```
**************************************************
*                                                *
*           STAAD.Pro V8i SELECTseries4          *
*           Version  20.07.09.31                 *
*           Proprietary Program of               *
*           Bentley Systems, Inc.                *
*           Date=    OCT 16, 2015                *
*           Time=    12:58:21                    *
*                                                *
*      USER ID: g                                *
**************************************************
```

```
     1. STAAD SPACE
INPUT FILE: Pre girder.STD
     2. START JOB INFORMATION
     3. ENGINEER DATE 30-APR-15
     4. END JOB INFORMATION
     5. INPUT WIDTH 79
     6. UNIT METER KN
     7. JOINT COORDINATES
     8. 1 0 0 0; 2 41 0 0
     9. MEMBER INCIDENCES
    10. 1 1 2
    11. DEFINE MATERIAL START
    12. ISOTROPIC STEEL
    13. E 2.05E+008
    14. POISSON 0.3
    15. DENSITY 76.8195
    16. ALPHA 1.2E-005
    17. DAMP 0.03
    18. ISOTROPIC CONCRETE
    19. E 2.17185E+007
    20. POISSON 0.17
    21. DENSITY 23.5616
    22. ALPHA 1E-005
    23. DAMP 0.05
    24. END DEFINE MATERIAL
    25. MEMBER PROPERTY AMERICAN
    26. 1 PRIS YD 3 ZD 3 YB 2.75 ZB 0.3
    27. CONSTANTS
    28. MATERIAL CONCRETE ALL
    29. SUPPORTS
    30. 1 2 PINNED
    31. DEFINE MOVING LOAD
    32. TYPE 1 LOAD 23 23 96 96 57 57 57 57 57
    33. DIST 1.1 3.2 1.2 4.3 3 3 3 3
    34. LOAD 1 LOADTYPE DEAD  TITLE LOAD CASE 1 DL
    35. MEMBER LOAD
    36. 1 UNI GY -75
    37. LOAD 2 LOADTYPE LIVE  TITLE LOAD CASE 2 LL
    38. LOAD GENERATION 13
```

```
 39. TYPE 1 0 0 0 XINC 3
 40. LOAD 16 LOADTYPE LIVE  TITLE LOAD CASE 16 PL
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   10 WHEEL   9 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   11 WHEEL   8 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   11 WHEEL   9 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   12 WHEEL   7 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   12 WHEEL   8 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   12 WHEEL   9 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   13 WHEEL   6 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   13 WHEEL   7 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   13 WHEEL   8 OF   9
**WARNING-A MOVING LOAD THAT WOULD HAVE BEEN APPLIED BEYOND THE X AND Z RANGES
          OF THE STRUCTURE HAS BEEN IGNORED. CASE=   13 WHEEL   9 OF   9
*ADDITIONAL MOVING LOAD MESSAGES SUPPRESSED
*ADDITIONAL MOVING LOAD MESSAGES SUPPRESSED
 41. MEMBER PRESTRESS LOAD
 42. 1 FORCE 11000 EM -1.6
 43. LOAD COMB 17 COMBINATION LOAD CASE 17 (1.25DL+2.5LL+1.2PL)
 44. 1 1.25 7 2.5 16 1.2
 45. LOAD COMB 18 COMBINATION LOAD CASE 18 (1.25DL+2.5LL+1.2PL)
 46. 1 1.25 3 2.5 16 1.2
 47. LOAD COMB 19 COMBINATION LOAD CASE 19 (1.25DL+ 1.2PL)
 48. 1 1.25 16 1.2
 49. LOAD COMB 20 COMBINATION LOAD CASE 20 (DL+ LL +PL)
 50. 1 1.0 7 1.0 16 1.0
 51. PERFORM ANALYSIS PRINT ALL


        P R O B L E M   S T A T I S T I C S
        -----------------------------------

 NUMBER OF JOINTS          2  NUMBER OF MEMBERS       1
 NUMBER OF PLATES          0  NUMBER OF SOLIDS        0
 NUMBER OF SURFACES        0  NUMBER OF SUPPORTS      2


      SOLVER USED IS THE IN-CORE ADVANCED SOLVER

 TOTAL PRIMARY LOAD CASES =    16, TOTAL DEGREES OF FREEDOM =       6
```

