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;------------------------------------------------------------------------
;   MIDAS/Civil  Text(MCT)  File.
;   Date : 2015/11/14
;------------------------------------------------------------------------

*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, bROTRIGID
     0, 1, 3, NO, YES, 9.806, 0, 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
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     5, 15, 5.6, 0
     6, 19, 5.6, 0
     7, 20, 5.6, 0
     8, 25, 5.6, 0
     9, 30, 5.6, 0
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    11, 40, 5.6, 0
    12, 42.5, 5.6, 0
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    14, 46.25, 5.6, 0
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    16, 50, 5.6, 0
    17, 53.75, 5.6, 0
    18, 55, 5.6, 0
    19, 58.75, 5.6, 0
    20, 60, 5.6, 0
    21, 63.75, 5.6, 0
    22, 65, 5.6, 0
    23, 67.5, 5.6, 0
    24, 70, 5.6, 0
    25, 75, 5.6, 0
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    27, 85, 5.6, 0
    28, 90, 5.6, 0
    29, 93.75, 5.6, 0
    30, 95, 5.6, 0
    31, 96.25, 5.6, 0
    32, 100, 5.6, 0
    33, 103.75, 5.6, 0
    34, 105, 5.6, 0
    35, 106.25, 5.6, 0
    36, 110, 5.6, 0
    37, 115, 5.6, 0
    38, 120, 5.6, 0
    39, 125, 5.6, 0
    40, 130, 5.6, 0
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    48, 153.75, 5.6, 0
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    55, 180, 5.6, 0
    56, 185, 5.6, 0
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    58, 189.95, 5.6, 0
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    60, 0.6, 0, 0
    61, 5, 0, 0
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    64, 19, 0, 0
    65, 20, 0, 0
    66, 25, 0, 0
    67, 30, 0, 0
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    69, 40, 0, 0
    70, 42.5, 0, 0
    71, 45, 0, 0
    72, 46.25, 0, 0
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    77, 58.75, 0, 0
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    81, 67.5, 0, 0
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    85, 85, 0, 0
    86, 90, 0, 0
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    88, 95, 0, 0
    89, 96.25, 0, 0
    90, 100, 0, 0
    91, 103.75, 0, 0
    92, 105, 0, 0
    93, 106.25, 0, 0
    94, 110, 0, 0
    95, 115, 0, 0
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    99, 135, 0, 0
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   107, 155, 0, 0
   108, 156.25, 0, 0
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   110, 165, 0, 0
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   112, 175, 0, 0
   113, 180, 0, 0
   114, 185, 0, 0
   115, 189.5, 0, 0
   116, 189.95, 0, 0
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   118, 0.6, 2.8, 0
   119, 5, 2.8, 0
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   129, 45, 2.8, 0
   130, 46.25, 2.8, 0
   131, 49, 2.8, 0
   132, 50, 2.8, 0
   133, 53.75, 2.8, 0
   134, 55, 2.8, 0
   135, 58.75, 2.8, 0
   136, 60, 2.8, 0
   137, 63.75, 2.8, 0
   138, 65, 2.8, 0
   139, 67.5, 2.8, 0
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   141, 75, 2.8, 0
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   143, 85, 2.8, 0
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   146, 95, 2.8, 0
   147, 96.25, 2.8, 0
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   165, 155, 2.8, 0
   166, 156.25, 2.8, 0
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  171, 180, 2.8, 0
  172, 185, 2.8, 0
  173, 189.5, 2.8, 0
  174, 189.95, 2.8, 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)
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    4, BEAM  ,    1,    2,    4,    5,    0,    0
    5, BEAM  ,    1,    2,    5,    6,    0,    0
    6, BEAM  ,    1,    2,    6,    7,    0,    0
    7, BEAM  ,    1,    2,    7,    8,    0,    0
    8, BEAM  ,    1,    2,    8,    9,    0,    0
    9, BEAM  ,    1,    2,    9,   10,    0,    0
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   11, BEAM  ,    1,    3,   11,   12,    0,    0
   12, BEAM  ,    1,    4,   12,   13,    0,    0
   13, BEAM  ,    1,    4,   13,   14,    0,    0
   14, BEAM  ,    1,    5,   14,   15,    0,    0
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   16, BEAM  ,    1,    5,   16,   17,    0,    0
   17, BEAM  ,    1,    4,   17,   18,    0,    0
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   22, BEAM  ,    1,    6,   22,   23,    0,    0
   23, BEAM  ,    1,    7,   23,   24,    0,    0
   24, BEAM  ,    1,    7,   24,   25,    0,    0
   25, BEAM  ,    1,    7,   25,   26,    0,    0
   26, BEAM  ,    1,    7,   26,   27,    0,    0
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   31, BEAM  ,    1,   10,   31,   32,    0,    0
   32, BEAM  ,    1,   10,   32,   33,    0,    0
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  171, BEAM  ,    2,   40,  173,  174,    0,    0
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  178, BEAM  ,    4,    42,   121,     5,     0,     0
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  181, BEAM  ,    4,    42,    65,   123,     0,     0
  182, BEAM  ,    4,    42,   124,     8,     0,     0
  183, BEAM  ,    4,    42,    66,   124,     0,     0
  184, BEAM  ,    4,    42,   125,     9,     0,     0
  185, BEAM  ,    4,    42,    67,   125,     0,     0
  186, BEAM  ,    4,    42,   126,    10,     0,     0
  187, BEAM  ,    4,    42,    68,   126,     0,     0
  188, BEAM  ,    4,    42,   127,    11,     0,     0
  189, BEAM  ,    4,    42,    69,   127,     0,     0
  190, BEAM  ,    4,    42,   129,    13,     0,     0
  191, BEAM  ,    4,    42,    71,   129,     0,     0
  192, BEAM  ,    3,    41,   132,    16,     0,     0
  193, BEAM  ,    3,    41,    74,   132,     0,     0
  194, BEAM  ,    4,    42,   134,    18,     0,     0
  195, BEAM  ,    4,    42,    76,   134,     0,     0
  196, BEAM  ,    4,    42,   136,    20,     0,     0
  197, BEAM  ,    4,    42,    78,   136,     0,     0
  198, BEAM  ,    4,    42,   138,    22,     0,     0
  199, BEAM  ,    4,    42,    80,   138,     0,     0
  200, BEAM  ,    4,    42,   140,    24,     0,     0
  201, BEAM  ,    4,    42,    82,   140,     0,     0
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  205, BEAM  ,    4,    42,    84,   142,     0,     0
  206, BEAM  ,    4,    42,   143,    27,     0,     0
  207, BEAM  ,    4,    42,    85,   143,     0,     0
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  209, BEAM  ,    4,    42,    86,   144,     0,     0
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  213, BEAM  ,    3,    41,    90,   148,     0,     0
  214, BEAM  ,    4,    42,   150,    34,     0,     0
  215, BEAM  ,    4,    42,    92,   150,     0,     0
  216, BEAM  ,    4,    42,   152,    36,     0,     0
