

(1) KO=0.5

SUBCASE : 시공단계-1 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-2 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-3 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-10 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-11 : INCR-1 (LOAD=1.000)SUBCASE : 시공단계-12 : INCR=1 (LOAD=1.000)SUBCASE : 시공단계-13 : INCR-1 (LOAD=1.000)SUBCASE : 시공단계-14 : INCR=1 (LOAD=1.000)

=====

SUBCASE : 시공단계-4 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-5 : INCR=1 (LOAD=1.000)SUBCASE : 시공단계-6 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계.7 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-8 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-9 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계·1 : INCR=1 (LOAD=1.000)

SUBCASE : 시공단계-2 : INCR=1 (LOAD=1,000)SUBCASE : 시공단계-3 : INCR=1 (LOAD=1.000)

- 5 -

- 6 -

- 7 -

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006							BISECTION	NUMBER OF WORK
PREDICTOR(P)	ITER	CONVERGENCE MEASURES						
STIFFNESS								
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE	SEARCHES
UPDATE								
P		1.000E-000	7.058E-001	4.558E-002	NO	0	0	YES
C	1	3.889E-001	3.144E-001	3.711E-002	NO	0	0	YES
P	2	9.582E-002	7.415E-002	1.843E-003	NO	0	0	YES
C	3	3.115E-002	7.737E-003	7.531E-006	NO	0	0	YES
P	4	3.809E-004	3.015E-005	2.235E-009	YES	0	0	

- 12 -

SUBCASE : 시공단계-8 : INCR-1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-9 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-10 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-11 : INCB-1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-12 : INCR=1 (LOAD=1.000)SUBCASE : 시공단계.13 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT .. INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-14 : INCR=1 (LOAD=1.000)

=====

해석 OUT PUT

NEWTON SOLVER STATISTICS FOR 1ST

PREDICTOR/PV	ITER	CONVERGENCE MEASURES	F
--------------	------	----------------------	---

SUBCASE : 시공단계-2 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

- 15 -

SUBCASE : 시공단계.3 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-4 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT .. INCREASING LOAD FACTOR TO 1.0000

SUBCASE ; 시공단계-5 ; INCR=1 (LOAD=1,000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT .. INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계.6 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

SUBCASE : 시공단계-7 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

- 16 -

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	4.314E-002	1.894E-003	NO	0	0
C	1	7.851E-002	2.249E-002	7.603E-005	NO	0	0
C	2	1.303E-003	6.300E-004	1.048E-006	NO	0	0
C	3	2.786E-005	1.664E-008	2.730E-013	YES	0	0

SUBCASE : 시공단계-8 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	2.753E-001	1.247E-002	NO	0	0
C	1	1.154E-001	8.565E-002	3.689E-003	NO	0	0
C	2	4.436E-002	2.035E-002	4.461E-004	NO	0	0
C	3	5.211E-003	1.834E-004	1.014E-006	NO	0	0
C	4	6.499E-005	6.049E-008	5.520E-012	YES	0	0

SUBCASE : 시공단계-9 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	5.740E-001	6.269E-002	NO	0	0
C	1	4.937E-001	2.889E-001	6.772E-002	NO	0	0
C	2	1.733E-001	6.649E-002	3.377E-003	NO	0	0
C	3	2.120E-002	1.471E-002	4.033E-005	NO	0	0
C	4	2.173E-003	2.606E-005	6.818E-009	YES	0	0

SUBCASE : 시공단계-10 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	2.371E-001	2.755E-002	NO	0	0
C	1	3.816E-001	1.215E-001	2.181E-002	NO	0	0
C	2	1.207E-001	3.159E-002	2.473E-003	NO	0	0
C	3	2.439E-002	1.938E-003	4.673E-005	NO	0	0
C	4	1.030E-003	5.848E-006	7.683E-009	YES	0	0

SUBCASE : 시공단계-11 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	4.824E-001	8.095E-002	NO	0	0
C	1	6.237E-001	2.860E-001	7.130E-002	NO	0	0
C	2	1.725E-001	5.917E-002	8.392E-003	NO	0	0
C	3	3.367E-002	3.989E-003	7.606E-005	NO	0	0
C	4	1.264E-003	5.073E-006	6.922E-009	YES	0	0

SUBCASE : 시공단계-12 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	8.337E-001	1.582E-001	NO	0	0
C	1	7.173E-001	4.258E-001	1.202E-001	NO	0	0
C	2	2.707E-001	1.379E-001	2.117E-002	NO	0	0
C	3	8.035E-002	1.352E-002	5.346E-004	NO	0	0
C	4	6.860E-003	9.047E-004	1.246E-006	NO	0	0
C	5	2.304E-004	1.066E-006	6.838E-011	YES	0	0

SUBCASE : 시공단계-13 : INCR=1 (LOAD=1.000)

NEWTON SOLVER STATISTICS FOR 1ST LOAD INCREMENT -- INCREASING LOAD FACTOR TO 1.0000

CONVERGENCE CRITERIA: EPS(FORCE) = 1.000E-003 EPS(WORK) = 1.000E-006

PREDICTOR(P)/ STIFFNESS	ITER	CONVERGENCE MEASURES				BISECTION	NUMBER OF
CORRECTOR(C)	NUMBER	DISP(U)	FORCE(P)	WORK(W)	CONVERGENCE	LEVEL	LINE SEARCHES
UPDATE							
P		1.000E+000	2.805E-014	3.082E-015	YES	0	0

SUBCASE : 시공단계-14 : INCR=1 (LOAD=1.000)

YOUR JOB IS SUCCESSFULLY COMPLETED.....
TOTAL SOLUTION TIME: 127.555 SECONDS.