME, 2, ISTYPE, W1, W2, W3, L, Pa, Pb, D1,
D2, d, UNITNUM ; user(BS 5400)
; NAME=NAME, 2, ISTYPE, [BD37/01-HA],
[BS-DATA-LF] ; user(HA)
: NAME=NAME, 2, ISTYPE, [BS-DATA-HB]
; user(HB)
: NAME=NAME, 2, ISTYPE, [BD37/01-HA2],
[BS-DATA-HB2], [BS-DATA-LF] ; user(HA&HB)
: NAME=NAME, 2, ISTYPE, [BD37/01-HA],
[BD37/01-HB], [BS-DATA-LF] ;
user(HA&HB(AUTO))
: NAME=NAME, 2, ISTYPE, W, L
; user(Pedestrian)
: NAME=NAME, 2, ISTYPE, V, AN, MINS, MAXS, P1, D1,
P2, D2, ... ; user(Special Vehicle)
: [BS-DATA-HA] : W1, W2, W3, EXP, EXP2, L1, L2, Pa
: [BS-DATA-HA2] : W1, W2, W3, EXP, EXP2, L1, L2
: [BS-DATA-HB] : Pb, D1, D2, d, UNITNUM
: [BS-DATA-HB2] : Pb, D1, D2, d, dd, UNITNUM
: [BS-DATA-LF] : nLT, LF1, LF2, LF3, LF4
; if Moving Load Code is EUROCODE
: NAME=NAME, 1, ITYPE, TYPE-NAME, PSY1, PSY2, PHI,
[AF7] ; standard (LM1, FLM1)
: NAME=NAME, 1, ITYPE, TYPE-NAME, bDF, bU, PHI,
PSY, ADJ, IN ; standard (others)
: NAME=NAME, 2, 1, [AF7]
; user(Type 1)
: [LOAD7], D, PHI, TPSY, UPSY
; user(Type 1): line 2
: NAME=NAME, 2, 2, ALP, TPSY, W, BET, LPSY, P1, D1,
P2, D2, ... ; user(Type 2)
: NAME=NAME, 2, 3
; user(Type 3)
: [LOADCASE1]
; user(Type 3): line 2
: [LOADCASE2]
; user(Type 3): line 3
: [LOADCASE3]
; user(Type 3): line 4
: NAME=NAME, 2, 4, WS, V, AN, MINS, MAXS, DYF, UI,
F, P1, D1, P2, D2, ... ; user(Type 4)
: NAME=NAME, 2, 5, INT, bPHI1, PHI1, bPHI2, PHI2
; user(Type 5)
: [VEHICLE1]
; user(Type 5): line 2
: [VEHICLE2]
; user(Type 5): line 3
: [VEHICLE3]
; user(Type 5): line 4
: [AF7] : TF1, TF2, TF3, UF1, UF2, UF3, UF4
; adjustment factor
: [LOAD7] : TL1, TL2, TL3, UL1, UL2, UL3, UL4
; tandem/udl loads
: [LOADCASE] : bUSE, N, bDF, bUI, PHI, P1, L1, P2, L2,
... ; load case
: [VEHICLE] : bUSE, N, P1, L1, P2, L2, ...
; vehicle
; if Moving Load Code is RUSSIA
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (SK)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (SK
FATIGUE)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
dDYNAFAC_UDL
; bFATI, nLOADFAC, dLOADFAC,
dLOADFAC_UDL, s1, s1_UDL ; standard (AK)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC,
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; standard (N14)
: NAME=NAME, 1, ITYPE, K, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC,
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; standard (N11)
: NAME=NAME, 1, ITYPE, nDYNAFAC, dDYNAFAC,
dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; standard (SUBWAY TRAINS)
: NAME=NAME, 1, ITYPE, VARIABLE, nDYNAFAC,
dDYNAFAC, dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; standard (TRAMCARS)
: NAME=NAME, 1, ITYPE, nDYNAFAC, dDYNAFAC, bFATI,
nLOADFAC, dLOADFAC ; standard (NK-80)
: NAME=NAME, 1, ITYPE, W, D, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; standard (NG-60)
: NAME=NAME, 1, ITYPE, BRIDGETYPE, W, bFATI,
nLOADFAC, dLOADFAC ; standard (UNIFORM
LOAD)
: NAME=NAME, 1, ITYPE, BRIDGETYPE, W, bFATI,
nLOADFAC, dLOADFAC ; standard (UNIFORM
LOAD(W/O OTHER LOADS))
: NAME=NAME, 1, ITYPE, BRIDGETYPE, P

```