  217, BEAM  ,    4,    42,    94,   152,     0,     0
  218, BEAM  ,    4,    42,   153,    37,     0,     0
  219, BEAM  ,    4,    42,    95,   153,     0,     0
  220, BEAM  ,    4,    42,   154,    38,     0,     0
```



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  221, BEAM  ,    4,    42,    96,   154,     0,     0
  222, BEAM  ,    4,    42,   155,    39,     0,     0
  223, BEAM  ,    4,    42,    97,   155,     0,     0
  224, BEAM  ,    4,    42,   156,    40,     0,     0
  225, BEAM  ,    4,    42,    98,   156,     0,     0
  226, BEAM  ,    4,    42,   157,    41,     0,     0
  227, BEAM  ,    4,    42,    99,   157,     0,     0
  228, BEAM  ,    4,    42,   158,    42,     0,     0
  229, BEAM  ,    4,    42,   100,   158,     0,     0
  230, BEAM  ,    4,    42,   160,    44,     0,     0
  231, BEAM  ,    4,    42,   102,   160,     0,     0
  232, BEAM  ,    3,    41,   162,    46,     0,     0
  233, BEAM  ,    3,    41,   104,   162,     0,     0
  234, BEAM  ,    4,    42,   165,    49,     0,     0
  235, BEAM  ,    4,    42,   107,   165,     0,     0
  236, BEAM  ,    4,    42,   167,    51,     0,     0
  237, BEAM  ,    4,    42,   109,   167,     0,     0
  238, BEAM  ,    4,    42,   168,    52,     0,     0
  239, BEAM  ,    4,    42,   110,   168,     0,     0
  240, BEAM  ,    4,    42,   169,    53,     0,     0
  241, BEAM  ,    4,    42,   111,   169,     0,     0
  242, BEAM  ,    4,    42,   170,    54,     0,     0
  243, BEAM  ,    4,    42,   112,   170,     0,     0
  244, BEAM  ,    4,    42,   171,    55,     0,     0
  245, BEAM  ,    4,    42,   113,   171,     0,     0
  246, BEAM  ,    4,    42,   172,    56,     0,     0
  247, BEAM  ,    4,    42,   114,   172,     0,     0
  248, BEAM  ,    3,    41,   173,    57,     0,     0
  249, BEAM  ,    3,    41,   115,   173,     0,     0

*GROUP     ; Group
; NAME,  NODE_LIST,  ELEM_LIST,  PLANE_TYPE
   Lateral    , 2to5  7to11  13  16to24by2  25to28  30to36by2  37to42  44  46  49  51to57  ₩
        60to63  65to69  71  74to82by2  83to86  88to94by2  95to100  102  104  107  109to115  ₩
        118to121  123to127  129  132to140by2  141to144  146to152by2  153to158  160  162  ₩
        165  167to173,  172to249,  0
   G1          , 1to42  44to58,  1to57,  0
   G2          , 59to100  102to116,  58to114,  0
   analysis   , 1to116,  1to114,  0
   A-A        , 6  64,  5  6  62  63,  0
   B-B        , 15  73,  14  15  71  72,  0
   C-C        , 25  83,  24  25  81  82,  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
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; [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
    3,  STEEL,  SM400                , 0,  0,  , C,  NO,  0.02,  2,  2.0500e+010,    0.3,  1.2000e-005,  76.98,       0
    4,  STEEL,  SM400                , 0,  0,  , C,  NO,  0.02,  2,  2.0500e+010,    0.3,  1.2000e-005,  76.98,       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,    0,    0,  255,   166,  202,  240,      0,    0,  255,   NO,  0.5
    2,    0,  128,    0,   192,  220,  192,      0,  128,    0,   NO,  0.5
    3,  128,  128,    0,   192,  220,  192,    128,  128,    0,   NO,  0.5
    4,  128,  128,    0,   192,  220,  192,    128,  128,    0,   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,  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,  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,  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)
;        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)
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;        [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/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,  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
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; [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
  1, COMPOSITE , A                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.038,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  2, COMPOSITE , B                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.016
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.038,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  3, COMPOSITE , C                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.016, 2.4, 0.12, 0.02
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.034,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  4, COMPOSITE , D                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.016, 2.4, 0.12, 0.02
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.034,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
```



```
  5, COMPOSITE , E                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.022, 2.4, 0.12, 0.026
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.028,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  6, COMPOSITE , F                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.038,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  7, COMPOSITE , G                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.038,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  8, COMPOSITE , H                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.036,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  9, COMPOSITE , I                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.036,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 10, COMPOSITE , J                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.016
```



```
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.036,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 11, COMPOSITE , K                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.018
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.036,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 12, COMPOSITE , L                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.036,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 13, COMPOSITE , M                    , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,   5.245, 0.25, 0.038,   7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 40, DBUSER    , Stringer            , CT, 0, 0, 0, 0, 1, 0.114, YES, H  , 2, 1.02, 0.25, 0.01, 0.01, 0, 0, 0, 0, 0, 0
 41, DBUSER    , Cross1              , CT, 0, 0, 0, 0, 1, 0.564, YES, H  , 2, 1.52, 0.25, 0.01, 0.01, 0, 0, 0, 0, 0, 0
 42, DBUSER    , Cross2              , CT, 0, 0, 0, 0, 1, 0.364, YES, H  , 2, 1.52, 0.25, 0.01, 0.01, 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
   5, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
   6, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
   7, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
```



