```
;---------------------------------------------------------------------------
;  MIDAS/Civil Text(MCT) File.
;  Date : 2013/6/18
;---------------------------------------------------------------------------

*VERSION
   8.1.5

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

*PROJINFO    ; Project Information
   USER=Windows 사용자
   ADDRESS=d

*REBAR-MATL-CODE    ; Rebar Material Code
; CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
 KS01-Civil(RC), SD240, KS01-Civil(RC), SD240

*NODE    ; Nodes
; iNO, X, Y, Z
   101, 95.3011, 0, 0
   102, 92.1474297440341, 2.41893822945802, 0
   103, 88.1800810189691, 5.46198671637465, 0
   104, 84.2127322939042, 8.50503520329128, 0
   105, 80.2453835688393, 11.5480836902079, 0
   106, 76.2780348437743, 14.5911321771245, 0
   107, 72.3106861187094, 17.6341806640412, 0
   108, 69.5994, 19.7138, 0
   109, 68.2472845483163, 20.6024253102803, 0
   110, 64.0688880606863, 23.3485139454415, 0
   111, 59.8904915730563, 26.0946025806027, 0
   112, 55.7120950854263, 28.8406912157638, 0
   113, 51.5336985977963, 31.586779850925, 0
   114, 47.3553021101663, 34.3328684860862, 0
   115, 43.1769056225363, 37.0789571212473, 0
   116, 38.9985091349063, 39.8250457564085, 0
   117, 34.8201126472763, 42.5711343915697, 0
   118, 30.6417161596463, 45.3172230267309, 0
   119, 27.7862, 47.1939, 0
   120, 26.3512501725515, 47.9454848086012, 0
   121, 21.9220219860871, 50.2653851668556, 0
   122, 17.4927937996226, 52.58528552511, 0
   123, 13.0635656131582, 54.9051858833644, 0
   124, 8.63433742669377, 57.2250862416188, 0
   125, 4.20510924022934, 59.5449865998733, 0
   126, 0, 61.7475, 0
   201, 102.2031, 4.2069, 0
   202, 97.3420683360449, 7.96332409954686, 0
   203, 93.3857112025301, 11.0206494391348, 0
   204, 89.4293540690152, 14.0779747787227, 0
   205, 85.4729969355004, 17.1353001183106, 0
   206, 81.5166398019856, 20.1926254578985, 0
   207, 77.5602826684708, 23.2499507974865, 0
   208, 76.3077, 24.2179, 0
```



```
   209, 72.7565436473674, 26.5806037446244, 0
   210, 68.5937327885383, 29.3502618017885, 0
   211, 64.4309219297091, 32.1199198589527, 0
   212, 60.26811107088, 34.8895779161169, 0
   213, 56.1053002120509, 37.6592359732781, 0
   214, 51.9424893532218, 40.4288940304452, 0
   215, 47.7796784943927, 43.1985520876093, 0
   216, 43.6168676355635, 45.9682101447735, 0
   217, 39.4540567767344, 48.7378682019377, 0
   218, 35.2912459179053, 51.5075262591018, 0
   219, 33.9733, 52.3844, 0
   220, 30.3999585326649, 54.2888746595625, 0
   221, 25.9875236361127, 56.6405587973004, 0
   222, 21.5750887395605, 58.9922429350383, 0
   223, 17.1626538430082, 61.3439270727762, 0
   224, 12.750218946456, 63.6956112105141, 0
   225, 8.33778404990375, 66.047295348252, 0
   226, 5.7318, 67.4362, 0
   501, 98.7521, 2.10345, 0
   502, 94.7447490400395, 5.19113116450244, 0
   503, 90.7828961107496, 8.24131807775471, 0
   504, 86.8210431814597, 11.291504991007, 0
   505, 82.8591902521698, 14.3416919042593, 0
   506, 78.897337322888, 17.3918788175115, 0
   507, 74.9354843935901, 20.4420657307638, 0
   508, 72.95355, 21.96585, 0
   509, 70.5019140978418, 23.5915145274524, 0
   510, 66.3313104246123, 26.3493873763615, 0
   511, 62.1607067513827, 29.1072612197777, 0
   512, 57.9901030781532, 31.8651345659404, 0
   513, 53.8194994049236, 34.623007912103, 0
   514, 49.6488957316941, 37.3808812582657, 0
   515, 45.4782920584645, 40.1387546044283, 0
   516, 41.3076883852349, 42.896627950591, 0
   517, 37.1370847120054, 45.6545012967537, 0
   518, 32.9664810387758, 48.4123746429163, 0
   519, 30.87975, 49.78915, 0
   520, 28.3756043526082, 51.1171797340818, 0
   521, 23.9547728110999, 53.452971982078, 0
   522, 19.5339412695916, 55.7887642300742, 0
   523, 15.1131097280832, 58.1245564780703, 0
   524, 10.6922781865749, 60.4603487260665, 0
   525, 6.27144664506654, 62.7961409740626, 0
   526, 2.8659, 64.59185, 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              ; 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)
   101, BEAM  ,    1,    11,   101,   102,     0
   102, BEAM  ,    1,    12,   102,   103,     0
   103, BEAM  ,    1,    12,   103,   104,     0
   104, BEAM  ,    1,    13,   104,   105,     0
   105, BEAM  ,    1,    14,   105,   106,     0
```



```
   106, BEAM  ,    1,    14,   106,   107,     0
   107, BEAM  ,    1,    14,   107,   108,     0
   108, BEAM  ,    1,    14,   108,   109,     0
   109, BEAM  ,    1,    14,   109,   110,     0
   110, BEAM  ,    1,    15,   110,   111,     0
   111, BEAM  ,    1,    16,   111,   112,     0
   112, BEAM  ,    1,    16,   112,   113,     0
   113, BEAM  ,    1,    16,   113,   114,     0
   114, BEAM  ,    1,    16,   114,   115,     0
   115, BEAM  ,    1,    16,   115,   116,     0
   116, BEAM  ,    1,    15,   116,   117,     0
   117, BEAM  ,    1,    14,   117,   118,     0
   118, BEAM  ,    1,    14,   118,   119,     0
   119, BEAM  ,    1,    14,   119,   120,     0
   120, BEAM  ,    1,    14,   120,   121,     0
   121, BEAM  ,    1,    14,   121,   122,     0
   122, BEAM  ,    1,    13,   122,   123,     0
   123, BEAM  ,    1,    12,   123,   124,     0
   124, BEAM  ,    1,    12,   124,   125,     0
   125, BEAM  ,    1,    11,   125,   126,     0
   201, BEAM  ,    1,    11,   201,   202,     0
   202, BEAM  ,    1,    12,   202,   203,     0
   203, BEAM  ,    1,    12,   203,   204,     0
   204, BEAM  ,    1,    13,   204,   205,     0
   205, BEAM  ,    1,    14,   205,   206,     0
   206, BEAM  ,    1,    14,   206,   207,     0
   207, BEAM  ,    1,    14,   207,   208,     0
   208, BEAM  ,    1,    14,   208,   209,     0
   209, BEAM  ,    1,    14,   209,   210,     0
   210, BEAM  ,    1,    15,   210,   211,     0
   211, BEAM  ,    1,    16,   211,   212,     0
   212, BEAM  ,    1,    16,   212,   213,     0
   213, BEAM  ,    1,    16,   213,   214,     0
   214, BEAM  ,    1,    16,   214,   215,     0
   215, BEAM  ,    1,    16,   215,   216,     0
   216, BEAM  ,    1,    15,   216,   217,     0
   217, BEAM  ,    1,    14,   217,   218,     0
   218, BEAM  ,    1,    14,   218,   219,     0
   219, BEAM  ,    1,    14,   219,   220,     0
   220, BEAM  ,    1,    14,   220,   221,     0