LOADING 1 LOADTYPE DEAD TITLE LOAD CASE 1 DL

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1	-75.0000 GY	0.00	41.00				

LOADING 2 LOADTYPE LIVE TITLE LOAD CASE 2 LL

LOADING 3

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	0.00		
1				-23.0000 GY	1.10		
1				-96.0000 GY	4.30		
1				-96.0000 GY	5.50		
1				-57.0000 GY	9.80		
1				-57.0000 GY	12.80		
1				-57.0000 GY	15.80		
1				-57.0000 GY	18.80		
1				-57.0000 GY	21.80		

LOADING 4

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	3.00		
1				-23.0000 GY	4.10		
1				-96.0000 GY	7.30		
1				-96.0000 GY	8.50		
1				-57.0000 GY	12.80		
1				-57.0000 GY	15.80		
1				-57.0000 GY	18.80		
1				-57.0000 GY	21.80		
1				-57.0000 GY	24.80		

LOADING 5

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	6.00		
1				-23.0000 GY	7.10		
1				-96.0000 GY	10.30		
1				-96.0000 GY	11.50		
1				-57.0000 GY	15.80		
1				-57.0000 GY	18.80		
1				-57.0000 GY	21.80		
1				-57.0000 GY	24.80		
1				-57.0000 GY	27.80		

LOADING 6

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	9.00		
1				-23.0000 GY	10.10		
1				-96.0000 GY	13.30		
1				-96.0000 GY	14.50		
1				-57.0000 GY	18.80		
1				-57.0000 GY	21.80		
1				-57.0000 GY	24.80		
1				-57.0000 GY	27.80		
1				-57.0000 GY	30.80		

LOADING 7

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	12.00		
1				-23.0000 GY	13.10		
1				-96.0000 GY	16.30		
1				-96.0000 GY	17.50		
1				-57.0000 GY	21.80		
1				-57.0000 GY	24.80		
1				-57.0000 GY	27.80		
1				-57.0000 GY	30.80		

1			-57.0000	GY	33.80		

LOADING 8

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	15.00		
1				-23.0000	GY	16.10		
1				-96.0000	GY	19.30		
1				-96.0000	GY	20.50		
1				-57.0000	GY	24.80		
1				-57.0000	GY	27.80		
1				-57.0000	GY	30.80		
1				-57.0000	GY	33.80		
1				-57.0000	GY	36.80		

LOADING 9

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	18.00		
1				-23.0000	GY	19.10		
1				-96.0000	GY	22.30		
1				-96.0000	GY	23.50		
1				-57.0000	GY	27.80		
1				-57.0000	GY	30.80		
1				-57.0000	GY	33.80		
1				-57.0000	GY	36.80		
1				-57.0000	GY	39.80		

LOADING 10

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	21.00		
1				-23.0000	GY	22.10		
1				-96.0000	GY	25.30		
1				-96.0000	GY	26.50		
1				-57.0000	GY	30.80		
1				-57.0000	GY	33.80		
1				-57.0000	GY	36.80		

1			-57.0000	GY	39.80		

LOADING 11

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	24.00		
1				-23.0000	GY	25.10		
1				-96.0000	GY	28.30		
1				-96.0000	GY	29.50		
1				-57.0000	GY	33.80		
1				-57.0000	GY	36.80		
1				-57.0000	GY	39.80		

LOADING 12

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	27.00		
1				-23.0000	GY	28.10		
1				-96.0000	GY	31.30		
1				-96.0000	GY	32.50		
1				-57.0000	GY	36.80		
1				-57.0000	GY	39.80		

