```
    *************************************************************

    NEOS Server Version 5.0
    Job#     : 6178757
    Password : nSIfyuGE
    User     : None
    Solver   : milp:Gurobi:GAMS
    Start    : 2018-07-24 16:48:45
    End      : 2018-07-24 17:12:57
    Host     : NEOS HTCondor Pool

    Disclaimer:

    This information is provided without any express or
    implied warranty. In particular, there is no warranty
    of any kind concerning the fitness of this
    information  for any particular purpose.
    *************************************************************
Executed on prod-exec-5.neos-server.org
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/24/18 16:48:47 Page 1
G e n e r a l   A l g e b r a i c   M o d e l i n g   S y s t e m
C o m p i l a t i o n




COMPILATION TIME      =        0.007 SECONDS     3 MB  24.9.2 r64480 LEX-LEG
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/24/18 16:48:47 Page 2
G e n e r a l   A l g e b r a i c   M o d e l i n g   S y s t e m
Model Analysis    SOLVE aero_model Using MIP From line 1216


****
****   2430 Integer +INF Bounds have been reset to 100 (see Option IntVarUp)
****
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/24/18 16:48:47 Page 3
G e n e r a l   A l g e b r a i c   M o d e l i n g   S y s t e m
Model Statistics   SOLVE aero_model Using MIP From line 1216


LOOPS                                    zz   z1


MODEL STATISTICS

BLOCKS OF EQUATIONS         64     SINGLE EQUATIONS      558,499
BLOCKS OF VARIABLES         38     SINGLE VARIABLES      932,864
NON ZERO ELEMENTS    5,473,927     DISCRETE VARIABLES      2,459


GENERATION TIME      =      300.756 SECONDS  1,068 MB  24.9.2 r64480 LEX-LEG


EXECUTION TIME       =      303.920 SECONDS  1,068 MB  24.9.2 r64480 LEX-LEG
               L O O P S          zz z1


GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/24/18 16:48:47 Page 4
G e n e r a l   A l g e b r a i c   M o d e l i n g   S y s t e m
Solution Report    SOLVE aero_model Using MIP From line 1216


          S O L V E     S U M M A R Y
```

```
      MODEL    aero_model              OBJECTIVE   objective
      TYPE     MIP                     DIRECTION   MAXIMIZE
      SOLVER   CPLEX                   FROM LINE   1216

**** SOLVER STATUS      1 Normal Completion
**** MODEL STATUS       8 Integer Solution
**** OBJECTIVE VALUE       -762307370.6515

 RESOURCE USAGE, LIMIT        1127.469 1728000000.000
 ITERATION COUNT, LIMIT       78198     900000000


IBM ILOG CPLEX   24.9.2 r64480 Released Nov 14, 2017 LEG x86 64bit/Linux
--- GAMS/Cplex licensed for continuous and discrete problems.
Cplex 12.7.1.0

Space for names approximately 62.69 Mb
Use option 'names no' to turn use of names off
MIP status(102): integer optimal, tolerance
Cplex Time: 1088.01sec (det. 164038.70 ticks)
Fixing integer variables, and solving final LP...
Fixed MIP status(1): optimal
Cplex Time: 35.34sec (det. 10389.99 ticks)
Solution satisfies tolerances.