   221, BEAM  ,    1,    14,   221,   222,     0
   222, BEAM  ,    1,    13,   222,   223,     0
   223, BEAM  ,    1,    12,   223,   224,     0
   224, BEAM  ,    1,    12,   224,   225,     0
   225, BEAM  ,    1,    11,   225,   226,     0
   401, BEAM  ,    2,     2,   101,   501,     0
   402, BEAM  ,    2,     2,   102,   502,     0
   403, BEAM  ,    2,     2,   103,   503,     0
   404, BEAM  ,    2,     2,   104,   504,     0
   405, BEAM  ,    2,     2,   105,   505,     0
   406, BEAM  ,    2,     2,   106,   506,     0
   407, BEAM  ,    2,     2,   107,   507,     0
   408, BEAM  ,    2,     2,   508,   108,     0
   409, BEAM  ,    2,     2,   109,   509,     0
   410, BEAM  ,    2,     2,   110,   510,     0
   411, BEAM  ,    2,     2,   111,   511,     0
```



```
   412, BEAM  ,    2,     2,   112,   512,     0
   413, BEAM  ,    2,     2,   113,   513,     0
   414, BEAM  ,    2,     2,   114,   514,     0
   415, BEAM  ,    2,     2,   115,   515,     0
   416, BEAM  ,    2,     2,   116,   516,     0
   417, BEAM  ,    2,     2,   117,   517,     0
   418, BEAM  ,    2,     2,   118,   518,     0
   419, BEAM  ,    2,     2,   119,   519,     0
   420, BEAM  ,    2,     2,   120,   520,     0
   421, BEAM  ,    2,     2,   121,   521,     0
   422, BEAM  ,    2,     2,   122,   522,     0
   423, BEAM  ,    2,     2,   123,   523,     0
   424, BEAM  ,    2,     2,   124,   524,     0
   425, BEAM  ,    2,     2,   125,   525,     0
   426, BEAM  ,    2,     2,   126,   526,     0
   501, BEAM  ,    2,     2,   501,   201,     0
   502, BEAM  ,    2,     2,   502,   202,     0
   503, BEAM  ,    2,     2,   503,   203,     0
   504, BEAM  ,    2,     2,   504,   204,     0
   505, BEAM  ,    2,     2,   505,   205,     0
   506, BEAM  ,    2,     2,   506,   206,     0
   507, BEAM  ,    2,     2,   507,   207,     0
   508, BEAM  ,    2,     2,   208,   508,     0
   509, BEAM  ,    2,     2,   509,   209,     0
   510, BEAM  ,    2,     2,   510,   210,     0
   511, BEAM  ,    2,     2,   511,   211,     0
   512, BEAM  ,    2,     2,   512,   212,     0
   513, BEAM  ,    2,     2,   513,   213,     0
   514, BEAM  ,    2,     2,   514,   214,     0
   515, BEAM  ,    2,     2,   515,   215,     0
   516, BEAM  ,    2,     2,   516,   216,     0
   517, BEAM  ,    2,     2,   517,   217,     0
   518, BEAM  ,    2,     2,   518,   218,     0
   519, BEAM  ,    2,     2,   519,   219,     0
   520, BEAM  ,    2,     2,   520,   220,     0
   521, BEAM  ,    2,     2,   521,   221,     0
   522, BEAM  ,    2,     2,   522,   222,     0
   523, BEAM  ,    2,     2,   523,   223,     0
   524, BEAM  ,    2,     2,   524,   224,     0
   525, BEAM  ,    2,     2,   525,   225,     0
   526, BEAM  ,    2,     2,   526,   226,     0
   801, BEAM  ,    3,     3,   501,   502,     0
   802, BEAM  ,    3,     3,   502,   503,     0
   803, BEAM  ,    3,     3,   503,   504,     0
   804, BEAM  ,    3,     3,   504,   505,     0
   805, BEAM  ,    3,     3,   505,   506,     0
   806, BEAM  ,    3,     3,   506,   507,     0
   807, BEAM  ,    3,     3,   507,   508,     0
   808, BEAM  ,    3,     3,   508,   509,     0
   809, BEAM  ,    3,     3,   509,   510,     0
   810, BEAM  ,    3,     3,   510,   511,     0
   811, BEAM  ,    3,     3,   511,   512,     0
   812, BEAM  ,    3,     3,   512,   513,     0
   813, BEAM  ,    3,     3,   513,   514,     0
   814, BEAM  ,    3,     3,   514,   515,     0
   815, BEAM  ,    3,     3,   515,   516,     0
```

```
   816, BEAM  ,    3,     3,   516,   517,     0
   817, BEAM  ,    3,     3,   517,   518,     0
   818, BEAM  ,    3,     3,   518,   519,     0
   819, BEAM  ,    3,     3,   519,   520,     0
   820, BEAM  ,    3,     3,   520,   521,     0
   821, BEAM  ,    3,     3,   521,   522,     0
   822, BEAM  ,    3,     3,   522,   523,     0
   823, BEAM  ,    3,     3,   523,   524,     0
   824, BEAM  ,    3,     3,   524,   525,     0
   825, BEAM  ,    3,     3,   525,   526,     0

*GROUP    ; Group
; NAME, NODE_LIST, ELEM_LIST, PLANE_TYPE
   G1         , , 101to125, 0
   G2         , , 201to225, 0
   CB         , , 401to426 501to526, 0
   ST         , , 801to825, 0
   p1         , 119 219, , 0
   p2         , 108 208, , 0

*MATERIAL    ; Material
; iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT, bMASS, DAMPRATIO, [DATA1]          ; STEEL, CONC, USE
R
; 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, SWS490           , 0, 0, , C, NO, 0.02, 2, 2.0594e+008,   0.3, 1.2000e-005, 136.28,     0

    2, STEEL, SWS400C          , 0, 0, , C, NO, 0.02, 2, 2.0594e+008,   0.3, 1.2000e-005, 94.558,     0

    3, STEEL, SWS400S          , 0, 0, , C, NO, 0.02, 2, 2.0594e+008,   0.3, 1.2000e-005, 110.89,     0


*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
    3, 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, Ixx, Iyy, Izz                                       ; 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       ; 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, Ixx1, Iyy1, Izz1                                 ; 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, Ixx2, Iyy2, Izz2                                 ; 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                                              ; 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
)
;       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, EgdEsb, DgdDsb, Pgd, Psb, bSYM, SW_i, SW_j     ; 2nd line(STYPE=CMP-CI/C
T)
;       OPT1, OPT2, [JOINT]                                                 ; 3rd line(STYPE=CMP-CI/C
T)
;       [SIZE-A]-i                                                          ; 4th line(STYPE=CMP-CI/C
T)
;       [SIZE-B]-i                                                          ; 5th line(STYPE=CMP-CI/C
T)
;       [SIZE-C]-i                                                          ; 6th line(STYPE=CMP-CI/C
T)
;       [SIZE-D]-i                                                          ; 7th line(STYPE=CMP-CI/C
T)
;       [SIZE-A]-j                                                          ; 8th line(STYPE=CMP-CI/C
T)
;       [SIZE-B]-j                                                          ; 9th line(STYPE=CMP-CI/C