```

; standard (CONCENTRATED LOAD
(W/O OTHER LOADS))
: NAME=NAME, 2, ITYPE, W, nDYNAFAC, dDYNAFAC,
dDYNAFAC_UDL
; bFATI, nLOADFAC, dLOADFAC,
dLOADFAC_UDL, s1, s1_UDL ; user (Type 1)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; user (Type 2)
: NAME=NAME, 2, ITYPE, Variable, nDYNAFAC,
dDYNAFAC, dEMPTYCAR
; bFATI, nLOADFAC, dLOADFAC,
; user (Type 3)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC
;
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; user (Type 4)
: NAME=NAME, 2, ITYPE, nDYNAFAC, dDYNAFAC,
nLOADFAC, dLOADFAC
;
; bTWOVEHL, TWOVEHL_FACT,
b2NDREDUC, 2NDREDUC_FACT ; user (Type 5)
: NAME=NAME, 2, ITYPE, W, D, nDYNAFAC, dDYNAFAC,
bFATI, nLOADFAC, dLOADFAC ; user (Type 6)
: NAME=NAME, 2, ITYPE, P, W, bFATI, nLOADFAC,
dLOADFAC ; user (Type 7)
; if Moving Load Code is KSCE-LSD15
: NAME=NAME, 1, TYPE-NAME, nLANETYPE, dDYNAFAC,
CODE ; standard
: NAME=NAME, 2, 8, L1, W1, W2, EXP
; user: line 1 (Type 1)
: NAME=NAME, 2, 1, W1, W2, D1, D2
; user: line 1 (Type 2)
: NAME=NAME, 2, 6, LOADNUM, DIST, W, L
; user: line 1 (Type 3)
: LOAD1, DIST1, LOAD2, DIST2, ...
; user: from line 2
; if Moving Load Code is AASHTO LRFD, CANADA and
Load Type is Permit Truck
: NAME=NAME, 3, AXLE-TYPE-NUM, IMP-FACTOR
; user(Permit Truck)
: AXLE-TYPE-NAME1, bEDWL1, bSV1, P1, D1, P2,
D2, ..., Pn, Dn ; user(from line 2)
;
: AXLE-TYPE-NAMEn, bEDWLn, bSVn, P1, D1, P2,
D2, ..., Pn, Dn
: AXLE-TYPE1, SPACING1, bVS1, AXLE-TYPE2,
SPACING2, bVS2 ... ; line 2+AXLE-TYPE-NUM
; if Moving Load Code is not one of those specified
above.
: NAME=NAME, 1, TYPE-NAME, DLA, CODE
; standard
: NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2),
PLV(D2), NDIST ; user: line 1
: LOAD1, DIST1, LOAD2, DIST2, ...
; user: from line 2
NAME=DB-24, 1, DB-24, 0, KS-RB
NAME=DL-24, 1, DL-24, 0, KS-RB
*MVLD_CASE : Moving Load Cases
: NAME=NAME, bLCPV, SCALE1, SCALE2, SCALE3,
SCALE4, SCALE5, SCALE6, COMB, DESC, LCOM, SERIAL
; 1st line
: nLTYPE, 2LFACTOR1, 2LFACTOR2, 3LFACTOR1,
3LFACTOR2, 3LFACTOR3, 3LFACTOR4
; 2st line
: TYPE1, VCLASS1, SCALE1, iMIN1, iMAX1, LANE11,
LANE12, ... ; 3rd line
;
: TYPEEn, VCLASSn, SCALEn, iMINn, iMAXn, LANEn1,
LANEn2, ... ; n+1th line
: NAME=NAME, bLCPV, VEHICLE, REFLANE, ECCEN,
SCALE, DESC
; Permit
NAME=활하중, NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 1
1, 1, 1, 1, 1, 0.5, 0.25
VL, DB-24, 1, 1, 3, L1, L2, L3
VL, DL-24, 1, 1, 3, L1, L2, L3
NAME=화하중(BD), NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 2
1, 1, 1, 1, 1, 0.5, 0.25
VL, DB-24, 1, 1, 3, L1, L2, L3
NAME=활하중(DL), NO, 1, 1, 0.9, 0.75, 0.75, 0.75,
INDEPENDENT, , 0, 3
1, 1, 1, 1, 1, 0.5, 0.25
VL, DL-24, 1, 1, 3, L1, L2, L3
*SM-GROUP : Settlement Group
: GRNAME, DISPLACEMENT, NODE_LIST
A1, -0.01, 158 197

```

```

P1, -0.01, 134 173
P2, -0.01, 31 111
A2, -0.01, 24 104
*SMLDCASE : Settlement Load Cases
: NAME=NAME, iSMIN, iSMAX, SCALE, DESC ; line 1
: GRNAME1, GRNAME2, ... ; from line 2
NAME=지점침하, 1, 3, 1,
A1, P1, P2, A2
*LOADCOMB : Combinations
: NAME=NAME, KIND, ACTIVE, bES, ITYPE, DESC,
ISERV-TYPE, nLCOMTYPE ; line 1
: ANAL1, LCNAME1, FACT1, ...
; from line 2
NAME=활성전, GEN, ACTIVE, 0, 0, , 0, 0
ST, 자중, 1, ST, 슬래브하중, 1
NAME=활성후, GEN, ACTIVE, 0, 0, , 0, 0
ST, "포장, 방호벽 하중", 1
NAME=고정하중, GEN, ACTIVE, 0, 0, , 0, 0
CB, 활성전, 1, CB, 활성후, 1
*LC-COLOR : Diagram Color for Load Case
: ANAL, LCNAME, iR1(ALL), iG1(ALL), iB1(ALL), iR2(MIN),
iG2(MIN), iB2(MIN), iR3(MAX), iG2(MAX), iB2(MAX)
ST, 자중, 255, 192, 160, 85, 192, 0, 255, 87, 87
ST, 슬래브하중, 160, 192, 255, 255, 255, 87, 0, 128, 57
ST, "포장, 방호벽 하중", 192, 192, 192, 160, 255, 255,
0, 157, 192
ST, 단위모멘트, 146, 0, 255, 255, 255, 255, 93, 255, 87
MV, 활하중, 255, 0, 192, 255, 87, 128, 255, 192, 160
CB, 활성전, 148, 87, 255, 148, 87, 255, 146, 0, 255
CB, 활성후, 255, 255, 87, 78, 0, 255, 0, 128, 255
SM, 지점침하, 128, 192, 0, 212, 160, 255, 93, 255, 87
MV, 화하중(BD), 255, 0, 128, 0, 128, 128, 255, 192, 87
MV, 활하중(DL), 160, 192, 255, 0, 192, 128, 255, 87, 87
CB, 고정하중, 192, 0, 192, 163, 160, 255, 160, 255, 255
*DGN-MATL : Modify Steel(Concrete) Material
: iMAT, TYPE, MNAME, [DATA1]
; STEEL
: iMAT, TYPE, MNAME, [DATA2], [R-DATA], FCI, bSERV,
SHORT, LONG ; CONC
: iMAT, TYPE, MNAME, [DATA3], [DATA2], [R-DATA]
; SRC
: iMAT, TYPE, MNAME, [DATA5]
; STEEL(None) & KSCE-ASD05
: [DATA1] : 1, DB, CODE, NAME or 2, ELAST, POISN,
FU, FY1, FY2, FY3, FY4
: FY5, FY6, AFT, AFT2, AFT3, FY, AFV, AFV2,
AFV3
: [DATA2] : 1, DB, CODE, NAME or 2, FC, CHK,
LAMBD A
: [DATA3] : 1, DB, CODE, NAME or 2, ELAST, FU, FY1,
FY2, FY3, FY4
: FY5, FY6, AFT, AFT2, AFT3, FY, AFV,
AFV2, AFV3
: [DATA4] : 1, DB, CODE, NAME or 2, FC
: [DATA5] : 3, ELAST, POISN, AL1, AL2, AL3, AL4, AL5,
AL6, AL7, AL8, AL9, AL10
; MIN1, MIN2, MIN3
: [R-DATA]: RBCODE, RBMAIN, RBSUB, FY(R), FYS
1, STEEL, SM490 , 1, KS10-Civil(S),
, SM490 , 1, KS01-Civil(RC),
, , , , 0, 0, NO.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0,
2, STEEL, SM400 , 1, KS10-Civil(S),
, SM400 , 1, KS01-Civil(RC),
, , , , 0, 0, NO.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0, 0.0.0000e+000, 0., 0, 0, 0, 0,
0, 0, 0, 0, 0, 0, 0, 0,
*SECTION MANAGER-GROUP & PART : Section
Manager - Group & Part
: SECT = NO, bSAMEJ
; line 1
: GRPDISIZE, GRPDJSIZE, PARTISIZE, PARTJSIZE
; line 2
;
; LOOP UTIL (GRPDISIZE, GRPDJSIZE)
;
: GROUPID, GROUPNAME, GROUPTYPE
; line n
;
; LOOP UTIL (PARTISIZE, PARTJSIZE)
;
: PARTTYPE, GROUPID, PARTNAME, PARTSHAPE,
bSTIFFENER ; line n
: LINESIZE, LINEINDEX[i].....
; line n
;
SECT=1, YES
0, 0, 0, 0
SECT=2, YES
0, 0, 0, 0
SECT=3, YES

```