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   8, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
   9, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
  10, 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
  40, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
  41, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5
  42, 255,   0,   0,   0, 255,   0,   0,   0, 255,  NO, 0.5

*COMP-GEN-SECT-PSC-DESIGN      ; Composite Section for PSC Design
; ELEM, (Z1, Z2, Z3, t1, t2, t3, TotT)-I, (Z1, Z2, Z3, t1, t2, t3, TotT)-J
   1, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   2, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   3, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   4, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   5, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   6, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   7, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   8, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
   9, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
  10, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
  11, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
  12, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0
  13, NO,  0, 0, 0, 0, 0, 0, 0,  0, 0, 0, 0, 0, 0, 0

*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, 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, 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)
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;        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)
;          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/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, 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
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;         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
  1, COMPOSITE , A                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.038,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  2, COMPOSITE , B                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.016
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.038,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  3, COMPOSITE , C                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.016, 2.4, 0.12, 0.02
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.034,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
```



```
  4, COMPOSITE , D                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.016, 2.4, 0.12, 0.02
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.034,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  5, COMPOSITE , E                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.022, 2.4, 0.12, 0.026
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.028,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  6, COMPOSITE , F                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.038,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  7, COMPOSITE , G                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.038,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  8, COMPOSITE , H                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
     1, 0, 0, 0, 5, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.036,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
  9, COMPOSITE , I                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
```



```
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.036,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 10, COMPOSITE , J                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.016
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.036,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 11, COMPOSITE , K                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.018
     1, 0, 0, 0, 5, 2
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     2, 0.8, 0, NO, 0.8, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.036,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 12, COMPOSITE , L                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.014, 2.4, 0.12, 0.014
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.036,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 13, COMPOSITE , M                  , CC, 0, 0, 0, 0, 0, 0, YES, B
     2.5, 0.012, 2.4, 0.12, 0.012, 2.4, 0.12, 0.012
     1, 0, 0, 0, 2, 5
     1, Rib, 0, 0.15, 0.014, 0, 0, 0, 0, 0, 0
     0
     0
     2, 0.8, 0, NO, 0.8, 0, NO
     5, 0.4, 0, NO, 0.4, 0, NO, 0.4, 0, YES, 0.4, 0, NO, 0.4, 0, NO
     10.49, 2, 5.6,    5.245, 0.25, 0.038,    7.68337, 3.13991, 0.3, 0.18, 1.2, NO, ,
 40, DBUSER     , Stringer          , CT, 0, 0, 0, 0, 1, 0.114, YES, H  , 2, 1.02, 0.25, 0.01, 0.01, 0, 0, 0, 0, 0, 0
 41, DBUSER     , Cross1            , CT, 0, 0, 0, 0, 1, 0.564, YES, H  , 2, 1.52, 0.25, 0.01, 0.01, 0, 0, 0, 0, 0, 0
 42, DBUSER     , Cross2            , CT, 0, 0, 0, 0, 1, 0.364, YES, H  , 2, 1.52, 0.25, 0.01, 0.01, 0, 0, 0, 0, 0, 0
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*STLDCASE     ; Static Load Cases
; LCNAME, LCTYPE, DESC
   Self Weight, D ,
   Deck , D ,
   2nd Dead, D ,
   Unit , USER,
   MVminLC1Dz64, USER,


*CONSTRAINT      ; Supports
; NODE_LIST, CONST(Dx,Dy,Dz,Rx,Ry,Rz), GROUP
   90, 111000,
   32, 101000,
   60 74 104 115, 011000,
   2 16 46 57, 001000,

; *LOADTOMASS, DIR, bNODAL, bBEAM, bFLOOR, bPRES, GRAV
;       LCNAME1, FACTOR1, LCNAME2, FACTOR2, ...    ; from line 1
*LOADTOMASS, Z, YES, YES, YES, YES, 9.806
   2nd Dead, 1

*USE-STLD, Self Weight

; *SELFWEIGHT, X, Y, Z, GROUP
*SELFWEIGHT, 0, 0, -1.5123,

; End of data for load case [Self Weight] ------------------------

*USE-STLD, Deck

*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, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    2, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    3, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    4, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    5, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    6, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    7, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    8, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
    9, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   10, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   11, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   12, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   13, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   14, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   15, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   16, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   17, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   18, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   19, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   20, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   21, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   22, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   23, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   24, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   25, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   26, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   27, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   28, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   29, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   30, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   31, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   32, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   33, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   34, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   38, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   46, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   54, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   56, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
   57, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 0.183, 0.183, YES, 0, -33.894, 1, -33.894, 0, 0, 0, 0, , NO, 0, 0, NO,
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   58, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   59, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   60, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   61, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   62, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   63, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   65, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   66, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   67, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   68, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   69, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   70, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   71, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   72, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   73, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   74, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   76, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   78, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   79, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   80, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   81, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   82, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   83, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   84, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   86, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   87, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   89, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   91, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   92, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   93, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
   94, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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   97, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO,
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  100, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
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  102, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
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  103, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
,
  104, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
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  105, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
,
  106, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
,
  107, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
,
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  114, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -0.069, -0.069, YES, 0, -33.685, 1, -33.685, 0, 0, 0, 0, , NO, 0, 0, NO
,
  115, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  116, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  117, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  118, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  119, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  120, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  121, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  122, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  123, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  124, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  125, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  126, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  127, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  128, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  129, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  130, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  131, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  132, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  133, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  134, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  135, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  136, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  137, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  138, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  139, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  140, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  141, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
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  142, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  143, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  144, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  145, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  146, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  147, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  148, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  149, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  150, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  151, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  152, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  153, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  154, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  155, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  156, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  157, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  158, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  159, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  160, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  161, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  162, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  163, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  164, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  165, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  166, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  167, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  168, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  169, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  170, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,
  171, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -8.714, 1, -8.714, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [Deck] -------------------------