MIP Solution:   -762307370.651457    (47939 iterations, 0 nodes)
Final Solve:    -762307370.651457    (30259 iterations)

Best possible:  -761428147.358228
Absolute gap:        879223.293229
Relative gap:             0.001153




**** REPORT SUMMARY :        0      NONOPT
                             0 INFEASIBLE
                             0 UNBOUNDED
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/24/18 16:48:47 Page 5
G e n e r a l   A l g e b r a i c   M o d e l i n g   S y s t e m
E x e c u t i o n


----    1218 VARIABLE results.L  Results

z1 -7.62307E+8


----    1219 VARIABLE Production.L  Production at plant f of product p in day d

INDEX 1 = f1
```

	y1	y2	y3	y4	y5	y6
p2.t1	38.769	38.769	17.000	34.000	38.769	25.846
p2.t2	38.769	12.231	30.435		38.769	25.846
p2.t3	7.462		51.692	17.000	33.231	25.846
p2.t4		38.769		38.769		23.077
p2.t5		38.769	51.692	38.769		25.846
p2.t6	34.000	34.596		26.121	25.231	
p2.t7			2.181			
p2.t8	38.769			38.769		25.846
p2.t9	12.231				29.231	25.846
p2.t10		38.769	51.000		38.769	25.846
p2.t11	17.000					
p2.t12	17.000	2.097		10.571		

	y7	y8	y9	y10	y11	y12
p2.t1	25.846	25.846	17.000	17.000	17.000	17.000
p2.t2	25.846	25.846	17.000	17.000	17.000	17.000
p2.t3			17.000	17.000	17.000	17.000
p2.t4	25.846	25.846	17.000	17.000	17.000	17.000
p2.t5	25.846	25.846	17.000	17.000	17.000	17.000
p2.t6	25.846	15.615	17.000	17.000	17.000	17.000
p2.t7			17.000	17.000	17.000	17.000
p2.t8	25.846	25.846	17.000	17.000	17.000	17.000
p2.t9	6.077	8.154	17.000	17.000	17.000	17.000
p2.t10	25.846	25.154	17.000	17.000	17.000	17.000

```
p2.t11                     25.846    17.000    17.000    17.000    17.000
p2.t12          17.000               17.000    17.000    17.000    17.000


         +        y13       y14       y15

p2.t1           17.000    17.000    17.000
p2.t2           17.000    17.000    17.000
p2.t3           17.000    17.000    17.000
p2.t4           17.000    17.000    17.000
p2.t5           17.000    17.000    17.000
p2.t6           17.000    17.000    17.000
p2.t7           17.000    17.000    17.000
p2.t8           17.000    17.000    17.000
p2.t9           17.000    17.000    17.000
p2.t10          17.000    17.000    17.000
p2.t11          17.000    17.000    17.000
p2.t12          17.000    17.000    17.000
```

```
----    1219 VARIABLE Flow.L  Flow of material m from l.origin to l.destination
                             in period t (in units)


 INDEX 1 = i1   INDEX 2 = f1   INDEX 3 = rm2


                            y1         y2         y3         y4

truck_out        .t2                          116503.615
truck_out        .t8                                    148408.615
truckCOOL_own    .t4             148408.615
truckCOOL_own    .t5                                    148408.615
truckCOOL_own    .t12  65076.000
truckCOOL_out    .t1             148408.615
truckCOOL_out    .t3    28562.769
truckCOOL_out    .t6   130152.000
truck_XL_own     .t3                          197878.154
truck_XL_own     .t5             148408.615
truck_XL_own     .t11  65076.000
truck_XL_own     .t12             8026.282
truck_XL_out     .t8   148408.615
truck_XL_out     .t10            148408.615
truckCOOL_XL_own.t1   148408.615
truckCOOL_XL_out.t2              46819.385
truckCOOL_XL_out.t6                                     99991.933


                 +        y5         y6         y7         y8

truck_own        .t1   148408.615
truck_own        .t2              98939.077
truck_own        .t12                       65076.000
truck_out        .t1              98939.077
truck_out        .t5              98939.077
truck_out        .t11                                  98939.077
truckCOOL_own    .t1                        98939.077
truckCOOL_own    .t2                        98939.077
truckCOOL_own    .t3   127207.612
truckCOOL_own    .t9              98939.077
truckCOOL_out    .t2   148408.615
truckCOOL_out    .t10            98939.077
truck_XL_own     .t4                                   98939.077
truck_XL_own     .t8                        98939.077
truck_XL_out     .t3             98939.077
truck_XL_out     .t4                        98939.077
truckCOOL_XL_own.t1                                    98939.077
truckCOOL_XL_out.t2                                    98939.077
truckCOOL_XL_out.t4              88338.462
truckCOOL_XL_out.t5                         98939.077
truckCOOL_XL_out.t8              98939.077


                 +        y9        y10        y11        y12