LOADING 13

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON		L	LIN1	LIN2
1				-23.0000	GY	30.00		
1				-23.0000	GY	31.10		
1				-96.0000	GY	34.30		
1				-96.0000	GY	35.50		
1				-57.0000	GY	39.80		

LOADING 14

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	33.00		
1				-23.0000 GY	34.10		
1				-96.0000 GY	37.30		
1				-96.0000 GY	38.50		

LOADING 15

MEMBER LOAD - UNIT KN METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
1				-23.0000 GY	36.00		
1				-23.0000 GY	37.10		
1				-96.0000 GY	40.30		

LOADING 16 LOADTYPE LIVE TITLE LOAD CASE 16 PL

***WARNING - INSTABILITY AT JOINT 2 DIRECTION = MX
PROBABLE CAUSE SINGULAR-ADDING WEAK SPRING
K-MATRIX DIAG= 7.5817019E+04 L-MATRIX DIAG= 0.0000000E+00 EQN NO 4
***NOTE - VERY WEAK SPRING ADDED FOR STABILITY

FOR LOADING - 1
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-1.53750E+03	0.00000E+00	0.00000E+00	0.00000E+00	-1.05062E+04
2	0.00000E+00	-1.53750E+03	0.00000E+00	0.00000E+00	0.00000E+00	1.05062E+04

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 1
LOADTYPE DEAD TITLE LOAD CASE 1 DL

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.204999996E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 1)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -3075.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -63037.49

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 1)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 3075.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 63037.49

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 1)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-7.04440E-03	1

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-1537.50	0.00	0.00	0.00	-10506.25	
	0.00	0.00	0.00	0.00	0.00	10506.25	111000
2	0.00	-1537.50	0.00	0.00	0.00	10506.25	
	0.00	0.00	0.00	0.00	0.00	-10506.25	111000

FOR LOADING - 2
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 2
LOADTYPE LIVE TITLE LOAD CASE 2 LL

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 2)
SUMMATION FORCE-X = 0.0000000E+00
SUMMATION FORCE-Y = 0.0000000E+00
SUMMATION FORCE-Z = 0.0000000E+00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.0000000E+00 MY= 0.0000000E+00 MZ= 0.0000000E+00

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 2)
SUMMATION FORCE-X = 0.0000000E+00
SUMMATION FORCE-Y = 0.0000000E+00
SUMMATION FORCE-Z = 0.0000000E+00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.0000000E+00 MY= 0.0000000E+00 MZ= 0.0000000E+00

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 2)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	0.00000E+00	0

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ

SUPPORT=1

FOR LOADING - 3
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-4.18834E+02	0.00000E+00	0.00000E+00	0.00000E+00	-2.34618E+03
2	0.00000E+00	-1.04166E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.14779E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 3

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.104573497E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 3)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -5469.19

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 3)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 5469.19

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 3)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-1.30877E-03	1

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-418.83	0.00	0.00	0.00	-2346.18	
	0.00	29.23	0.00	0.00	0.00	2346.18	111000
2	0.00	-104.17	0.00	0.00	0.00	1147.79	
	0.00	-29.23	0.00	0.00	0.00	-1147.79	111000

FOR LOADING - 4

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-3.77717E+02	0.00000E+00	0.00000E+00	0.00000E+00	-2.61460E+03
2	0.00000E+00	-1.45283E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.53312E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 4

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.134571719E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 4)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -7038.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 4)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 7038.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 4)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-1.51453E-03	1

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-377.72	0.00	0.00	0.00	-2614.60	
	0.00	26.38	0.00	0.00	0.00	2614.60	111000
2	0.00	-145.28	0.00	0.00	0.00	1533.12	
	0.00	-26.38	0.00	0.00	0.00	-1533.12	111000

FOR LOADING - 5

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-3.30827E+02	0.00000E+00	0.00000E+00	0.00000E+00	-2.64998E+03
2	0.00000E+00	-1.92173E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.92197E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 5

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.164571703E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 5)

SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -8607.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 5)

SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 8607.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 5)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-1.61622E-03	1