T)
;       [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, 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
;       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, Ixx, Iyy, Izz
; [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
   2, DBUSER    , Crossbeam         , CT, 0, 0, 0, 0, 0, 0, YES, H  , 2, 1.5, 0.3, 0.012, 0.012, 0.3, 0
.012, 0.006, 0, 0, 0
   3, DBUSER    , Stringer          , CT, 0, 0, 0, 0, 0, 0, YES, H  , 2, 0.8, 0.25, 0.01, 0.012, 0.25,
0.012, 0.035, 0, 0, 0
  11, COMPOSITE , 11                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.012
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  12, COMPOSITE , 12                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.014
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  13, COMPOSITE , 13                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.014, 2.5, 0.1, 0.014
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  14, COMPOSITE , 14                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.02, 2.5, 0.1, 0.02
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
```



```
  15, COMPOSITE , 15                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.016, 2.5, 0.1, 0.02
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  16, COMPOSITE , 16                , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.016, 2.5, 0.1, 0.016
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,

*SECT-COLOR
; iSEC, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R, HE_G, HE_B, bBLEND, FACT
    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
   11, 255,   0,   0,    0, 255,   0,    0,   0, 255,  NO, 0.5
   12, 255,   0,   0,    0, 255,   0,    0,   0, 255,  NO, 0.5
   13, 255,   0,   0,    0, 255,   0,    0,   0, 255,  NO, 0.5
   14, 255,   0,   0,    0, 255,   0,    0,   0, 255,  NO, 0.5
   15, 255,   0,   0,    0, 255,   0,    0,   0, 255,  NO, 0.5
   16, 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, Ixx, Iyy, Izz                                       ; 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       ; 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, Ixx1, Iyy1, Izz1                                 ; 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, Ixx2, Iyy2, Izz2                                 ; 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                                              ; 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
)
;       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, EgdEsb, DgdDsb, Pgd, Psb, bSYM, SW_i, SW_j       ; 2nd line(STYPE=CMP-CI/C
T)
;       OPT1, OPT2, [JOINT]                                                   ; 3rd line(STYPE=CMP-CI/C
T)
;       [SIZE-A]-i                                                            ; 4th line(STYPE=CMP-CI/C
T)
;       [SIZE-B]-i                                                            ; 5th line(STYPE=CMP-CI/C
T)
;       [SIZE-C]-i                                                            ; 6th line(STYPE=CMP-CI/C
T)
;       [SIZE-D]-i                                                            ; 7th line(STYPE=CMP-CI/C
T)
;       [SIZE-A]-j                                                            ; 8th line(STYPE=CMP-CI/C
T)
;       [SIZE-B]-j                                                            ; 9th line(STYPE=CMP-CI/C
T)
;       [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, 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
;       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, Ixx, Iyy, Izz
; [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
   2, DBUSER    , Crossbeam          , CT, 0, 0, 0, 0, 0, 0, YES, H  , 2, 1.5, 0.3, 0.012, 0.012, 0.3, 0
.012, 0.006, 0, 0, 0
   3, DBUSER    , Stringer           , CT, 0, 0, 0, 0, 0, 0, YES, H  , 2, 0.8, 0.25, 0.01, 0.012, 0.25,
0.012, 0.035, 0, 0, 0
  11, COMPOSITE , 11                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.012
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  12, COMPOSITE , 12                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.012, 2.5, 0.1, 0.014
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  13, COMPOSITE , 13                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.014, 2.5, 0.1, 0.014
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  14, COMPOSITE , 14                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.02, 2.5, 0.1, 0.02
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  15, COMPOSITE , 15                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.016, 2.5, 0.1, 0.02
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,
  16, COMPOSITE , 16                 , CT, 0, 0, 0, 0, 0, 0, YES, B
      2.3, 0.012, 2.5, 0.1, 0.016, 2.5, 0.1, 0.016
      0, 0,   0.15, 0.15,   0.014, 0.014
      12.6, 2, 7.2,   6.3, 0.25, 0,   8, 0, 0, 0, NO, ,


*STLDCASE    ; Static Load Cases
; LCNAME, LCTYPE, DESC
   DL(BC), D ,
   DL(AC), D ,
   WL(No Live), USER,
   WL(Live), USER,
   Unit Moment, USER,
   Temp(+), T ,
   Temp(-), T ,


*LOCALAXIS    : Node Local Axis
```



```
; NODE_LIST, iMETHOD, ANGLE-x, ANGLE-y, ANGLE-z                    ; iMETHOD=1
; NODE_LIST, iMETHOD, POX, POY, POZ, P1X, P1Y, P1Z, P2X, P2Y, P2Z  ; iMETHOD=2
; NODE_LIST, iMETHOD, V1X, V1Y, V1Z, V2X, V2Y, V2Z                 ; iMETHOD=3
   101, 1, 0, 0, 142.51
   108, 1, 0, 0, 144.6
   119, 1, 0, 0, 149.52
   126, 1, 0, 0, 152.36
   201, 1, 0, 0, 142.51
   208, 1, 0, 0, 144.6
   219, 1, 0, 0, 149.52
   226, 1, 0, 0, 152.36

*CONSTRAINT    ; Supports
; NODE_LIST, CONST(Dx,Dy,Dz,Rx,Ry,Rz), GROUP
   119, 111111,
   219, 101000,
   201 208 226, 001000,
   101 108 126, 011000,

; *LOADTOMASS, DIR, bNODAL, bBEAM, bFLOOR, bPRES, GRAV
;     LCNAME1, FACTOR1, LCNAME2, FACTOR2, ...    ; from line 1
*LOADTOMASS, XYZ, YES, YES, YES, YES, 9.806
   DL(BC), 1, DL(AC), 1

*USE-STLD, DL(BC)

; *SELFWEIGHT, X, Y, Z, GROUP
*SELFWEIGHT, 0, 0, -1,

*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