truck_XL_own     .t1   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t2   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t3   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t4   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t5   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t6   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t7   65076.000  65076.000  65076.000  65076.000
truck_XL_own     .t8   65076.000  65076.000  65076.000  65076.000
```

```
truck_XL_own       .t9    65076.000    65076.000    65076.000    65076.000
truck_XL_own       .t10   65076.000    65076.000    65076.000    65076.000
truck_XL_own       .t11   65076.000    65076.000    65076.000    65076.000
truck_XL_own       .t12   65076.000    65076.000    65076.000    65076.000
```

```
                   +        y13          y14          y15

truck_XL_own       .t1    65076.000    65076.000    65076.000
truck_XL_own       .t2    65076.000    65076.000    65076.000
truck_XL_own       .t3    65076.000    65076.000    65076.000
truck_XL_own       .t4    65076.000    65076.000    65076.000
truck_XL_own       .t5    65076.000    65076.000    65076.000
truck_XL_own       .t6    65076.000    65076.000    65076.000
truck_XL_own       .t7    65076.000    65076.000    65076.000
truck_XL_own       .t8    65076.000    65076.000    65076.000
truck_XL_own       .t9    65076.000    65076.000    65076.000
truck_XL_own       .t10   65076.000    65076.000    65076.000
truck_XL_own       .t11   65076.000    65076.000    65076.000
truck_XL_own       .t12   65076.000    65076.000    65076.000
```

```
INDEX 1 = i1   INDEX 2 = f1   INDEX 3 = rm3

                           y1           y2           y3           y4

truckCOOL_own      .t1    6513.231
truckCOOL_own      .t2                              5113.011
truckCOOL_own      .t4                 6513.231
truckCOOL_out      .t3    1253.538                              2856.000
truckCOOL_out      .t5                 6513.231
truckCOOL_out      .t7                              366.373
truckCOOL_XL_own.t2                    2054.769
truckCOOL_XL_own.t4                                             6513.231
truckCOOL_XL_own.t5                                 8684.308
truckCOOL_XL_own.t6                                             4388.361
truckCOOL_XL_own.t8                                             6513.231
truckCOOL_XL_own.t11  2856.000
truckCOOL_XL_out.t1                                 2856.000
truckCOOL_XL_out.t3                                 8684.308
truckCOOL_XL_out.t5                                             6513.231
truckCOOL_XL_out.t6   5712.000
truckCOOL_XL_out.t9   2054.769
truckCOOL_XL_out.t10                                8568.000
```

```
                   +        y5           y6           y7           y8

truckCOOL_own      .t1                                           4342.154
truckCOOL_own      .t3                 4342.154
truckCOOL_own      .t5                              4342.154
truckCOOL_own      .t8                              4342.154
truckCOOL_own      .t12                             2856.000
truckCOOL_out      .t6    4238.759
truckCOOL_out      .t9                 4342.154
truckCOOL_XL_own.t2                                             4342.154
truckCOOL_XL_own.t3   5582.779
truckCOOL_XL_own.t4                    3876.923    4342.154
truckCOOL_XL_own.t6                                             2623.385
truckCOOL_XL_own.t11                                            4342.154
truckCOOL_XL_out.t1                                 4342.154
truckCOOL_XL_out.t2   6513.231
truckCOOL_XL_out.t5                    4342.154
truckCOOL_XL_out.t8                    4342.154
truckCOOL_XL_out.t9   4910.769
truckCOOL_XL_out.t10                                4342.154    4225.846
```

```
                   +        y9           y10          y11          y12

truckCOOL_XL_own.t1   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t2   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t3   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t4   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t5   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t6   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t7   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t8   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t9   2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t10  2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t11  2856.000     2856.000     2856.000     2856.000
truckCOOL_XL_own.t12  2856.000     2856.000     2856.000     2856.000
```

```
                    +          y13           y14           y15

truckCOOL_XL_own.t1      2856.000      2856.000      2856.000
truckCOOL_XL_own.t2      2856.000      2856.000      2856.000
truckCOOL_XL_own.t3      2856.000      2856.000      2856.000