```

0, 0, 0, 0
  SECT=4, YES
0, 0, 0, 0
  SECT=5, YES
0, 0, 0, 0
  SECT=6, YES
0, 0, 0, 0
  SECT=7, YES
0, 0, 0, 0
  SECT=8, YES
0, 0, 0, 0
  SECT=9, YES
0, 0, 0, 0
  SECT=10, YES
0, 0, 0, 0
  SECT=11, YES
0, 0, 0, 0
  SECT=12, YES
0, 0, 0, 0
  SECT=13, YES
0, 0, 0, 0
  SECT=14, YES
0, 0, 0, 0
  SECT=18, YES
0, 0, 0, 0
  SECT=19, YES
0, 0, 0, 0
  SECT=20, YES
0, 0, 0, 0
  SECT=21, YES
0, 0, 0, 0
  SECT=22, YES
0, 0, 0, 0
  SECT=23, YES
0, 0, 0, 0
  SECT=24, YES
0, 0, 0, 0
  SECT=25, YES
0, 0, 0, 0
  SECT=26, YES
0, 0, 0, 0
  SECT=27, YES
0, 0, 0, 0
  SECT=28, YES
0, 0, 0, 0
  SECT=29, YES
0, 0, 0, 0
  SECT=30, YES
0, 0, 0, 0
  SECT=31, YES
0, 0, 0, 0
  SECT=32, YES
0, 0, 0, 0
*SECTION MANAGER-STIFFENER      ; Section Manager -
Stiffener
;      SECT      =      NO,      bSAMEJ
;                  ; line 1
;      STFNSIZE,  STFNJSIZE
;                  ; line 2
; ..... ;
;      LOOP UTIL (STFNJSIZE, STFNJSIZE)
;
;      TYPE, Z, STANDREF, POSLINE, STANDREFL,
NUM, CTC      ; line n
;      STIFFTYPE, dSIZE(0 ~ 20)
;                  ; line n
;      LINESIZE,  LINEINDEX[i].....
;                  ; line n
; ..... ;

  SECT=1, YES
0, 0
  SECT=2, YES
0, 0
  SECT=3, YES
0, 0
  SECT=4, YES
0, 0
  SECT=5, YES
0, 0
  SECT=6, YES
0, 0
  SECT=7, YES
0, 0
  SECT=8, YES
0, 0
  SECT=9, YES
0, 0
  SECT=10, YES
0, 0
  SECT=11, YES
0, 0
  SECT=12, YES
0, 0
  SECT=13, YES
0, 0

```

```

  SECT=14, YES
0, 0
  SECT=18, YES
0, 0
  SECT=19, YES
0, 0
  SECT=20, YES
0, 0
  SECT=21, YES
0, 0
  SECT=22, YES
0, 0
  SECT=23, YES
0, 0
  SECT=24, YES
0, 0
  SECT=25, YES
0, 0
  SECT=26, YES
0, 0
  SECT=27, YES
0, 0
  SECT=28, YES
0, 0
  SECT=29, YES
0, 0
  SECT=30, YES
0, 0
  SECT=31, YES
0, 0
  SECT=32, YES
0, 0
*ENDDATA

```

■ 흥산1교 대구방향(P1) 하부 input

```
-----
: MIDAS/Civil Text(MCT) File.
: Date : 2016/1/5
:-----

*VERSION
8.4.5

*UNIT      : Unit System
: FORCE, LENGTH, HEAT, TEMPER
KN , M, KCAL, C

*STRUCTYPE : Structure Type
: ISTYP, IMASS, ISMAS, bMASSOFFSET, bSELFWEIGHT,
GRAV, TEMPER, bALIGNBEAM, bALIGNSLAB, bROTGRID
1, 1, 1, NO, YES, 9.806, 10, NO, NO, NO

*REBAR=MATL-CODE : Rebar Material Code
: CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
KS01-Civil(RC), SD300, KS01-Civil(RC), SD300

*NODE      : Nodes
: INO, X, Y, Z
1, 0, 0, 9.791
2, 1.6, 0, 9.791
3, 4, 0, 9.791
4, 4.736, 0, 9.791
5, 5.5, 0, 9.791
6, 6.264, 0, 9.791
7, 7, 0, 9.791
8, 9.4, 0, 9.791
9, 11, 0, 9.791
10, 5.5, 0, 0
11, 5.5, 0, 7.791

*ELEMENT   : Elements
: iEL, TYPE, iMAT, iPRO, iN1, iN2, ANGLE, iSUB, EXVAL,
iOPT(EXVAL2) : Frame Element
: iEL, TYPE, iMAT, iPRO, iN1, iN2, ANGLE, iSUB, EXVAL,
EXVAL2, bLMT : Comp/Tens Truss
: iEL, TYPE, iMAT, iPRO, iN1, iN2, iN3, iN4, iSUB, iWID ,
LCAXIS : Planar Element
: iEL, TYPE, iMAT, iPRO, iN1, iN2, iN3, iN4, iN5, iN6, iN7,
iN8 : Solid Element
: iEL, TYPE, iMAT, iPRO, iN1, iN2, REF, RPX, RPY, RPZ,
iSUB, EXVAL : Frame(Ref. Point)
1, BEAM , 1, 1, 1, 2, 0, 0
2, BEAM , 1, 2, 2, 3, 0, 0
3, BEAM , 1, 3, 3, 4, 0, 0
4, BEAM , 1, 3, 4, 5, 0, 0
5, BEAM , 1, 3, 5, 6, 0, 0
6, BEAM , 1, 3, 6, 7, 0, 0
7, BEAM , 1, 2, 7, 8, 0, 0
9, BEAM , 1, 4, 11, 10, 0, 0
10, BEAM , 1, 1, 8, 9, 0, 0

*MATERIAL : Material
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA1] : STEEL, CONC,
USER
: iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA2], [DATA2] : SRC
: [DATA1] : 1, DB, NAME, CODE
: [DATA1] : 2, ELAST, POISN, THERMAL, DEN, MASS
: [DATA1] : 3, Ex, Ey, Ez, Tx, Ty, Tz, Sxy, Sxz, Syz,
Pxy, Pxz, Pyz, DEN, MASS : Orthotropic
: [DATA2] : 1, DB, NAME, CODE or 2, ELAST, POISN,
THERMAL, DEN, MASS
1, CONC , C24 , 0, 0, , C, NO, 0.05,
1, KS01-Civil(RC), KCI-2012 , C24