   101, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   101, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   102, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   102, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   103, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   103, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   104, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   104, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   105, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   105, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   106, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   106, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   107, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   107, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   108, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   108, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   109, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   109, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   110, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   110, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   111, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
```



```
   111, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   112, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   112, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   113, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   113, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   114, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   114, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   115, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   115, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   116, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   116, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   117, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   117, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   118, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   118, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   119, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   119, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   120, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   120, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   121, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   121, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   122, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   122, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   123, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   123, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   124, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   124, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   125, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 0.942, 1, 0.942, 0, 0, 0, 0, , NO, 0, 0, NO
   125, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -40.11, 1, -40.11, 0, 0, 0, 0, , NO, 0, 0, NO
   201, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   201, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   202, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   202, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   203, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   203, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   204, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   204, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   205, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   205, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   206, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   206, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   207, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   207, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   208, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   208, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   209, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   209, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   210, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   210, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   211, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   211, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   212, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   212, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   213, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
   213, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
   214, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
```

```
  214, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  215, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  215, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  216, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  216, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  217, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  217, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  218, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  218, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  219, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  219, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  220, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  220, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  221, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  221, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  222, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  222, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  223, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  223, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  224, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  224, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  225, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 6.251, 1, 6.251, 0, 0, 0, 0, , NO, 0, 0, NO
  225, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -41.23, 1, -41.23, 0, 0, 0, 0, , NO, 0, 0, NO