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-330.83	0.00	0.00	0.00	-2649.98	
	0.00	17.76	0.00	0.00	0.00	2649.98	111000
2	0.00	-192.17	0.00	0.00	0.00	1921.97	
	0.00	-17.76	0.00	0.00	0.00	-1921.97	111000

FOR LOADING - 6

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-2.80624E+02	0.00000E+00	0.00000E+00	0.00000E+00	-2.50263E+03
2	0.00000E+00	-2.42376E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.26393E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 6

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.194571698E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 6)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -10176.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 6)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 10176.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 6)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-1.62535E-03	1

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-280.62	0.00	0.00	0.00	-2502.63	
	0.00	5.82	0.00	0.00	0.00	2502.63	111000
2	0.00	-242.38	0.00	0.00	0.00	2263.93	
	0.00	-5.82	0.00	0.00	0.00	-2263.93	111000

FOR LOADING - 7
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-2.29567E+02	0.00000E+00	0.00000E+00	0.00000E+00	-2.22295E+03
2	0.00000E+00	-2.93433E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.50862E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 7

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.224571690E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 7)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -11745.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 7)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 11745.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 7)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.61901E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-229.57	0.00	0.00	0.00	-2222.95	
	0.00	-6.97	0.00	0.00	0.00	2222.95	111000
2	0.00	-293.43	0.00	0.00	0.00	2508.62	
	0.00	6.97	0.00	0.00	0.00	-2508.62	111000

FOR LOADING - 8
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-1.80113E+02	0.00000E+00	0.00000E+00	0.00000E+00	-1.86136E+03
2	0.00000E+00	-3.42887E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.60561E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 8

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.254571688E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 8)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -13314.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 8)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 13314.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 8)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.58289E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-180.11	0.00	0.00	0.00	-1861.36	
	0.00	-18.15	0.00	0.00	0.00	1861.36	111000
2	0.00	-342.89	0.00	0.00	0.00	2605.61	
	0.00	18.15	0.00	0.00	0.00	-2605.61	111000

FOR LOADING - 9
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-1.34722E+02	0.00000E+00	0.00000E+00	0.00000E+00	-1.46824E+03
2	0.00000E+00	-3.88278E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.50452E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 9

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.284571688E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 9)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -14883.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 9)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 523.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 14883.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 9)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.45069E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-134.72	0.00	0.00	0.00	-1468.24	
	0.00	-25.28	0.00	0.00	0.00	1468.24	111000
2	0.00	-388.28	0.00	0.00	0.00	2504.52	
	0.00	25.28	0.00	0.00	0.00	-2504.52	111000

FOR LOADING - 10
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-9.55136E+01	0.00000E+00	0.00000E+00	0.00000E+00	-1.08930E+03
2	0.00000E+00	-3.70486E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.26674E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 10

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.300697439E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 10)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -466.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -14012.50

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 10)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 466.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 14012.50

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 10)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.26012E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-95.51	0.00	0.00	0.00	-1089.30	
	0.00	-28.72	0.00	0.00	0.00	1089.30	111000
2	0.00	-370.49	0.00	0.00	0.00	2266.74	
	0.00	28.72	0.00	0.00	0.00	-2266.74	111000

FOR LOADING - 11
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-6.30973E+01	0.00000E+00	0.00000E+00	0.00000E+00	-7.48568E+02
2	0.00000E+00	-3.45903E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.95968E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 11

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.317136926E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 11)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -409.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -12970.90

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 11)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 409.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 12970.90

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 11)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.04681E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-63.10	0.00	0.00	0.00	-748.57	
	0.00	-29.54	0.00	0.00	0.00	748.57	111000
2	0.00	-345.90	0.00	0.00	0.00	1959.68	
	0.00	29.54	0.00	0.00	0.00	-1959.68	111000

FOR LOADING - 12
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-3.76723E+01	0.00000E+00	0.00000E+00	0.00000E+00	-4.62627E+02
2	0.00000E+00	-3.14328E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.59176E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 12