*MATL-COLOR
: iMAT, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 0, 255,
NO, 0.5

*SECTION : Section
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, iCEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT,
PERI_IN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
: DB, NAME1, NAME2
: 2nd line(STYPE=DB)
: [DIM1], [DIM2]
: 2nd line(STYPE=USER)
: D11, D12, D13, D14, D15, D16, D17, D18
: 2nd line(STYPE=VALUE)
```

```
: AREA1, ASy1, ASz1, lxx1, lyy1, lzz1
: 3rd line(STYPE=VALUE)
: CyP1, CyM1, CzP1, CzM1, QyB1, QzB1,
PERI_OUT1, PERI_IN1, Cy1, Cz1 : 4th
line(STYPE=VALUE)
: Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1,
Zyy2 : 5th line(STYPE=VALUE)
: D21, D22, D23, D24, D25, D26, D27, D28
: 6th line(STYPE=VALUE)
: AREA2, ASy2, ASz2, lxx2, lyy2, lzz2
: 7th line(STYPE=VALUE)
: CyP2, CyM2, CzP2, CzM2, QyB2, QzB2,
PERI_OUT2, PERI_IN2, Cy2, Cz2 : 8th
line(STYPE=VALUE)
: Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2,
Zzz2 : 9th line(STYPE=VALUE)
: OPT1, OPT2, [JOINT]
: 2nd line(STYPE=PSC)
: ELAST, DEN, POIS, POIC, THERMAL
: 2nd line(STYPE=PSC-CMPW)
: bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I],
[WT-J], Wl, WJ, bSYM, bSIDEHOLE : 3rd
line(STYPE=PSC)
: bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I],
[CMPWEB-J] : 3rd
line(STYPE=PSC-CMPW)
: bUSERDEFMESHIZE, MESHIZE, bUSERINPSTIFF,
[STIFF-I], [STIFF-J] : 4th line(STYPE=PSC)
: [SIZE-A]-i
: 5th line(STYPE=PSC)
: [SIZE-B]-i
: 6th line(STYPE=PSC)
: [SIZE-C]-i
: 7th line(STYPE=PSC)
: [SIZE-D]-i
: 8th line(STYPE=PSC)
: [SIZE-A]-j
: 9th line(STYPE=PSC)
: [SIZE-B]-j
: 10th line(STYPE=PSC)
: [SIZE-C]-j
: 11th line(STYPE=PSC)
: [SIZE-D]-j
: 12th line(STYPE=PSC)
: GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMULTI, EsEc-L, EsEc-S : 2nd
line(STYPE=CMP-B/I)
: SW_i, Hw_i, tw_i, B_j, Bf1_i, tf1_i, B2_i, Bf2_i,
tf2_i : 3rd line(STYPE=CMP-B/I)
: SW_j, Hw_j, tw_j, B_j, Bf1_j, tf1_j, B2_j, Bf2_j,
tf2_j : 4th line(STYPE=CMP-B/I)
: N1, N2, Hr, Hr2, tr1, tr2
: 5th line(STYPE=CMP-B)
: GN, CTC, Bc, Tc, Hh, EgDdSb, DgdDsb, Pgd,
Psb, bSYM, SW_j, SW_j : 2nd
line(STYPE=CMP-CI/CT)
: OPT1, OPT2, [JOINT]
: 3rd line(STYPE=CMP-CI/CT)
: [SIZE-A]-i
: 4th line(STYPE=CMP-CI/CT)
: [SIZE-B]-i
: 5th line(STYPE=CMP-CI/CT)
: [SIZE-C]-i
: 6th line(STYPE=CMP-CI/CT)
: [SIZE-D]-i
: 7th line(STYPE=CMP-CI/CT)
: [SIZE-A]-j
: 8th line(STYPE=CMP-CI/CT)
: [SIZE-B]-j
: 9th line(STYPE=CMP-CI/CT)
: [SIZE-C]-j
: 10th line(STYPE=CMP-CI/CT)
: [SIZE-D]-j
: 11th line(STYPE=CMP-CI/CT)
: iSEC, TYPE, SNAME, [OFFSET], bSD, STYPE1, STYPE2
: 1st line - CONSTRUCT
: SHAPE, ...(same with other type data from shape)
: Before (STYPE1)
: SHAPE, ...(same with other type data from shape)
: After (STYPE2)
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SB
: Hw, tw, B, Bf1, tf1, B2, Bf2, tf2
: 2nd line
: N1, N2, Hr, Hr2, tr1, tr2
: 3rd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SI
: Hw, tw, B, tf1, B2, tf2
: 2nd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 3rd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-CI/CT
: OPT1, OPT2, [JOINT]
: 2nd line
: [SIZE-A]
: 3rd line
```

```
: [SIZE-B]
: 4th line
: [SIZE-C]
: 5th line
: [SIZE-D]
: 6th line
: SW, GN, CTC, Bc, Tc, Hh, EgDdSb, DgdDsb,
Pgd, Psb : 7th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - PSC
: OPT1, OPT2, [JOINT]
: 2nd line
: bSHEARCHK, [SCHK], [WT], WIDTH, bSYM,
bSIDEHOLE : 3rd line
: bUSERDEFMESHIZE, MESHIZE, bUSERINPSTIFF,
[STIFF] : 4th line
: [SIZE-A]
: 5th line
: [SIZE-B]
: 6th line
: [SIZE-C]
: 7th line
: [SIZE-D]
: 8th line
: [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6,
D7, D8, D9, D10
: [DATA2] : CCSHAPE or ICEL or iN1, iN2
: [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4,
D5, D6, D7, D8, D9, D10, iN1, iN2
: [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
: [OFFSET] : OFFSET, iCENT, iREF, iHORZ, HUSER,
iVERT, VUSER
: [OFFSET2] : OFFSET, iCENT, iREF, iHORZ, HUSERI,
HUSERJ, iVERT, VUSERI, VUSERJ
: [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM),
8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL), 2(nCEL2)
: [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM),
6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL), 11(nCEL2)
: [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM),
6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL), 18(nCEL2)
: [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM),
10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL), 11(nCEL2)
: [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM),
7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL), 18(nCEL2)
: [STIFF] : AREA, ASy, ASz, lxx, lyy, lzz
: [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3
: [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1,
bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3
: [CMPWEB] : EFD, LRF, A, B, H, T
1, DBUSER , 코평1 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.021, 2.8, 0, 0, 0, 0, 0, 0,
2, DBUSER , 코평2 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.836, 2.8, 0, 0, 0, 0, 0, 0,
3, DBUSER , 코평3 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 4.2, 8, 0, 0, 0, 0, 0, 0, 0
4, DBUSER , 기돌 , CC, 0, 0, 0, 0,
0, 0, YES, SR , 2, 3, 0, 0, 0, 0, 0, 0, 0, 0
*SECT-COLOR
: iSEC, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 0, 255,
NO, 0.5
2, 255, 0, 0, 0, 255, 0, 0, 0, 0, 255,
NO, 0.5
3, 255, 0, 0, 0, 255, 0, 0, 0, 0, 255,
NO, 0.5
4, 255, 0, 0, 0, 255, 0, 0, 0, 0, 255,
NO, 0.5
*DGN-SECT
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, iCEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT,
PERI_IN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
: DB, NAME1, NAME2
: 2nd line(STYPE=DB)
: [DIM1], [DIM2]
: 2nd line(STYPE=USER)
: D11, D12, D13, D14, D15, D16, D17, D18
: 2nd line(STYPE=VALUE)
line(STYPE=VALUE)
```

■ 흥산1교 부산방향(P1) 하부 input