  801, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  802, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  803, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  804, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  805, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  806, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  807, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  808, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  809, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  810, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  811, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  812, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  813, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  814, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  815, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  816, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  817, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  818, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  819, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  820, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  821, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  822, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  823, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  824, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO
  825, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.25, 1, -16.25, 0, 0, 0, 0, , NO, 0, 0, NO

; End of data for load case [DL(BC)] -------------------------

*USE-STLD, DL(AC)

*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
  101, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  101, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  102, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  102, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  103, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  103, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  104, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  104, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  105, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  105, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  106, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  106, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  107, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  107, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  108, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  108, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  109, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  109, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  110, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  110, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  111, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  111, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  112, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  112, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  113, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  113, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  114, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  114, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  115, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  115, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  116, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  116, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  117, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  117, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  118, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  118, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  119, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  119, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  120, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  120, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  121, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  121, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  122, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  122, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  123, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  123, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  124, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  124, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  125, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  125, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, -22.99, 1, -22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  201, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  201, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  202, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
```



```
  202, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  203, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  203, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  204, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  204, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  205, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  205, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  206, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  206, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  207, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  207, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  208, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  208, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  209, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  209, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  210, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  210, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  211, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  211, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  212, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  212, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  213, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  213, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  214, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  214, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  215, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  215, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  216, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  216, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  217, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  217, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  218, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  218, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  219, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  219, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  220, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  220, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  221, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  221, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  222, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  222, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  223, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  223, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  224, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  224, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  225, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -16.85, 1, -16.85, 0, 0, 0, 0, , NO, 0, 0, NO
  225, BEAM   , UNILOAD, LX, NO , NO, aDir[1], , , , 0, 22.99, 1, 22.99, 0, 0, 0, 0, , NO, 0, 0, NO
  801, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  802, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  803, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  804, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  805, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  806, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  807, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  808, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  809, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
```



```
  810, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  811, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  812, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  813, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  814, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  815, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  816, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  817, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  818, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  819, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  820, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  821, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  822, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  823, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  824, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO
  825, BEAM   , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.183, 1, -8.183, 0, 0, 0, 0, , NO, 0, 0, NO

; End of data for load case [DL(AC)] -------------------------

*USE-STLD, WL(No Live)

*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
  201, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  201, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  202, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  202, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  203, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  203, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  204, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  204, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  205, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  205, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  206, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  206, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  207, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  207, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  208, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  208, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  209, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  209, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  210, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  210, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  211, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  211, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  212, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  212, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  213, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  213, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  214, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
  214, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
  215, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
```

```
   215, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   216, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   216, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   217, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   217, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   218, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   218, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   219, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   219, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   220, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   220, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   221, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   221, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   222, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   222, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   223, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   223, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   224, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   224, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO
   225, LINE   , UNILOAD, LY, NO , NO, aDir[1], , , , 0, 12.24, 1, 12.24, 0, 0, 0, 0, , NO, 0, 0, NO
   225, LINE   , UNIMOMENT, LX, NO , NO, aDir[1], , , , 0, 8.69, 1, 8.69, 0, 0, 0, 0, , NO, 0, 0, NO

; End of data for load case [WL(No Live)] ---------------------------

*USE-STLD, Unit Moment

*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