*USE-STLD, 2nd Dead

*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, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    2, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    3, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    4, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    5, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    6, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
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    7, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    8, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
    9, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   10, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   11, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   12, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   13, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   14, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   15, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   16, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   17, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   18, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   19, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   20, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   21, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   22, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   23, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   24, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   25, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   26, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   27, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   28, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   29, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   30, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   31, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   32, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   33, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   34, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   35, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   36, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   37, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   38, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   39, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   40, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   41, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   42, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   43, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   44, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   45, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   46, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   47, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   48, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   49, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   50, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   51, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   52, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   53, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
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   54, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   55, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   56, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   57, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, 1.129, 1.129, YES, 0, -10.918, 1, -10.918, 0, 0, 0, 0, , NO, 0, 0, NO,
   58, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   59, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   60, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   61, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   62, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   63, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   65, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   66, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   67, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   68, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   69, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   70, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   71, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   72, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   73, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   74, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   75, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   76, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   77, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   78, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   79, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   80, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   81, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   82, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   83, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   84, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   85, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   86, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   87, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   88, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   89, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   90, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   91, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   92, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   93, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   94, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   95, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   96, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   97, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   98, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
   99, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  100, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
```

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  101, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  102, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  103, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  104, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  105, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  106, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  107, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  108, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  109, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  110, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  111, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  112, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  113, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  114, BEAM    , UNILOAD, GZ, NO , YES, 1, GY, -1.553, -1.553, YES, 0, -12.93, 1, -12.93, 0, 0, 0, 0, , NO, 0, 0, NO,
  115, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  116, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  117, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  118, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  119, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  120, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  121, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  122, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  123, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  124, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  125, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  126, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  127, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  128, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  129, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  130, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  131, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  132, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  133, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  134, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  135, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  136, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  137, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  138, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  139, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  140, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  141, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  142, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  143, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  144, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  145, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  146, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  147, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
```



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  148, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  149, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  150, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  151, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  152, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  153, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  154, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  155, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  156, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  157, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  158, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  159, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  160, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  161, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  162, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  163, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  164, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  165, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  166, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  167, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  168, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  169, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  170, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,
  171, BEAM    , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.614, 1, -5.614, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [2nd Dead] ------------------------

*USE-STLD,  Unit

*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
    2, BEAM    , CONMOMENT, GY, NO , NO, aDir[1], , , , 0, 1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   56, BEAM    , CONMOMENT, GY, NO , NO, aDir[1], , , , 1, -1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   59, BEAM    , CONMOMENT, GY, NO , NO, aDir[1], , , , 0, 1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
  113, BEAM    , CONMOMENT, GY, NO , NO, aDir[1], , , , 1, -1, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,

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

*USE-STLD,  MVminLC1Dz64

*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
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; [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
   63, BEAM    , CONMOMENT, LX, NO , NO, aDir[1], , , , 1, 32.336, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   63, BEAM    , CONLOAD, GZ, NO , NO, aDir[1], , , , 1, -101.05, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , CONLOAD, GZ, NO , NO, aDir[1], , , , 0.26, -101.05, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , CONLOAD, GZ, NO , NO, aDir[1], , , , 0.9, -61, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , CONMOMENT, LX, NO , NO, aDir[1], , , , 0.9, 19.52, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,
   64, BEAM    , CONMOMENT, LX, NO , NO, aDir[1], , , , 0.26, 32.336, 0, 0, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [MVminLC1Dz64] ------------------------

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

*LINELANE      ; Traffic Line Lanes
; NAME=NAME, LDIST, GROUP, SKEWS, SKEWE, MOVING, LW, WS, bLANEOPT ; line 1
;        iELEM1, ECC1, FACT1, bSPAN1, ECCVL...                    ; from line 2
   NAME=L1, LANE, , 0, 0, BOTH, 3, 1.8, NO
          1, -0.288, 0.168, YES, 0,      2, -0.288, 0.168, NO, 0
          3, -0.288, 0.168, NO, 0,       4, -0.288, 0.168, NO, 0
          5, -0.288, 0.168, NO, 0,       6, -0.288, 0.168, NO, 0
          7, -0.288, 0.168, NO, 0,       8, -0.288, 0.168, NO, 0
          9, -0.288, 0.168, NO, 0,      10, -0.288, 0.168, NO, 0
         11, -0.288, 0.167, NO, 0,      12, -0.288, 0.167, NO, 0
         13, -0.288, 0.167, NO, 0,      14, -0.288, 0.167, NO, 0
         15, -0.288, 0.167, NO, 0,      16, -0.288, 0.167, YES, 0
         17, -0.288, 0.167, NO, 0,      18, -0.288, 0.167, NO, 0
         19, -0.288, 0.167, NO, 0,      20, -0.288, 0.167, NO, 0
         21, -0.288, 0.167, NO, 0,      22, -0.288, 0.167, NO, 0
         23, -0.288, 0.167, NO, 0,      24, -0.288, 0.167, NO, 0
         25, -0.288, 0.167, NO, 0,      26, -0.288, 0.167, NO, 0
         27, -0.288, 0.167, NO, 0,      28, -0.288, 0.167, NO, 0
         29, -0.288, 0.167, NO, 0,      30, -0.288, 0.167, NO, 0
         31, -0.288, 0.167, NO, 0,      32, -0.288, 0.167, YES, 0
         33, -0.288, 0.167, NO, 0,      34, -0.288, 0.167, NO, 0
         35, -0.288, 0.167, NO, 0,      36, -0.288, 0.167, NO, 0
         37, -0.288, 0.167, NO, 0,      38, -0.288, 0.167, NO, 0
         39, -0.288, 0.167, NO, 0,      40, -0.288, 0.167, NO, 0
         41, -0.288, 0.167, NO, 0,      42, -0.288, 0.177, NO, 0
         43, -0.288, 0.177, NO, 0,      44, -0.288, 0.177, NO, 0
         45, -0.288, 0.177, NO, 0,      46, -0.288, 0.177, YES, 0
         47, -0.288, 0.177, NO, 0,      48, -0.288, 0.177, NO, 0
         49, -0.288, 0.177, NO, 0,      50, -0.288, 0.189, NO, 0
         51, -0.288, 0.189, NO, 0,      52, -0.288, 0.189, NO, 0
         53, -0.288, 0.189, NO, 0,      54, -0.288, 0.189, NO, 0
```



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         55, -0.288, 0.189, NO, 0,      56, -0.288, 0.189, NO, 0
         57, -0.288, 0.189, NO, 0
   NAME=L2, CROSS, Lateral, 0, 0, BOTH, 3, 1.8, NO
          1, 2.878, 0.168, YES, 0,       2, 2.878, 0.168, NO, 0
          3, 2.878, 0.168, NO, 0,        4, 2.878, 0.168, NO, 0
          5, 2.878, 0.168, NO, 0,        6, 2.878, 0.168, NO, 0
          7, 2.878, 0.168, NO, 0,        8, 2.878, 0.168, NO, 0
          9, 2.878, 0.168, NO, 0,       10, 2.878, 0.168, NO, 0
         11, 2.878, 0.167, NO, 0,       12, 2.878, 0.167, NO, 0
         13, 2.878, 0.167, NO, 0,       14, 2.878, 0.167, NO, 0
         15, 2.878, 0.167, NO, 0,       16, 2.878, 0.167, YES, 0
         17, 2.878, 0.167, NO, 0,       18, 2.878, 0.167, NO, 0
         19, 2.878, 0.167, NO, 0,       20, 2.878, 0.167, NO, 0
         21, 2.878, 0.167, NO, 0,       22, 2.878, 0.167, NO, 0
         23, 2.878, 0.167, NO, 0,       24, 2.878, 0.167, NO, 0
         25, 2.878, 0.167, NO, 0,       26, 2.878, 0.167, NO, 0
         27, 2.878, 0.167, NO, 0,       28, 2.878, 0.167, NO, 0
         29, 2.878, 0.167, NO, 0,       30, 2.878, 0.167, NO, 0
         31, 2.878, 0.167, NO, 0,       32, 2.878, 0.167, YES, 0
         33, 2.878, 0.167, NO, 0,       34, 2.878, 0.167, NO, 0
         35, 2.878, 0.167, NO, 0,       36, 2.878, 0.167, NO, 0
         37, 2.878, 0.167, NO, 0,       38, 2.878, 0.167, NO, 0
         39, 2.878, 0.167, NO, 0,       40, 2.878, 0.167, NO, 0
         41, 2.878, 0.167, NO, 0,       42, 2.878, 0.177, NO, 0
         43, 2.878, 0.177, NO, 0,       44, 2.878, 0.177, NO, 0
         45, 2.878, 0.177, NO, 0,       46, 2.878, 0.177, YES, 0
         47, 2.878, 0.177, NO, 0,       48, 2.878, 0.177, NO, 0
         49, 2.878, 0.177, NO, 0,       50, 2.878, 0.189, NO, 0
         51, 2.878, 0.189, NO, 0,       52, 2.878, 0.189, NO, 0
         53, 2.878, 0.189, NO, 0,       54, 2.878, 0.189, NO, 0
         55, 2.878, 0.189, NO, 0,       56, 2.878, 0.189, NO, 0
         57, 2.878, 0.189, NO, 0
   NAME=L3, LANE, , 0, 0, BOTH, 3, 1.8, NO
         58, 0.445, 0.168, YES, 0,      59, 0.445, 0.168, NO, 0
         60, 0.445, 0.168, NO, 0,       61, 0.445, 0.168, NO, 0
         62, 0.445, 0.168, NO, 0,       63, 0.445, 0.168, NO, 0
         64, 0.445, 0.168, NO, 0,       65, 0.445, 0.168, NO, 0
         66, 0.445, 0.168, NO, 0,       67, 0.445, 0.168, NO, 0
         68, 0.445, 0.167, NO, 0,       69, 0.445, 0.167, NO, 0
         70, 0.445, 0.167, NO, 0,       71, 0.445, 0.167, NO, 0
         72, 0.445, 0.167, NO, 0,       73, 0.445, 0.167, YES, 0
         74, 0.445, 0.167, NO, 0,       75, 0.445, 0.167, NO, 0
         76, 0.445, 0.167, NO, 0,       77, 0.445, 0.167, NO, 0
         78, 0.445, 0.167, NO, 0,       79, 0.445, 0.167, NO, 0
         80, 0.445, 0.167, NO, 0,       81, 0.445, 0.167, NO, 0
         82, 0.445, 0.167, NO, 0,       83, 0.445, 0.167, NO, 0
         84, 0.445, 0.167, NO, 0,       85, 0.445, 0.167, NO, 0
```