```
-----
: MIDAS/Civil Text(MCT) File.
: Date : 2016/1/5
-----
*VERSION
8.4.5
*UNIT      : Unit System
: FORCE, LENGTH, HEAT, TEMPER
KN , M, KCAL, C
*STRUCTYPE : Structure Type
: ISTEP, IMASS, ISMAS, bMASSOFFSET, bSELFWEIGHT,
GRAV, TEMPER, bALIGNBEAM, bALIGNSLAB, bROTRIGID
1, 1, 1, NO, YES, 9.806, 10, NO, NO, NO
*REBAR-MATL-CODE : Rebar Material Code
: CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
KS01-Civil(RC), SD300, KS01-Civil(RC), SD300
*NODE      : Nodes
: INO, X, Y, Z
1, 0, 0, 11
2, 1.6, 0, 11
3, 4, 0, 11
4, 4.736, 0, 11
5, 5.5, 0, 11
6, 6.264, 0, 11
7, 7, 0, 11
8, 9.4, 0, 11
9, 11, 0, 11
10, 5.5, 0, 0
11, 5.5, 0, 9
*ELEMENT   : Elements
: iEL, TYPE, IMAT, iPRO, iN1, iN2, ANGLE, iSUB, EXVAL,
iOPT(EXVAL2) : Frame Element
: iEL, TYPE, IMAT, iPRO, iN1, iN2, ANGLE, iSUB, EXVAL,
EXVAL2, bLMT : Comp/Tens Truss
: iEL, TYPE, IMAT, iPRO, iN1, iN2, iN3, iN4, iSUB, iWID ,
LCAXIS : Planar Element
: iEL, TYPE, IMAT, iPRO, iN1, iN2, iN3, iN4, iN5, iN6, iN7,
iN8 : Solid Element
: iEL, TYPE, IMAT, iPRO, iN1, iN2, REF, RPX, RPY, RPZ,
iSUB, EXVAL : Frame(Ref. Point)
1, BEAM , 1, 1, 1, 2, 0, 0
2, BEAM , 1, 2, 2, 3, 0, 0
3, BEAM , 1, 3, 3, 4, 0, 0
4, BEAM , 1, 3, 4, 5, 0, 0
5, BEAM , 1, 3, 5, 6, 0, 0
6, BEAM , 1, 3, 6, 7, 0, 0
7, BEAM , 1, 2, 7, 8, 0, 0
10, BEAM , 1, 1, 8, 9, 0, 0
11, BEAM , 1, 4, 11, 10, 0, 0
*MATERIAL : Material
: IMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA1] : STEEL, CONC,
USER
: IMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT,
bMASS, DAMPRATIO, [DATA2], [DATA2] : SRC
: [DATA1] : 1, DB, NAME, CODE
: [DATA1] : 2, ELAST, POISN, THERMAL, DEN, MASS
: [DATA1] : 3, Ex, Ey, Ez, Tx, Ty, Tz, Sxy, Sxz, Syz,
Pxy, Pxz, Pyz, DEN, MASS : Orthotropic
: [DATA2] : 1, DB, NAME, CODE or 2, ELAST, POISN,
THERMAL, DEN, MASS
1, CONC , C24 , 0, 0, , C, NO, 0.05,
1, KS01-Civil(RC), KCI-2012 , C24
*MATL-COLOR
: IMAT, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
*SECTION : Section
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, iCEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT,
PERI_IN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
: DB, NAME1, NAME2
: 2nd line(STYPE=DB)
: [DIM1], [DIM2]
: 2nd line(STYPE=USER)
: D11, D12, D13, D14, D15, D16, D17, D18
```