truckCOOL_XL_own.t4      2856.000      2856.000      2856.000
truckCOOL_XL_own.t5      2856.000      2856.000      2856.000
truckCOOL_XL_own.t6      2856.000      2856.000      2856.000
truckCOOL_XL_own.t7      2856.000      2856.000      2856.000
truckCOOL_XL_own.t8      2856.000      2856.000      2856.000
truckCOOL_XL_own.t9      2856.000      2856.000      2856.000
truckCOOL_XL_own.t10     2856.000      2856.000      2856.000
truckCOOL_XL_own.t11     2856.000      2856.000      2856.000
truckCOOL_XL_own.t12     2856.000      2856.000      2856.000


INDEX 1 = i1   INDEX 2 = f1   INDEX 3 = sp1

                             y1            y2            y3            y4

truck_own        .t8                                            23261.538
truck_out        .t5                    23261.538
truck_XL_own     .t1      23261.538
truck_XL_own     .t12                                            6342.668
truckCOOL_XL_own.t2                                   18260.755
truckCOOL_XL_own.t5                                            23261.538


                    +          y6            y7            y9           y10

truckCOOL_own    .t4      13846.154
truckCOOL_out    .t5      15507.692
truckCOOL_out    .t9                    3646.154
truckCOOL_out    .t10     15507.692
truck_XL_own     .t1                                 10200.000     10200.000
truck_XL_own     .t2                                 10200.000     10200.000
truck_XL_own     .t3                                 10200.000     10200.000
truck_XL_own     .t4                                 10200.000     10200.000
truck_XL_own     .t5                                 10200.000     10200.000
truck_XL_own     .t6                                 10200.000     10200.000
truck_XL_own     .t7                                 10200.000     10200.000
truck_XL_own     .t8                                 10200.000     10200.000
truck_XL_own     .t9                                 10200.000     10200.000
truck_XL_own     .t10                                10200.000     10200.000
truck_XL_own     .t11                                10200.000     10200.000
truck_XL_own     .t12                                10200.000     10200.000
truckCOOL_XL_out.t8               15507.692


                    +          y11           y12           y13           y14

truck_XL_own     .t1      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t2      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t3      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t4      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t5      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t6      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t7      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t8      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t9      10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t10     10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t11     10200.000     10200.000     10200.000     10200.000
truck_XL_own     .t12     10200.000     10200.000     10200.000     10200.000


                    +          y15

truck_XL_own     .t1      10200.000
truck_XL_own     .t2      10200.000
truck_XL_own     .t3      10200.000
truck_XL_own     .t4      10200.000
truck_XL_own     .t5      10200.000
truck_XL_own     .t6      10200.000
truck_XL_own     .t7      10200.000
truck_XL_own     .t8      10200.000
truck_XL_own     .t9      10200.000
truck_XL_own     .t10     10200.000
truck_XL_own     .t11     10200.000
truck_XL_own     .t12     10200.000


INDEX 1 = i1   INDEX 2 = f1   INDEX 3 = sp2
```

```
                               y1           y2           y3           y4

truck_own        .t4                   69784.615
truck_own        .t9      22015.385
truck_out        .t12                   3774.114
truckCOOL_own    .t4                                              69784.615
truckCOOL_own    .t7                                3925.428
truckCOOL_out    .t8      69784.615
truck_XL_own     .t5                               93046.154
truck_XL_own     .t10                              91800.000
truck_XL_own     .t12     30600.000
truck_XL_out     .t3      13430.769
truck_XL_out     .t8                                              69784.615
truckCOOL_XL_own.t2                               54782.264
truckCOOL_XL_out.t1                   69784.615
truckCOOL_XL_out.t3                                              30600.000

                 +            y5           y6           y7           y8

truck_own        .t3                   46523.077
truck_own        .t9                                10938.462
truck_out        .t4                                46523.077