86, 0.445, 0.167, NO, 0, 87, 0.445, 0.167, NO, 0
88, 0.445, 0.167, NO, 0, 89, 0.445, 0.167, YES, 0
90, 0.445, 0.167, NO, 0, 91, 0.445, 0.167, NO, 0
92, 0.445, 0.167, NO, 0, 93, 0.445, 0.167, NO, 0
94, 0.445, 0.167, NO, 0, 95, 0.445, 0.167, NO, 0
96, 0.445, 0.167, NO, 0, 97, 0.445, 0.167, NO, 0
98, 0.445, 0.167, NO, 0, 99, 0.445, 0.177, NO, 0
100, 0.445, 0.177, NO, 0, 101, 0.445, 0.177, NO, 0
102, 0.445, 0.177, NO, 0, 103, 0.445, 0.177, YES, 0
104, 0.445, 0.177, NO, 0, 105, 0.445, 0.177, NO, 0
106, 0.445, 0.177, NO, 0, 107, 0.445, 0.189, NO, 0
108, 0.445, 0.189, NO, 0, 109, 0.445, 0.189, NO, 0
110, 0.445, 0.189, NO, 0, 111, 0.445, 0.189, NO, 0
112, 0.445, 0.189, NO, 0, 113, 0.445, 0.189, NO, 0
114, 0.445, 0.189, NO, 0
NAME=R1, LANE, , 0, 0, BOTH, 3, 1.8, NO
1, -0.455, 0.168, YES, 0, 2, -0.455, 0.168, NO, 0
3, -0.455, 0.168, NO, 0, 4, -0.455, 0.168, NO, 0
5, -0.455, 0.168, NO, 0, 6, -0.455, 0.168, NO, 0
7, -0.455, 0.168, NO, 0, 8, -0.455, 0.168, NO, 0
9, -0.455, 0.168, NO, 0, 10, -0.455, 0.168, NO, 0
11, -0.455, 0.167, NO, 0, 12, -0.455, 0.167, NO, 0
13, -0.455, 0.167, NO, 0, 14, -0.455, 0.167, NO, 0
15, -0.455, 0.167, NO, 0, 16, -0.455, 0.167, YES, 0
17, -0.455, 0.167, NO, 0, 18, -0.455, 0.167, NO, 0
19, -0.455, 0.167, NO, 0, 20, -0.455, 0.167, NO, 0
21, -0.455, 0.167, NO, 0, 22, -0.455, 0.167, NO, 0
23, -0.455, 0.167, NO, 0, 24, -0.455, 0.167, NO, 0
25, -0.455, 0.167, NO, 0, 26, -0.455, 0.167, NO, 0
27, -0.455, 0.167, NO, 0, 28, -0.455, 0.167, NO, 0
29, -0.455, 0.167, NO, 0, 30, -0.455, 0.167, NO, 0
31, -0.455, 0.167, NO, 0, 32, -0.455, 0.167, YES, 0
33, -0.455, 0.167, NO, 0, 34, -0.455, 0.167, NO, 0
35, -0.455, 0.167, NO, 0, 36, -0.455, 0.167, NO, 0
37, -0.455, 0.167, NO, 0, 38, -0.455, 0.167, NO, 0
39, -0.455, 0.167, NO, 0, 40, -0.455, 0.167, NO, 0
41, -0.455, 0.167, NO, 0, 42, -0.455, 0.177, NO, 0
43, -0.455, 0.177, NO, 0, 44, -0.455, 0.177, NO, 0
45, -0.455, 0.177, NO, 0, 46, -0.455, 0.177, YES, 0
47, -0.455, 0.177, NO, 0, 48, -0.455, 0.177, NO, 0
49, -0.455, 0.177, NO, 0, 50, -0.455, 0.189, NO, 0
51, -0.455, 0.189, NO, 0, 52, -0.455, 0.189, NO, 0
53, -0.455, 0.189, NO, 0, 54, -0.455, 0.189, NO, 0
55, -0.455, 0.189, NO, 0, 56, -0.455, 0.189, NO, 0
57, -0.455, 0.189, NO, 0
NAME=R2, CROSS, Lateral, 0, 0, BOTH, 3, 1.8, NO
58, -2.888, 0.168, YES, 0, 59, -2.888, 0.168, NO, 0