```
: 2nd line(STYPE=VALUE)
: AREA1, ASy1, ASz1, lxx1, lyy1, lzz1
: 3rd line(STYPE=VALUE)
: CyP1, CyM1, CzP1, CzM1, QyB1, QzB1,
PERI_OUT1, PERI_IN1, Cy1, Cz1 : 4th
line(STYPE=VALUE)
: Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1,
Zyy2 : 5th line(STYPE=VALUE)
: D21, D22, D23, D24, D25, D26, D27, D28
: 6th line(STYPE=VALUE)
: AREA2, ASy2, ASz2, lxx2, lyy2, lzz2
: 7th line(STYPE=VALUE)
: CyP2, CyM2, CzP2, CzM2, QyB2, QzB2,
PERI_OUT2, PERI_IN2, Cy2, Cz2 : 8th
line(STYPE=VALUE)
: Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2,
Zzz2 : 9th line(STYPE=VALUE)
: OPT1, OPT2, [JOINT]
: 2nd line(STYPE=PSC)
: ELAST, DEN, POIS, POIC, THERMAL
: 2nd line(STYPE=PSC-CMPW)
: bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I],
[WT-J], Wl, WJ, bSYM, bSIDEHOLE : 3rd
line(STYPE=PSC)
: bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I],
[CMPWEB-J] : 3rd
line(STYPE=PSC-CMPW)
: bUSERDEFMESHSIZE, MESHSIZE, bUSERINPSTIFF,
[STIFF-I], [STIFF-J] : 4th line(STYPE=PSC)
: [SIZE-A]-i
: 5th line(STYPE=PSC)
: [SIZE-B]-i
: 6th line(STYPE=PSC)
: [SIZE-C]-i
: 7th line(STYPE=PSC)
: [SIZE-D]-i
: 8th line(STYPE=PSC)
: [SIZE-A]-j
: 9th line(STYPE=PSC)
: [SIZE-B]-j
: 10th line(STYPE=PSC)
: [SIZE-C]-j
: 11th line(STYPE=PSC)
: [SIZE-D]-j
: 12th line(STYPE=PSC)
: GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMULTI, EsEc-L, EsEc-S : 2nd
line(STYPE=CMP-B/I)
: SW_i, Hw_i, tw_i, B_i, Bf1_i, tf1_i, B2_i, Bf2_i,
tf2_i : 3rd line(STYPE=CMP-B/I)
: SW_j, Hw_j, tw_j, B_j, Bf1_j, tf1_j, B2_j, Bf2_j,
tf2_j : 4th line(STYPE=CMP-B/I)
: N1, N2, Hr, Hr2, tr1, tr2
: 5th line(STYPE=CMP-B)
: GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb, Pgd,
Psb, bSYM, SW_j, SW_j : 2nd
line(STYPE=CMP-CI/CT)
: OPT1, OPT2, [JOINT]
: 3rd line(STYPE=CMP-CI/CT)
: [SIZE-A]-i
: 4th line(STYPE=CMP-CI/CT)
: [SIZE-B]-i
: 5th line(STYPE=CMP-CI/CT)
: [SIZE-C]-i
: 6th line(STYPE=CMP-CI/CT)
: [SIZE-D]-i
: 7th line(STYPE=CMP-CI/CT)
: [SIZE-A]-j
: 8th line(STYPE=CMP-CI/CT)
: [SIZE-B]-j
: 9th line(STYPE=CMP-CI/CT)
: [SIZE-C]-j
: 10th line(STYPE=CMP-CI/CT)
: [SIZE-D]-j
: 11th line(STYPE=CMP-CI/CT)
: iSEC, TYPE, SNAME, [OFFSET], bSD, STYPE1, STYPE2
: 1st line - CONSTRUCT
: SHAPE, ...(same with other type data from shape)
: Before (STYPE1)
: SHAPE, ...(same with other type data from shape)
: After (STYPE2)
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SB
: Hw, tw, B, Bf1, tf1, B2, Bf2, tf2
: 2nd line
: N1, N2, Hr, Hr2, tr1, tr2
: 3rd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-SI
: Hw, tw, B, tf1, B2, tf2
: 2nd line
: SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 3rd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - COMPOSITE-CI/CT
: OPT1, OPT2, [JOINT]
: 2nd line
```

```
: [SIZE-A]
: 3rd line
: [SIZE-B]
: 4th line
: [SIZE-C]
: 5th line
: [SIZE-D]
: 6th line
: SW, GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb,
Pgd, Psb : 7th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
: 1st line - PSC
: OPT1, OPT2, [JOINT]
: 2nd line
: bSHEARCHK, [SCHK], [WT], WIDTH, bSYM,
bSIDEHOLE : 3rd line
: bUSERDEFMESHSIZE, MESHSIZE, bUSERINPSTIFF,
[STIFF] : 4th line
: [SIZE-A]
: 5th line
: [SIZE-B]
: 6th line
: [SIZE-C]
: 7th line
: [SIZE-D]
: 8th line
: [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6,
D7, D8, D9, D10
: [DATA2] : CCSHAPE or iCEL or iN1, iN2
: [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4,
D5, D6, D7, D8, D9, D10, iN1, iN2
: [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
: [OFFSET] : OFFSET, iCENT, iREF, iHORZ, HUSER,
iVERT, VUSER
: [OFFSET2] : OFFSET, iCENT, iREF, iHORZ, HUSERI,
HUSERJ, iVERT, VUSERI, VUSERJ
: [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM),
8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL), 2(nCEL2)
: [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM),
6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL), 11(nCEL2)
: [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM),
6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL), 18(nCEL2)
: [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM),
10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL), 11(nCEL2)
: [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM),
7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL), 18(nCEL2)
: [STIFF] : AREA, ASy, ASz, lxx, lyy, lzz
: [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3
: [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1,
bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3
: [CMPWEB] : EFD, LRF, A, B, H, T
1, DBUSER , 코핑1 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.021, 2.8, 0, 0, 0, 0, 0, 0, 0
2, DBUSER , 코핑2 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.836, 2.8, 0, 0, 0, 0, 0, 0, 0
3, DBUSER , 코핑3 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 4, 2.8, 0, 0, 0, 0, 0, 0, 0, 0
4, DBUSER , 기둥 , CC, 0, 0, 0, 0,
0, 0, YES, SR , 2, 3, 0, 0, 0, 0, 0, 0, 0, 0
*SECT-COLOR
: iSEC, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R,
HE_G, HE_B, bBLEND, FACT
1, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
2, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
3, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
4, 255, 0, 0, 0, 255, 0, 0, 0, 255,
NO, 0.5
*DGN-SECT
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, [DATA1],
[DATA2] : 1st line - DB/USER
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, BLT, D1,
..., D8, iCEL : 1st line - VALUE
: AREA, ASy, ASz, lxx, lyy, lzz
: 2nd line
: CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT,
PERI_IN, Cy, Cz : 3rd line
: Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz
: 4th line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, ELAST,
DEN, POIS, POIC, SF, THERMAL : 1st line - SRC
: D1, D2, [SRC]
: 2nd line
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 1, DB,
NAME1, NAME2, D1, D2 : 1st line - COMBINED
: iSEC, TYPE, SNAME, [OFFSET], bSD, SHAPE, 2, D11,
D12, D13, D14, D15, D21, D22, D23, D24
: iSEC, TYPE, SNAME, [OFFSET2], bSD, SHAPE, iyVAR,
izVAR, STYPE : 1st line - TAPERED
: DB, NAME1, NAME2
: 2nd line(STYPE=DB)
: [DIM1], [DIM2]
: 2nd line(STYPE=USER)
: D11, D12, D13, D14, D15, D16, D17, D18
: 2nd line(STYPE=VALUE)
: AREA1, ASy1, ASz1, lxx1, lyy1, lzz1
: 3rd line(STYPE=VALUE)
```