truck_out        .t6      45415.278
truck_out        .t10                  46523.077
truckCOOL_own    .t6                                             28107.692
truck_XL_own     .t12                               30600.000
truckCOOL_XL_own.t2                                              46523.077
truckCOOL_XL_own.t11                                             46523.077
truckCOOL_XL_out.t2                                 46523.077
truckCOOL_XL_out.t4                    41538.462
truckCOOL_XL_out.t5                                 46523.077

                 +            y9          y10          y11          y12

truck_XL_own     .t1      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t2      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t3      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t4      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t5      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t6      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t7      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t8      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t9      30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t10     30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t11     30600.000    30600.000    30600.000    30600.000
truck_XL_own     .t12     30600.000    30600.000    30600.000    30600.000

                 +           y13          y14          y15

truck_XL_own     .t1      30600.000    30600.000    30600.000
truck_XL_own     .t2      30600.000    30600.000    30600.000
truck_XL_own     .t3      30600.000    30600.000    30600.000
truck_XL_own     .t4      30600.000    30600.000    30600.000
truck_XL_own     .t5      30600.000    30600.000    30600.000
truck_XL_own     .t6      30600.000    30600.000    30600.000
truck_XL_own     .t7      30600.000    30600.000    30600.000
truck_XL_own     .t8      30600.000    30600.000    30600.000
truck_XL_own     .t9      30600.000    30600.000    30600.000
truck_XL_own     .t10     30600.000    30600.000    30600.000
truck_XL_own     .t11     30600.000    30600.000    30600.000
truck_XL_own     .t12     30600.000    30600.000    30600.000

INDEX 1 = i3   INDEX 2 = f1   INDEX 3 = rm2

                               y1           y2           y3           y4

truck_own        .t9      46819.385
truckCOOL_out    .t1                                65076.000
truckCOOL_out    .t6                  132431.872
truckCOOL_out    .t7                                 8348.077
truckCOOL_out    .t10                              195228.000
truck_XL_own     .t1                                             130152.000
truck_XL_own     .t5                               197878.154
truck_XL_out     .t2     148408.615
truckCOOL_XL_own.t4                                              148408.615
truckCOOL_XL_out.t3                                               65076.000
truckCOOL_XL_out.t12                                              40466.221
```

```
                       +           y5           y7           y8

 truck_out         .t5                                    98939.077
 truck_out         .t10                                   96288.923
 truckCOOL_own     .t8                                    98939.077
 truckCOOL_own     .t10   148408.615
 truckCOOL_out     .t6                     98939.077      59775.692
 truckCOOL_out     .t9                     23262.462
 truck_XL_own      .t9    111895.385
 truck_XL_own      .t10                    98939.077
 truckCOOL_XL_own.t6      96583.158
 truckCOOL_XL_own.t9                                      31212.923


 INDEX 1 = i3   INDEX 2 = f1   INDEX 3 = rm3

                            y1           y2           y4           y5

 truckCOOL_own     .t6                  5812.057
 truckCOOL_own     .t10                 6513.231                  6513.231
 truckCOOL_own     .t12                  352.251
 truckCOOL_out     .t1                               5712.000
 truckCOOL_out     .t12   2856.000
 truckCOOL_XL_own.t1                    6513.231
 truckCOOL_XL_own.t12                                1775.947
 truckCOOL_XL_out.t1                                              6513.231
 truckCOOL_XL_out.t2      6513.231
 truckCOOL_XL_out.t8      6513.231


                       +           y6           y7           y8

 truckCOOL_own     .t1    4342.154
 truckCOOL_own     .t5                               4342.154
 truckCOOL_own     .t9                  1020.923
 truckCOOL_own     .t10   4342.154
 truckCOOL_out     .t2    4342.154      4342.154
 truckCOOL_XL_own.t9                                 1369.846
 truckCOOL_XL_out.t4                                 4342.154