60, -2.888, 0.168, NO, 0, 61, -2.888, 0.168, NO, 0
62, -2.888, 0.168, NO, 0, 63, -2.888, 0.168, NO, 0
64, -2.888, 0.168, NO, 0, 65, -2.888, 0.168, NO, 0
66, -2.888, 0.168, NO, 0, 67, -2.888, 0.168, NO, 0
68, -2.888, 0.167, NO, 0, 69, -2.888, 0.167, NO, 0
70, -2.888, 0.167, NO, 0, 71, -2.888, 0.167, NO, 0
72, -2.888, 0.167, NO, 0, 73, -2.888, 0.167, YES, 0
74, -2.888, 0.167, NO, 0, 75, -2.888, 0.167, NO, 0
76, -2.888, 0.167, NO, 0, 77, -2.888, 0.167, NO, 0
78, -2.888, 0.167, NO, 0, 79, -2.888, 0.167, NO, 0
80, -2.888, 0.167, NO, 0, 81, -2.888, 0.167, NO, 0
82, -2.888, 0.167, NO, 0, 83, -2.888, 0.167, NO, 0
84, -2.888, 0.167, NO, 0, 85, -2.888, 0.167, NO, 0
86, -2.888, 0.167, NO, 0, 87, -2.888, 0.167, NO, 0
88, -2.888, 0.167, NO, 0, 89, -2.888, 0.167, YES, 0
90, -2.888, 0.167, NO, 0, 91, -2.888, 0.167, NO, 0
92, -2.888, 0.167, NO, 0, 93, -2.888, 0.167, NO, 0
94, -2.888, 0.167, NO, 0, 95, -2.888, 0.167, NO, 0
96, -2.888, 0.167, NO, 0, 97, -2.888, 0.167, NO, 0
98, -2.888, 0.167, NO, 0, 99, -2.888, 0.177, NO, 0
100, -2.888, 0.177, NO, 0, 101, -2.888, 0.177, NO, 0
102, -2.888, 0.177, NO, 0, 103, -2.888, 0.177, YES, 0
104, -2.888, 0.177, NO, 0, 105, -2.888, 0.177, NO, 0
106, -2.888, 0.177, NO, 0, 107, -2.888, 0.189, NO, 0
108, -2.888, 0.189, NO, 0, 109, -2.888, 0.189, NO, 0
110, -2.888, 0.189, NO, 0, 111, -2.888, 0.189, NO, 0
112, -2.888, 0.189, NO, 0, 113, -2.888, 0.189, NO, 0
114, -2.888, 0.189, NO, 0
NAME=R3, LANE, , 0, 0, BOTH, 3, 1.8, NO
58, 0.278, 0.168, YES, 0, 59, 0.278, 0.168, NO, 0
60, 0.278, 0.168, NO, 0, 61, 0.278, 0.168, NO, 0
62, 0.278, 0.168, NO, 0, 63, 0.278, 0.168, NO, 0
64, 0.278, 0.168, NO, 0, 65, 0.278, 0.168, NO, 0
66, 0.278, 0.168, NO, 0, 67, 0.278, 0.168, NO, 0
68, 0.278, 0.167, NO, 0, 69, 0.278, 0.167, NO, 0
70, 0.278, 0.167, NO, 0, 71, 0.278, 0.167, NO, 0
72, 0.278, 0.167, NO, 0, 73, 0.278, 0.167, YES, 0
74, 0.278, 0.167, NO, 0, 75, 0.278, 0.167, NO, 0
76, 0.278, 0.167, NO, 0, 77, 0.278, 0.167, NO, 0
78, 0.278, 0.167, NO, 0, 79, 0.278, 0.167, NO, 0
80, 0.278, 0.167, NO, 0, 81, 0.278, 0.167, NO, 0
82, 0.278, 0.167, NO, 0, 83, 0.278, 0.167, NO, 0
84, 0.278, 0.167, NO, 0, 85, 0.278, 0.167, NO, 0
86, 0.278, 0.167, NO, 0, 87, 0.278, 0.167, NO, 0
88, 0.278, 0.167, NO, 0, 89, 0.278, 0.167, YES, 0
90, 0.278, 0.167, NO, 0, 91, 0.278, 0.167, NO, 0
92, 0.278, 0.167, NO, 0, 93, 0.278, 0.167, NO, 0