```

;      CyP1, CyM1, CzP1, CzM1, QyB1, QzB1,
PERL_OUT1, PERL_IN1, Cy1, Cz1      : 4th
line(STYPE=VALUE)
;      Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1,
Zyy2      : 5th line(STYPE=VALUE)
;      D21, D22, D23, D24, D25, D26, D27, D28
      : 6th line(STYPE=VALUE)
;      AREA2, ASy2, ASz2, lxx2, lyy2, lzz2
      : 7th line(STYPE=VALUE)
;      CyP2, CyM2, CzP2, CzM2, QyB2, QzB2,
PERL_OUT2, PERL_IN2, Cy2, Cz2      : 8th
line(STYPE=VALUE)
;      Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2,
Zzz2      : 9th line(STYPE=VALUE)
;      OPT1, OPT2, [JOINT]
      : 2nd line(STYPE=PSC)
;      ELAST, DEN, POIS, POIC, THERMAL
      : 2nd line(STYPE=PSC-CMPW)
;      bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I],
[WT-J], WI, WJ, bSYM, bSIDEHOLE : 3rd
line(STYPE=PSC)
;      bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I],
[CMPWEB-J] : 3rd
line(STYPE=PSC-CMPW)
;      bUSERDEFMESHIZE, MESHIZE, bUSERINPSTIFF,
[STIFF-I], [STIFF-J] : 4th line(STYPE=PSC)
;      [SIZE-A]-I
      : 5th line(STYPE=PSC)
;      [SIZE-B]-I
      : 6th line(STYPE=PSC)
;      [SIZE-C]-I
      : 7th line(STYPE=PSC)
;      [SIZE-D]-I
      : 8th line(STYPE=PSC)
;      [SIZE-A]-J
      : 9th line(STYPE=PSC)
;      [SIZE-B]-J
      : 10th line(STYPE=PSC)
;      [SIZE-C]-J
      : 11th line(STYPE=PSC)
;      [SIZE-D]-J
      : 12th line(STYPE=PSC)
;      GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMULTI, EsEc-L, EsEc-S : 2nd
line(STYPE=CMP-B/I)
;      SW_i, Hw_j, tw_j, B_i, Bf1_i, tf1_i, B2_j, Bf2_i,
tf2_j : 3rd line(STYPE=CMP-B/I)
;      SW_j, Hw_j, tw_j, B_j, Bf1_j, tf1_j, B2_j, Bf2_j,
tf2_j : 4th line(STYPE=CMP-B/I)
;      N1, N2, Hr, Hr2, tr1, tr2
      : 5th line(STYPE=CMP-B)
;      GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb, Pgd,
Psb, bSYM, SW_j, SW_j : 2nd
line(STYPE=CMP-CI/CT)
;      OPT1, OPT2, [JOINT]
      : 3rd line(STYPE=CMP-CI/CT)
;      [SIZE-A]-I
      : 4th line(STYPE=CMP-CI/CT)
;      [SIZE-B]-I
      : 5th line(STYPE=CMP-CI/CT)
;      [SIZE-C]-I
      : 6th line(STYPE=CMP-CI/CT)
;      [SIZE-D]-I
      : 7th line(STYPE=CMP-CI/CT)
;      [SIZE-A]-J
      : 8th line(STYPE=CMP-CI/CT)
;      [SIZE-B]-J
      : 9th line(STYPE=CMP-CI/CT)
;      [SIZE-C]-J
      : 10th line(STYPE=CMP-CI/CT)
;      [SIZE-D]-J
      : 11th line(STYPE=CMP-CI/CT)
; ISEC, TYPE, SNAME, [OFFSET], bSD, STYPE1, STYPE2
      : 1st line - CONSTRUCT
;      SHAPE, ...(same with other type data from shape)
      : Before (STYPE1)
;      SHAPE, ...(same with other type data from shape)
      : After (STYPE2)
; ISEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
      : 1st line - COMPOSITE-SB
;      Hw, tw, B, Bf1, tf1, B2, Bf2, tf2
      : 2nd line
;      N1, N2, Hr, Hr2, tr1, tr2
      : 3rd line
;      SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 4th line
; ISEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
      : 1st line - COMPOSITE-SI
;      Hw, tw, B, tf1, B2, tf2
      : 2nd line
;      SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc,
bMulti, Elong, Esh : 3rd line
; ISEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
      : 1st line - COMPOSITE-CI/CT
;      OPT1, OPT2, [JOINT]
      : 2nd line
;      [SIZE-A]
      : 3rd line
;      [SIZE-B]

```

```

      : 4th line
;      [SIZE-C]
      : 5th line
;      [SIZE-D]
      : 6th line
;      SW, GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb,
Pgd, Psb : 7th line
; ISEC, TYPE, SNAME, [OFFSET], bSD, SHAPE
      : 1st line - PSC
;      OPT1, OPT2, [JOINT]
      : 2nd line
;      bSHEARCHK, [SCHK], [WT], WIDTH, bSYM,
bSIDEHOLE : 3rd line
;      bUSERDEFMESHIZE, MESHIZE, bUSERINPSTIFF,
[STIFF] : 4th line
;      [SIZE-A]
      : 5th line
;      [SIZE-B]
      : 6th line
;      [SIZE-C]
      : 7th line
;      [SIZE-D]
      : 8th line
; [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6,
D7, D8, D9, D10
; [DATA2] : CSHAPE or ICEL or IN1, IN2
; [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4,
D5, D6, D7, D8, D9, D10, IN1, IN2
; [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
; [OFFSET] : OFFSET, iCENT, iREF, iHORZ, HUSER,
iVERT, VUSER
; [OFFSET2]: OFFSET, iCENT, iREF, iHORZ, HUSERi,
HUSERJ, iVERT, VUSERi, VUSERJ
; [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM),
8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL), 2(nCEL2)
; [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM),
6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL), 11(nCEL2)
; [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM),
6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL), 18(nCEL2)
; [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM),
10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL), 11(nCEL2)
; [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM),
7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL), 18(nCEL2)
; [STIFF] : AREA, ASy, ASz, lxx, lyy, lzz
; [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3
; [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1,
bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3
; [CMPWEB] : EFD, LRF, A, B, H, T
; 1, DBUSER , 코핑1 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.021, 2.8, 0, 0, 0, 0, 0, 0
; 2, DBUSER , 코핑2 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 2.836, 2.8, 0, 0, 0, 0, 0, 0
; 3, DBUSER , 코핑3 , CC, 0, 0, 0, 0,
0, 0, YES, SB , 2, 4, 2.8, 0, 0, 0, 0, 0, 0
; 4, DBUSER , 기둥 , CC, 0, 0, 0, 0,
0, 0, YES, SR , 2, 3, 0, 0, 0, 0, 0, 0, 0
; *STLDCASE : Static Load Cases
; LCNAME, LCTYPE, DESC
; D , D ,
; L , L ,
; W-LO , USER,
; W-TR , USER,
; WL , USER,
; *CONSTRAINT : Supports
; NODE_LIST, CONST(Dx,Dy,Dz,Rx,Ry,Rz), GROUP
10, 111111,
; *RIGIDLINK : Rigid Link
; M-NODE, DOF, S-NODE LIST, GROUP
5, 111111, 11,
; *USE-STLD, D
; *SELFWEIGHT, X, Y, Z, GROUP
; *SELFWEIGHT, 0, 0, -1,
; *CONLOAD : Nodal Loads
; NODE_LIST, FX, FY, FZ, MX, MY, MZ, GROUP
2, 0, 0, -4624.7, 0, 0, 0,
8, 0, 0, -4420.24, 0, 0, 0,
; End of data for load case [D]
; -----
; *USE-STLD, L
; *CONLOAD : Nodal Loads
; NODE_LIST, FX, FY, FZ, MX, MY, MZ, GROUP
2, 0, 0, -830.445, 0, 0, 0,
8, 0, 0, -600.133, 0, 0, 0,
; End of data for load case [L]
; -----
; *USE-STLD, W-LO
; *BEAMLOAD : Element Beam Loads
; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN],
[VALUE], GROUP
; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ,
bPROJ, [ECCEN], [VALUE], GROUP
; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4
; [ECCEN] : bECCEN, ECCDIR, I-END, J-END,
bJ-END
; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END,
ADDITIONAL_J-END, bADDITIONAL_J-END
1, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
10.3488, 1, 10.3488, 0, 0, 0, . NO, 0, 0, NO,
2, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,

```