    101, BEAM   , CONMOMENT, LY, NO , NO, aDir[1], , , , 0, 1, 1, 0, 0, 0, 0, 0, , NO, 0, 0, NO
    125, BEAM   , CONMOMENT, LY, NO , NO, aDir[1], , , , 1, -1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO
    201, BEAM   , CONMOMENT, LY, NO , NO, aDir[1], , , , 0, 1, 1, 0, 0, 0, 0, 0, , NO, 0, 0, NO
    225, BEAM   , CONMOMENT, LY, NO , NO, aDir[1], , , , 1, -1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO

; End of data for load case [Unit Moment] ---------------------------

*USE-STLD, Temp(+)

; *SYSTEMPER, SYSTEMP, GROUP
*SYSTEMPER, 50,

; End of data for load case [Temp(+)] ---------------------------

*USE-STLD, Temp(-)

; *SYSTEMPER, SYSTEMP, GROUP
*SYSTEMPER, -10,

; End of data for load case [Temp(-)] ---------------------------

*MVLDCODE    ; Moving Load Code
; CODE=CODE
   CODE=KOREA
```



```
*LINELANE    ; Traffic Line Lanes
; NAME=NAME, LDIST, GROUP, SKEWS, SKEWE, MOVING, LW, WS  ; line 1
;      iELEM1, ECC1, FACT1, bSPAN1, ...                  ; from line 2
   NAME=L1, CROSS, CB, 70, 70, BACKWARD, 3, 0
          125, -0.5, 0.2083, YES,   124, -0.5, 0.2083, NO
          123, -0.5, 0.2083, NO,   122, -0.5, 0.2083, NO
          121, -0.5, 0.2083, NO,   120, -0.5, 0.2083, NO
          119, -0.5, 0.2083, NO,   118, -0.5, 0.1667, YES
          117, -0.5, 0.1667, NO,   116, -0.5, 0.1667, NO
          115, -0.5, 0.1667, NO,   114, -0.5, 0.1667, NO
          113, -0.5, 0.1667, NO,   112, -0.5, 0.1667, NO
          111, -0.5, 0.1667, NO,   110, -0.5, 0.1667, NO
          109, -0.5, 0.1667, NO,   108, -0.5, 0.1667, NO
          107, -0.5, 0.2083, YES,   106, -0.5, 0.2083, NO
          105, -0.5, 0.2083, NO,   104, -0.5, 0.2083, NO
          103, -0.5, 0.2083, NO,   102, -0.5, 0.2083, NO
          101, -0.5, 0.2083, NO
   NAME=L1-(Copy1), CROSS, CB, 70, 70, BACKWARD, 3, 0
          125, -0.55, 0.2083, YES,   124, -0.55, 0.2083, NO
          123, -0.55, 0.2083, NO,   122, -0.55, 0.2083, NO
          121, -0.55, 0.2083, NO,   120, -0.55, 0.2083, NO
          119, -0.55, 0.2083, NO,   118, -0.55, 0.1667, YES
          117, -0.55, 0.1667, NO,   116, -0.55, 0.1667, NO
          115, -0.55, 0.1667, NO,   114, -0.55, 0.1667, NO
          113, -0.55, 0.1667, NO,   112, -0.55, 0.1667, NO
          111, -0.55, 0.1667, NO,   110, -0.55, 0.1667, NO
          109, -0.55, 0.1667, NO,   108, -0.55, 0.1667, NO
          107, -0.55, 0.2083, YES,   106, -0.55, 0.2083, NO
          105, -0.55, 0.2083, NO,   104, -0.55, 0.2083, NO
          103, -0.55, 0.2083, NO,   102, -0.55, 0.2083, NO
          101, -0.55, 0.2083, NO
   NAME=L2, CROSS, CB, 70, 70, BACKWARD, 3, 0
          825, 0, 0.2083, YES,   824, 0, 0.2083, NO,   823, 0, 0.2083, NO
          822, 0, 0.2083, NO,   821, 0, 0.2083, NO,   820, 0, 0.2083, NO
          819, 0, 0.2083, NO,   818, 0, 0.1667, YES,   817, 0, 0.1667, NO
          816, 0, 0.1667, NO,   815, 0, 0.1667, NO,   814, 0, 0.1667, NO
          813, 0, 0.1667, NO,   812, 0, 0.1667, NO,   811, 0, 0.1667, NO
          810, 0, 0.1667, NO,   809, 0, 0.1667, NO,   808, 0, 0.1667, NO
          807, 0, 0.2083, YES,   806, 0, 0.2083, NO,   805, 0, 0.2083, NO
          804, 0, 0.2083, NO,   803, 0, 0.2083, NO,   802, 0, 0.2083, NO
          801, 0, 0.2083, NO
   NAME=L2-(Copy1), CROSS, CB, 70, 70, BACKWARD, 3, 0
          825, -0.75, 0.2083, YES,   824, -0.75, 0.2083, NO
          823, -0.75, 0.2083, NO,   822, -0.75, 0.2083, NO
          821, -0.75, 0.2083, NO,   820, -0.75, 0.2083, NO
          819, -0.75, 0.2083, NO,   818, -0.75, 0.1667, YES
          817, -0.75, 0.1667, NO,   816, -0.75, 0.1667, NO
          815, -0.75, 0.1667, NO,   814, -0.75, 0.1667, NO
          813, -0.75, 0.1667, NO,   812, -0.75, 0.1667, NO
          811, -0.75, 0.1667, NO,   810, -0.75, 0.1667, NO
          809, -0.75, 0.1667, NO,   808, -0.75, 0.1667, NO
          807, -0.75, 0.2083, YES,   806, -0.75, 0.2083, NO
          805, -0.75, 0.2083, NO,   804, -0.75, 0.2083, NO
          803, -0.75, 0.2083, NO,   802, -0.75, 0.2083, NO
          801, -0.75, 0.2083, NO
```



```
   NAME=L3, CROSS, CB, 70, 70, BACKWARD, 3, 0
          225, 0.5, 0.2083, YES,   224, 0.5, 0.2083, NO,   223, 0.5, 0.2083, NO
          222, 0.5, 0.2083, NO,   221, 0.5, 0.2083, NO,   220, 0.5, 0.2083, NO
          219, 0.5, 0.2083, NO,   218, 0.5, 0.1667, YES,   217, 0.5, 0.1667, NO
          216, 0.5, 0.1667, NO,   215, 0.5, 0.1667, NO,   214, 0.5, 0.1667, NO
          213, 0.5, 0.1667, NO,   212, 0.5, 0.1667, NO,   211, 0.5, 0.1667, NO
          210, 0.5, 0.1667, NO,   209, 0.5, 0.1667, NO,   208, 0.5, 0.1667, NO
          207, 0.5, 0.2083, YES,   206, 0.5, 0.2083, NO,   205, 0.5, 0.2083, NO
          204, 0.5, 0.2083, NO,   203, 0.5, 0.2083, NO,   202, 0.5, 0.2083, NO
          201, 0.5, 0.2083, NO
   NAME=L3-(Copy1), LANE, , 0, 0, BACKWARD, 3, 0
          225, -0.95, 0.2083, YES,   224, -0.95, 0.2083, NO
          223, -0.95, 0.2083, NO,   222, -0.95, 0.2083, NO
          221, -0.95, 0.2083, NO,   220, -0.95, 0.2083, NO
          219, -0.95, 0.2083, NO,   218, -0.95, 0.1667, YES
          217, -0.95, 0.1667, NO,   216, -0.95, 0.1667, NO
          215, -0.95, 0.1667, NO,   214, -0.95, 0.1667, NO
          213, -0.95, 0.1667, NO,   212, -0.95, 0.1667, NO
          211, -0.95, 0.1667, NO,   210, -0.95, 0.1667, NO
          209, -0.95, 0.1667, NO,   208, -0.95, 0.1667, NO
          207, -0.95, 0.2083, YES,   206, -0.95, 0.2083, NO
          205, -0.95, 0.2083, NO,   204, -0.95, 0.2083, NO
          203, -0.95, 0.2083, NO,   202, -0.95, 0.2083, NO
          201, -0.95, 0.2083, NO

*LSUPPORT    ; Lane Supports - Negative Moments at Interior Piers
; iTYPE, ELEM_LIST, POSITION     ; (When iTYPE=0)
; iTYPE, GRUP-NAME               ; (When iTYPE=1)
   0, 101 108 119 201 208 219, END-I
   0, 107 118 125 207 218 225, END-J

*VEHICLE    ; Vehicles
; if Moving Load Code is China
; NAME=NAME, 1, TYPE-NAME, CODE                                    ; standard
; NAME=NAME, 2, LTYPE, [TRUCK/LANE] or [TRAIN/SUBWAY] or [CROWD]   ; user: line 1
;      LOAD1, DIST1, LOAD2, DIST2, ...                             ; user: from line 2
; [TRUCK/LANE] : 1, P, Qm, Qq                                      ; truck(JTG)
; [TRUCK/LANE] : 2, P, Qm, Qq                                      ; lane load1