94, 0.278, 0.167, NO, 0, 95, 0.278, 0.167, NO, 0
96, 0.278, 0.167, NO, 0, 97, 0.278, 0.167, NO, 0
98, 0.278, 0.167, NO, 0, 99, 0.278, 0.177, NO, 0
100, 0.278, 0.177, NO, 0, 101, 0.278, 0.177, NO, 0
102, 0.278, 0.177, NO, 0, 103, 0.278, 0.177, YES, 0
104, 0.278, 0.177, NO, 0, 105, 0.278, 0.177, NO, 0
106, 0.278, 0.177, NO, 0, 107, 0.278, 0.189, NO, 0
108, 0.278, 0.189, NO, 0, 109, 0.278, 0.189, NO, 0
110, 0.278, 0.189, NO, 0, 111, 0.278, 0.189, NO, 0
112, 0.278, 0.189, NO, 0, 113, 0.278, 0.189, NO, 0
114, 0.278, 0.189, NO, 0
NAME=T1, LANE, , 0, 0, FORWARD, 3, 1.85, NO
58, 0.32, 0, YES, 0, 59, 0.32, 0, NO, 0, 60, 0.32, 0, NO, 0
61, 0.32, 0, NO, 0, 62, 0.32, 0, NO, 0, 63, 0.32, 0, NO, 0
64, 0.32, 0, NO, 0, 65, 0.32, 0, NO, 0, 66, 0.32, 0, NO, 0
67, 0.32, 0, NO, 0, 68, 0.32, 0, NO, 0, 69, 0.32, 0, NO, 0
70, 0.32, 0, NO, 0, 71, 0.32, 0, NO, 0, 72, 0.32, 0, NO, 0
73, 0.32, 0, YES, 0, 74, 0.32, 0, NO, 0, 75, 0.32, 0, NO, 0
76, 0.32, 0, NO, 0, 77, 0.32, 0, NO, 0, 78, 0.32, 0, NO, 0
79, 0.32, 0, NO, 0, 80, 0.32, 0, NO, 0, 81, 0.32, 0, NO, 0
82, 0.32, 0, NO, 0, 83, 0.32, 0, NO, 0, 84, 0.32, 0, NO, 0
85, 0.32, 0, NO, 0, 86, 0.32, 0, NO, 0, 87, 0.32, 0, NO, 0
88, 0.32, 0, NO, 0, 89, 0.32, 0, YES, 0, 90, 0.32, 0, NO, 0
91, 0.32, 0, NO, 0, 92, 0.32, 0, NO, 0, 93, 0.32, 0, NO, 0
94, 0.32, 0, NO, 0, 95, 0.32, 0, NO, 0, 96, 0.32, 0, NO, 0
97, 0.32, 0, NO, 0, 98, 0.32, 0, NO, 0, 99, 0.32, 0, NO, 0
100, 0.32, 0, NO, 0, 101, 0.32, 0, NO, 0, 102, 0.32, 0, NO, 0
103, 0.32, 0, YES, 0, 104, 0.32, 0, NO, 0, 105, 0.32, 0, NO, 0
106, 0.32, 0, NO, 0, 107, 0.32, 0, NO, 0, 108, 0.32, 0, NO, 0
109, 0.32, 0, NO, 0, 110, 0.32, 0, NO, 0, 111, 0.32, 0, NO, 0
112, 0.32, 0, NO, 0, 113, 0.32, 0, NO, 0, 114, 0.32, 0, NO, 0
NAME=T2, CROSS, Lateral, 0, 0, FORWARD, 3, 1.85, NO
58, -2.8, 0, YES, 0, 59, -2.8, 0, NO, 0, 60, -2.8, 0, NO, 0
61, -2.8, 0, NO, 0, 62, -2.8, 0, NO, 0, 63, -2.8, 0, NO, 0
64, -2.8, 0, NO, 0, 65, -2.8, 0, NO, 0, 66, -2.8, 0, NO, 0
67, -2.8, 0, NO, 0, 68, -2.8, 0, NO, 0, 69, -2.8, 0, NO, 0
70, -2.8, 0, NO, 0, 71, -2.8, 0, NO, 0, 72, -2.8, 0, NO, 0
73, -2.8, 0, YES, 0, 74, -2.8, 0, NO, 0, 75, -2.8, 0, NO, 0
76, -2.8, 0, NO, 0, 77, -2.8, 0, NO, 0, 78, -2.8, 0, NO, 0
79, -2.8, 0, NO, 0, 80, -2.8, 0, NO, 0, 81, -2.8, 0, NO, 0
82, -2.8, 0, NO, 0, 83, -2.8, 0, NO, 0, 84, -2.8, 0, NO, 0
85, -2.8, 0, NO, 0, 86, -2.8, 0, NO, 0, 87, -2.8, 0, NO, 0
88, -2.8, 0, NO, 0, 89, -2.8, 0, YES, 0, 90, -2.8, 0, NO, 0
91, -2.8, 0, NO, 0, 92, -2.8, 0, NO, 0, 93, -2.8, 0, NO, 0
94, -2.8, 0, NO, 0, 95, -2.8, 0, NO, 0, 96, -2.8, 0, NO, 0
97, -2.8, 0, NO, 0, 98, -2.8, 0, NO, 0, 99, -2.8, 0, NO, 0
100, -2.8, 0, NO, 0, 101, -2.8, 0, NO, 0, 102, -2.8, 0, NO, 0

103, -2.8, 0, YES, 0, 104, -2.8, 0, NO, 0, 105, -2.8, 0, NO, 0
106, -2.8, 0, NO, 0, 107, -2.8, 0, NO, 0, 108, -2.8, 0, NO, 0
109, -2.8, 0, NO, 0, 110, -2.8, 0, NO, 0, 111, -2.8, 0, NO, 0
112, -2.8, 0, NO, 0, 113, -2.8, 0, NO, 0, 114, -2.8, 0, NO, 0
NAME=T3, LANE, , 0, 0, FORWARD, 3, 1.85, NO
1, -0.33, 0, YES, 0, 2, -0.33, 0, NO, 0, 3, -0.33, 0, NO, 0
4, -0.33, 0, NO, 0, 5, -0.33, 0, NO, 0, 6, -0.33, 0, NO, 0
7, -0.33, 0, NO, 0, 8, -0.33, 0, NO, 0, 9, -0.33, 0, NO, 0
10, -0.33, 0, NO, 0, 11, -0.33, 0, NO, 0, 12, -0.33, 0, NO, 0
13, -0.33, 0, NO, 0, 14, -0.33, 0, NO, 0, 15, -0.33, 0, NO, 0
16, -0.33, 0, YES, 0, 17, -0.33, 0, NO, 0, 18, -0.33, 0, NO, 0
19, -0.33, 0, NO, 0, 20, -0.33, 0, NO, 0, 21, -0.33, 0, NO, 0
22, -0.33, 0, NO, 0, 23, -0.33, 0, NO, 0, 24, -0.33, 0, NO, 0
25, -0.33, 0, NO, 0, 26, -0.33, 0, NO, 0, 27, -0.33, 0, NO, 0
28, -0.33, 0, NO, 0, 29, -0.33, 0, NO, 0, 30, -0.33, 0, NO, 0
31, -0.33, 0, NO, 0, 32, -0.33, 0, YES, 0, 33, -0.33, 0, NO, 0
34, -0.33, 0, NO, 0, 35, -0.33, 0, NO, 0, 36, -0.33, 0, NO, 0
37, -0.33, 0, NO, 0, 38, -0.33, 0, NO, 0, 39, -0.33, 0, NO, 0
40, -0.33, 0, NO, 0, 41, -0.33, 0, NO, 0, 42, -0.33, 0, NO, 0
43, -0.33, 0, NO, 0, 44, -0.33, 0, NO, 0, 45, -0.33, 0, NO, 0
46, -0.33, 0, YES, 0, 47, -0.33, 0, NO, 0, 48, -0.33, 0, NO, 0
49, -0.33, 0, NO, 0, 50, -0.33, 0, NO, 0, 51, -0.33, 0, NO, 0
52, -0.33, 0, NO, 0, 53, -0.33, 0, NO, 0, 54, -0.33, 0, NO, 0
55, -0.33, 0, NO, 0, 56, -0.33, 0, NO, 0, 57, -0.33, 0, NO, 0