```

15.5232, 1, 15.5232, 0, 0, 0, 0, . NO, 0, 0, NO,
3, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
19.404, 1, 19.404, 0, 0, 0, 0, . NO, 0, 0, NO,
4, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
19.404, 1, 19.404, 0, 0, 0, 0, . NO, 0, 0, NO,
5, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
19.404, 1, 19.404, 0, 0, 0, 0, . NO, 0, 0, NO,
6, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
19.404, 1, 19.404, 0, 0, 0, 0, . NO, 0, 0, NO,
7, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
15.5232, 1, 15.5232, 0, 0, 0, 0, . NO, 0, 0, NO,
10, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
10.3488, 1, 10.3488, 0, 0, 0, 0, . NO, 0, 0, NO,
11, LINE , UNILoad, GY, NO , NO, aDir[1], . . . 0,
4.5, 1, 4.5, 0, 0, 0, 0, . NO, 0, 0, NO,
; End of data for load case [W-LO]
; -----
; *USE-STLD, W-TR
; *CONLOAD : Nodal Loads
; NODE_LIST, FX, FY, FZ, MX, MY, MZ, GROUP
1, 34.91, 0, 0, 0, 0, 0,
2, 363.275, 0, 0, 0, 1247.12, 0,
8, 363.275, 0, 0, 0, 1247.12, 0,
; *BEAMLOAD : Element Beam Loads
; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN],
[VALUE], GROUP
; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ,
bPROJ, [ECCEN], [VALUE], GROUP
; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4
; [ECCEN] : bECCEN, ECCDIR, I-END, J-END,
bJ-END
; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END,
ADDITIONAL_J-END, bADDITIONAL_J-END
11, LINE , UNILoad, GX, NO , NO, aDir[1], . . . 0,
4.5, 1, 4.5, 0, 0, 0, 0, . NO, 0, 0, NO,
; End of data for load case [W-TR]
; -----
; *USE-STLD, WL
; *CONLOAD : Nodal Loads
; NODE_LIST, FX, FY, FZ, MX, MY, MZ, GROUP
2, 41.25, 0, 0, 0, 249.893, 0,
8, 41.25, 0, 0, 0, 249.893, 0,
; End of data for load case [WL]
; -----
; *LOADCOMB : Combinations
; NAME=NAME, KIND, ACTIVE, bES, ITYPE, DESC,
ISERV-TYPE, nLCOMTYPE : line 1
; ANAL1, LCNAME1, FACT1, ...
; from line 2
NAME=UL001, GEN, ACTIVE, 0, 0, . 0, 0
ST, D, 1.3, ST, L, 2.15
NAME=UL004(교), GEN, ACTIVE, 0, 0, . 0, 0
ST, D, 1.3, ST, L, 1.3, ST, W-LO, 0.65
NAME=합성부재력, GEN, ACTIVE, 0, 0, . 0, 0
ST, W-LO, 1, ST, W-TR, 1, ST, WL, 1
NAME=UL003(교직), GEN, ACTIVE, 0, 0, . 0, 0
ST, D, 1.3, ST, W-TR, 1.3
; *LC-COLOR : Diagram Color for Load Case
; ANAL, LCNAME, iR1(ALL), iG1(ALL), iB1(ALL), iR2(MIN),
iG2(MIN), iB2(MIN), iR3(MAX), iG2(MAX), iB2(MAX)
ST, D, 148, 87, 255, 255, 87, 128, 85, 192, 0
ST, L, 192, 72, 0, 160, 255, 255, 255, 0, 192
ST, W-LO, 255, 192, 160, 0, 128, 192, 0, 192, 192
CB, UL001, 160, 255, 255, 146, 0, 255, 148, 87, 255
ST, W-TR, 0, 128, 192, 192, 192, 192, 0, 128, 57
ST, WL, 255, 160, 255, 0, 192, 192, 78, 0, 255
CB, UL004(교), 0, 192, 128, 0, 128, 128, 255, 192, 87
CB, 합성부재력, 192, 72, 0, 0, 192, 192, 192, 128, 0
CB, UL003(교직), 192, 72, 0, 148, 87, 255, 93, 255, 87
; *DGN-MATL : Modify Steel(Concrete) Material
; IMAT, TYPE, MNAME, [DATA1]
; STEEL
; IMAT, TYPE, MNAME, [DATA2], [R-DATA], FCI, bSERV,
SHORT, LONG : CONC
; IMAT, TYPE, MNAME, [DATA3], [DATA2], [R-DATA]
; SRC
; IMAT, TYPE, MNAME, [DATA5]
; STEEL(None) & KSCE-ASD05
; [DATA1] : 1, DB, CODE, NAME or 2, ELAST, POISN,
FU, FY1, FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV, AFV2,
AFV3
; [DATA2] : 1, DB, CODE, NAME or 2, FC, CHK,
LAMBDA
; [DATA3] : 1, DB, CODE, NAME or 2, ELAST, FU, FY1,
FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV,
AFV2, AFV3
; [DATA4] : 1, DB, CODE, NAME or 2, FC
; [DATA5] : 3, ELAST, POISN, AL1, AL2, AL3, AL4, AL5,
AL6, AL7, AL8, AL9, AL10
; MIN1, MIN2, MIN3
; [R-DATA] : RBCODE, RBMAIN, RBSUB, FY(R), FYS
1, CONC , C24 , 1, KS01-Civil(RC),
.C24 , NO, 1, . . . 0, 0, 16800, NO, 0,
0, , , , 0, NO, 1, . . .
0, 0, 0
; *ENDDATA

```