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.334042634E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 12)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -352.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -11758.30

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 12)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 352.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 11758.30

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 12)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	8.18208E-04	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-37.67	0.00	0.00	0.00	-462.63	
	0.00	-27.54	0.00	0.00	0.00	462.63	111000
2	0.00	-314.33	0.00	0.00	0.00	1591.76	
	0.00	27.54	0.00	0.00	0.00	-1591.76	111000

FOR LOADING - 13
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-1.91695E+01	0.00000E+00	0.00000E+00	0.00000E+00	-2.42575E+02
2	0.00000E+00	-2.75831E+02	0.00000E+00	0.00000E+00	0.00000E+00	1.17693E+03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 13

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.351684770E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 13)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -295.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -10374.70

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 13)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 295.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 10374.70

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 13)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	5.83026E-04	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-19.17	0.00	0.00	0.00	-242.58	
	0.00	-22.79	0.00	0.00	0.00	242.58	111000
2	0.00	-275.83	0.00	0.00	0.00	1176.93	
	0.00	22.79	0.00	0.00	0.00	-1176.93	111000

FOR LOADING - 14
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-7.25188E+00	0.00000E+00	0.00000E+00	0.00000E+00	-9.40140E+01
2	0.00000E+00	-2.30748E+02	0.00000E+00	0.00000E+00	0.00000E+00	7.34586E+02

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 14

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.370592460E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 14)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -238.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -8820.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 14)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 238.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 8820.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 14)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	3.51241E-04	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-7.25	0.00	0.00	0.00	-94.01	
	0.00	-15.62	0.00	0.00	0.00	94.01	111000
2	0.00	-230.75	0.00	0.00	0.00	734.59	
	0.00	15.62	0.00	0.00	0.00	-734.59	111000

FOR LOADING - 15

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-1.61047E+00	0.00000E+00	0.00000E+00	0.00000E+00	-2.11626E+01
2	0.00000E+00	-1.40390E+02	0.00000E+00	0.00000E+00	0.00000E+00	2.27033E+02

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 15

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.390852129E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 15)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = -142.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= -5550.10

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 15)
SUMMATION FORCE-X = 0.00
SUMMATION FORCE-Y = 142.00
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.00 MY= 0.00 MZ= 5550.10

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 15)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	1.06814E-04	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00	-1.61	0.00	0.00	0.00	-21.16	
	0.00	-5.02	0.00	0.00	0.00	21.16	111000
2	0.00	-140.39	0.00	0.00	0.00	227.03	
	0.00	5.02	0.00	0.00	0.00	-227.03	111000

FOR LOADING - 16
APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	1.08652E+04	-1.35749E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.17333E+04
2	-1.08652E+04	-1.35749E-04	0.00000E+00	0.00000E+00	0.00000E+00	-1.17333E+04

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 16
LOADTYPE LIVE TITLE LOAD CASE 16 PL

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.204999996E+02
Y = 0.000000000E+00
Z = 0.000000000E+00

***TOTAL APPLIED LOAD (KN METE) SUMMARY (LOADING 16)
SUMMATION FORCE-X = 0.0000000E+00
SUMMATION FORCE-Y = -2.7149791E-04
SUMMATION FORCE-Z = 0.0000000E+00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.0000000E+00 MY= 0.0000000E+00 MZ= -5.5657062E-03

***TOTAL REACTION LOAD(KN METE) SUMMARY (LOADING 16)
SUMMATION FORCE-X = 0.0000000E+00
SUMMATION FORCE-Y = 2.7149791E-04
SUMMATION FORCE-Z = 0.0000000E+00

SUMMATION OF MOMENTS AROUND THE ORIGIN-
MX= 0.0000000E+00 MY= 0.0000000E+00 MZ= 5.5657062E-03

MAXIMUM DISPLACEMENTS (CM /RADIANS) (LOADING 16)