*LSUPPORT ; Lane Supports - Negative Moments at Interior Piers
; iTYPE, ELEM_LIST, POSITION ; (When iTYPE=0)
; iTYPE, GRUP-NAME ; (When iTYPE=1)
0, 16 32 46 73 89 103, END-I
0, 15 31 45 72 88 102, 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], [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,
;                       bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT        ; standard (N14)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC,
;                       bTWOVEHI, TWOVEHI_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 OT
HER 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

;                       bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT ; user (Type 4)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC

;                       bTWOVEHI, TWOVEHI_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
   NAME=Dump, 2, NO, 0, 0, 0, 0, 0
       61, 3.2, 101.05, 1.3, 101.05, 1.3

*MVLDCASE    ; Moving Load Cases
; NAME=NAME, bLCPV, SCALE1, SCALE2, SCALE3, SCALE4, SCALE5, SCALE6, COMB, DESC, LCOM, SERIAL    ; 1st lin
e
;       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, , 0, 1
       1, 1, 1, 1, 1, 0.5, 0.25
       VL, DB-24, 1, 1, 3, L1, L2, L3
       VL, DB-24, 1, 1, 3, R1, R2, R3
       VL, DL-24, 1, 1, 3, L1, L2, L3
       VL, DL-24, 1, 1, 3, R1, R2, R3
   NAME=LC1, NO, 1, 1, 0.9, 0.75, 0.75, 0.75, INDEPENDENT, , 0, 2
       1, 1, 1, 1, 1, 0.5, 0.25
       VL, Dump, 1, 1, 1, T1
   NAME=LC2, NO, 1, 1, 0.9, 0.75, 0.75, 0.75, INDEPENDENT, , 0, 3
       1, 1, 1, 1, 1, 0.5, 0.25
       VL, Dump, 1, 1, 1, T2
   NAME=LC3, NO, 1, 1, 0.9, 0.75, 0.75, 0.75, INDEPENDENT, , 0, 4
       1, 1, 1, 1, 1, 0.5, 0.25
       VL, Dump, 1, 1, 1, T3

*COMPBOXLC    ; Pre-Combined Load Cases for Composite Section
; LCNAME1, LCNAME2, ..., LCNAMEn
   Deck, Self Weight

*LOADCOMB    ; Combinations
; NAME=NAME, KIND, ACTIVE, bES, iTYPE, DESC, iSERV-TYPE, nLCOMTYPE    ; line 1
;       ANAL1, LCNAME1, FACT1, ...                                    ; from line 2
   NAME=ALL, GEN, ACTIVE, 0, 0, , 0, 0
       ST, Self Weight, 1, ST, Deck, 1, ST, 2nd Dead, 1, MV, MV, 1
   NAME=DL(BC), GEN, ACTIVE, 0, 0, , 0, 0
       ST, Self Weight, 1, ST, Deck, 1
   NAME=DL(AC), GEN, ACTIVE, 0, 0, , 0, 0
       ST, 2nd Dead, 1
   NAME=LL, GEN, ACTIVE, 0, 0, , 0, 0
       MV, MV, 1
   NAME=K, GEN, ACTIVE, 0, 0, , 0, 0
       ST, Unit, 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, Self Weight, 192, 0, 128, 255, 255, 87, 255, 192, 87
 ST, Deck, 0, 192, 128, 128, 192, 0, 78, 0, 255
 ST, 2nd Dead, 255, 255, 255, 212, 160, 255, 192, 0, 128
 ST, Unit, 255, 0, 192, 0, 128, 192, 192, 192, 192
 MV, MV, 192, 128, 0, 255, 87, 87, 255, 192, 87
 CB, DL(BC), 0, 128, 255, 212, 160, 255, 93, 255, 87
 CB, DL(AC), 0, 128, 128, 192, 192, 192, 0, 192, 192
 CB, LL, 0, 192, 192, 192, 192, 192, 255, 192, 87
 CB, ALL, 0, 128, 57, 93, 255, 87, 160, 255, 255
 CB, K, 192, 128, 0, 192, 128, 0, 255, 192, 87
 MV, LC1, 192, 128, 0, 85, 192, 0, 0, 128, 57
 MV, LC2, 0, 128, 192, 0, 128, 128, 255, 160, 255
 MV, LC3, 255, 160, 255, 0, 192, 128, 78, 0, 255
 ST, MVminLC1Dz64, 192, 192, 0, 148, 87, 255, 0, 128, 255

*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)
   LANCZOS, 10, 20, 1, 1e-010, NO, 0, 0, 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, 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, 0,0.0000e+000,      0,, 0, 0,0, 0, 0,0, 0, 0,0, 0, 0,0.0000
e+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, 0,0.0000
e+000,      0,, 0, 0,0, 0, 0,0, 0, 0,0, 0, 0,0, 0,
     3, STEEL, SM400          , 2, 2.0500e+010,    0.3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 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,
     4, STEEL, SM400          , 2, 2.0500e+010,    0.3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 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, 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

*SECTION MANAGER-STIFFENER      ; Section Manager - Stiffener
; SECT = NO, bSAMEJ                                                  ; line 1
;        STFNISIZE, STFNJSIZE                                          ; line 2
; ..................................................................  ;
;        LOOP UTIL (STFNISIZE, 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

*ENDDATA
```