; [TRUCK/LANE] : 3, Qk, Pk1, L1, Pk2, L2                           ; lane load2
; [TRUCK/LANE] : 4, dW, dD                                         ; crawler type
; [TRUCK/LANE] : 5                                                 ; GC type load
; [TRAIN/SUBWAY] : iTYPE, W1, D1, W2, D2                           ; train-type1,3
; [TRAIN/SUBWAY] : iTYPE, DD, FD, BD, MAINCOUNT                    ; train-type2
; [TRAIN/SUBWAY] : 4, P1, D1, P2, D2, P3, D3, P4, dD, Po, n, IFR   ; subway
; [CROWD] : 1, dW1                                                 ; crowd-type1
; [CROWD] : 2, dW1, dL1, dW2, dL2, WIDTH                           ; crowd-type2
; if Moving Load Type is India
; NAME=NAME, 1, TYPE-NAME, CODE                                    ; standard
; NAME=NAME, 2, bWTB, P, D, Pb, Db, dD1, dD2, NDIST                ; user: line 1
; NAME=NAME, 2, bWTB, dD1, dD2, NDIST                              ; user: line 1
;      LOAD1, DIST1, LOAD2, DIST2, ...                             ; user: from line 2
; if Moving Load Code is CANADA
; NAME=NAME, 1, TYPE-NAME, DLA, CODE, [DYNA]                       ; standard
; NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2), PLV(D2), NDIST, [DYNA]   ; user: line 1
;      LOAD1, DIST1, LOAD2, DIST2, ...                             ; user: from line 2
; [DYNA] : nDYNA, FACT1AXLE, FACT2AXLE, FACT3AXLE                  ; Dynamic Load Allowance
```



```
; if Moving Load Code is BS
; 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], [BD37/01-HB]                 ; user(BS BD37/01)
; NAME=NAME, 2, iSTYPE, W, L                                       ; user(Pedestrian)
; [BS-DATA-HA] : W1, W2, W3, EXP, L1, L2, Pa
; [BS-DATA-HB] : Pb, D1, D2, d, UNITNUM
; 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                       ; standard (SK)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC                       ; standard (SK FATIGUE)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC                       ; standard (AK)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC                       ; standard (N14)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC                       ; standard (N11)
; NAME=NAME, 1, iTYPE, nDYNAFAC, dDYNAFAC                          ; standard (SUBWAY TRAINS)
; NAME=NAME, 1, iTYPE, nDYNAFAC, dDYNAFAC                          ; standard (TRAMCARS)
; NAME=NAME, 1, iTYPE, nDYNAFAC, dDYNAFAC                          ; standard (NK-80)
; NAME=NAME, 1, iTYPE, W, D, nDYNAFAC, dDYNAFAC                    ; standard (NG-60)
; NAME=NAME, 1, iTYPE, BRIDGETYPE, W                               ; standard (UNIFORM LOAD)
; NAME=NAME, 1, iTYPE, BRIDGETYPE, W                               ; 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                       ; user (Type 1)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC                          ; user (Type 2)
; NAME=NAME, 2, iTYPE, Variable, nDYNAFAC, dDYNAFAC                ; user (Type 3)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC                          ; user (Type 4)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC                          ; user (Type 5)
; NAME=NAME, 2, iTYPE, W, D, nDYNAFAC, dDYNAFAC                    ; user (Type 6)
; NAME=NAME, 2, iTYPE, P, W                                        ; user (Type 7)
; if Moving Load Code is KSCE-LSD12
; NAME=NAME, 1, TYPE-NAME, nLANETYPE, dDYNAFAC,  CODE              ; standard
; NAME=NAME, 2, W1                                                 ; user: line 1
;      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, KS2005
   NAME=DL-24, 1, DL-24, 0, KS2005

*MVLDCASE   ; Moving Load Cases
; NAME=NAME, bLCPV, SCALE1, SCALE2, SCALE3, SCALE4, SCALE5, SCALE6, COMB, DESC  ; 1st line
;      nLTYPE, 2LFACTOR1, 2LFACTOR2, 3LFACTOR1, 3LFACTOR2, 3LFACTOR3, 3LFACTOR4 ; 2st line
;      TYPE1, VCLASS1, SCALE1, iMIN1, iMAX1, LANE11, LANE12, ...               ; 3nd line
;      ...                                                                     ; ...
;      TYPEn, VCLASSn, SCALEn, iMINn, iMAXn, LANEn1, LANEn2, ...               ; n+1th line
; NAME=NAME, bLCPV, VEHICLE, REFLANE, ECCEN, SCALE, DESC                       ; Permit
   NAME=MV, NO, 1, 1, 0.9, 0.75, 0.75, 0.75, INDEPENDENT,
         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=MV2, NO, 1, 1, 0.9, 0.75, 0.75, 0.75, INDEPENDENT,
         1, 1, 1, 1, 1, 0.5, 0.25
         VL, DB-24, 1, 1, 3, L1-(Copy1), L2-(Copy1), L3-(Copy1)
         VL, DL-24, 1, 1, 3, L1-(Copy1), L2-(Copy1), L3-(Copy1)

*LOADCOMB    ; Combinations
; NAME=NAME, KIND, ACTIVE, bES, iTYPE, DESC, iSERV-TYPE, nLCOMTYPE   ; line 1
;      ANAL1, LCNAME1, FACT1, ...                                    ; from line 2
   NAME=LC1, GEN, ACTIVE, 0, 0, , 0, 0
         ST, DL(BC), 1, ST, DL(AC), 1, MV, MV, 1

*CON-REAC-GROUP    ; Concurrent Reaction Group
; GROUP1, GROUP2, ..., GROUPn
  p1, p2
*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, DL(BC), 212, 160, 255, 0, 192, 128, 85, 0, 192
 ST, DL(AC), 255, 87, 87, 192, 0, 192, 255, 0, 192
 ST, WL(No Live), 163, 255, 160, 192, 192, 192, 192, 192, 0
 ST, WL(Live), 210, 210, 210, 148, 87, 255, 255, 160, 255
 ST, Unit Moment, 255, 0, 192, 192, 192, 0, 0, 128, 57
 ST, Temp(+), 85, 192, 0, 255, 87, 87, 212, 160, 255
 ST, Temp(-), 0, 192, 192, 192, 72, 0, 255, 0, 128
 MV, MV, 78, 0, 255, 192, 0, 128, 255, 0, 128
 MV, MV2, 0, 157, 192, 192, 192, 0, 0, 128, 128
 CB, LC1, 160, 255, 255, 85, 0, 192, 255, 87, 128

*EIGEN-CTRL    ; Eigenvalue Analysis Control
; TYPE, iFREQ, iITER, iDIM, TOL, bMINMAX, FRMIN, FRMAX, bSTRUM   ; TYPE=EIGEN
; TYPE, bINCNL, iGNUM                                           ; TYPE=RITZ(line 1)
;       KIND1, CASE1/GROUND1, iNOG1, ...                        ; TYPE=RITZ(from line2)
   EIGEN, 20, 20, 1, 1e-010, NO, 0, 1600, NO

*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, STEEL, SWS490          , 2, 2.0594e+008,   0.3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
    2, STEEL, SWS400C         , 2, 2.0594e+008,   0.3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
    3, STEEL, SWS400S         , 2, 2.0594e+008,   0.3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

*ENDDATA
```