	MAXIMUMS	AT NODE
X =	0.00000E+00	0
Y =	0.00000E+00	0
Z =	0.00000E+00	0
RX=	0.00000E+00	0
RY=	0.00000E+00	0
RZ=	-7.86716E-03	2

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY (KN METE)-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	10865.16	0.00	0.00	0.00	0.00	11733.33	
	0.00	0.00	0.00	0.00	0.00	-11733.33	111000
2	-10865.16	0.00	0.00	0.00	0.00	-11733.33	
	0.00	0.00	0.00	0.00	0.00	11733.33	111000

LOAD COMBINATION NO. 17
COMBINATION LOAD CASE 17 (1.25DL+2.5LL+1.2PL)

LOADING-	1.	7.	16.
FACTOR -	1.25	2.50	1.20

LOAD COMBINATION NO. 18
COMBINATION LOAD CASE 18 (1.25DL+2.5LL+1.2PL)

LOADING-	1.	3.	16.
FACTOR -	1.25	2.50	1.20

LOAD COMBINATION NO. 19
COMBINATION LOAD CASE 19 (1.25DL+ 1.2PL)

LOADING-	1.	16.
FACTOR -	1.25	1.20

LOAD COMBINATION NO. 20
COMBINATION LOAD CASE 20 (DL+ LL +PL)

LOADING-	1.	7.	16.
FACTOR -	1.00	1.00	1.00

********** END OF DATA FROM INTERNAL STORAGE **********

52. LOAD LIST 17 TO 20
53. START CONCRETE DESIGN
54. CODE IS13920
55. FC 60000 ALL
56. FYMAIN 500000 ALL
57. FYSEC 500000 ALL
58. DESIGN BEAM ALL

*** WARNING : WIDTH-TO-DEPTH RATIO OF BEAM # 1 SHALL PREFERABLY BE MORE THAN 0.3 AS PER CL 6.1.2

*** WARNING : UDL LOADING IS NOT DEFINED FOR MEMBER # 1.
DEFAULT VALUE WILL BE USED.

==========

B E A M N O. 1 D E S I G N R E S U L T S

M60 Fe500 (Main) Fe500 (Sec.)

LENGTH: 41000.0 mm SIZE: 300.0 mm X 3000.0 mm COVER: 25.0 mm

FLANGE WIDTH: 3000.0 mm FLANGE DEPTH: 250.0 mm

SUMMARY OF REINF. AREA (Sq.mm)

SECTION	0.0 mm	10250.0 mm	20500.0 mm	30750.0 mm	41000.0 mm
TOP REINF.	0.00 (Sq. mm)	3288.50 (Sq. mm)	3288.50 (Sq. mm)	3288.50 (Sq. mm)	0.00 (Sq. mm)
BOTTOM REINF.	0.00 (Sq. mm)	4063.98 (Sq. mm)	6371.67 (Sq. mm)	4587.14 (Sq. mm)	0.00 (Sq. mm)

SUMMARY OF PROVIDED REINF. AREA

SECTION	0.0 mm	10250.0 mm	20500.0 mm	30750.0 mm	41000.0 mm
TOP REINF.	2-25í 1 layer(s)	7-25í 2 layer(s)	7-25í 2 layer(s)	7-25í 2 layer(s)	2-25í 1 layer(s)
BOTTOM REINF.	2-32í 1 layer(s)	6-32í 2 layer(s)	8-32í 2 layer(s)	6-32í 2 layer(s)	2-32í 1 layer(s)
SHEAR REINF.	2 legged 8í @ 200 mm c/c	2 legged 8í @ 300 mm c/c	2 legged 8í @ 300 mm c/c	2 legged 8í @ 300 mm c/c	2 legged 8í @ 200 mm c/c

Provide 9-10í along each face of the beam (Side face reinf.)

**********END OF BEAM DESIGN RESULTS**********

59. END CONCRETE DESIGN
60. FINISH

********** END OF THE STAAD.Pro RUN **********

**** DATE= OCT 16,2015 TIME= 12:58:41 ****