 truckCOOL_XL_out.t6                    4342.154
 truckCOOL_XL_out.t8                                 4342.154


 INDEX 1 = i3   INDEX 2 = f1   INDEX 3 = sp1

                            y1           y2           y3           y4

 truck_own         .t3    4476.923                                10200.000
 truck_out         .t6                                            15672.717
 truckCOOL_own     .t5                               31015.385
 truckCOOL_out     .t2    23261.538
 truckCOOL_out     .t4                  23261.538
 truckCOOL_out     .t10                 23261.538
 truckCOOL_out     .t12   10200.000
 truck_XL_own      .t1                                            20400.000
 truck_XL_own      .t2                  7338.462
 truck_XL_own      .t6                  20757.347
 truck_XL_own      .t9    7338.462
 truck_XL_out      .t1                  23261.538
 truck_XL_out      .t6    20400.000
 truck_XL_out      .t8    23261.538
 truck_XL_out      .t10                              30600.000
 truck_XL_out      .t11   10200.000
 truckCOOL_XL_own.t1                                 10200.000
 truckCOOL_XL_own.t3                                 31015.385
 truckCOOL_XL_own.t4                                              23261.538
 truckCOOL_XL_own.t7                                 1308.476
 truckCOOL_XL_own.t12                   1258.038


                       +           y5           y6           y7           y8

 truck_own         .t6    15138.426
 truck_own         .t10                                           15092.308
 truck_out         .t3    19938.497
 truck_out         .t8                                            15507.692
 truck_out         .t9                                            4892.308
 truck_out         .t11                                           15507.692
 truckCOOL_own     .t1                  15507.692    15507.692
 truckCOOL_own     .t2                  15507.692    15507.692
 truckCOOL_own     .t6                               15507.692
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truckCOOL_own    .t10                          15507.692
truckCOOL_out    .t1                                           15507.692
truckCOOL_out    .t3               15507.692
truckCOOL_out    .t9               15507.692
truckCOOL_out    .t12                          10200.000
truck_XL_own     .t4                                           15507.692
truck_XL_own     .t5                          15507.692
truck_XL_out     .t4                          15507.692
truck_XL_out     .t5                                           15507.692
truckCOOL_XL_own.t1     23261.538
truckCOOL_XL_own.t2                                           15507.692
truckCOOL_XL_own.t6                                            9369.231
truckCOOL_XL_own.t8               15507.692
truckCOOL_XL_own.t9     17538.462
truckCOOL_XL_out.t2     23261.538
truckCOOL_XL_out.t10    23261.538


 INDEX 1 = i3   INDEX 2 = f1   INDEX 3 = sp2

                                  y1             y2             y3             y4

truck_out        .t1                                           61200.000
truck_out        .t5                                           69784.615
truckCOOL_out    .t2     69784.615
truck_XL_own     .t2                    22015.385
truck_XL_own     .t6                    62272.040                             47018.150
truckCOOL_XL_own.t3                                    93046.154
truckCOOL_XL_own.t10                   69784.615
truckCOOL_XL_own.t11    30600.000
truckCOOL_XL_out.t1     69784.615                      30600.000
truckCOOL_XL_out.t5                    69784.615
truckCOOL_XL_out.t6     61200.000
truckCOOL_XL_out.t12                                          19028.003


                     +          y5             y6             y7             y8

truck_own        .t1                                           46523.077
truck_own        .t8                    46523.077
truck_own        .t9                    46523.077
truck_own        .t10                                 46523.077
truck_out        .t1     69784.615
truck_out        .t5                    46523.077
truck_out        .t9                                           14676.923
truck_out        .t10                                          45276.923
truckCOOL_own    .t2                    46523.077
truckCOOL_out    .t1                    46523.077
truckCOOL_out    .t8                                           46523.077
truck_XL_own     .t1                                  46523.077
truck_XL_own     .t2     69784.615
truck_XL_own     .t3     59815.491
truck_XL_own     .t4                                           46523.077
truck_XL_own     .t9     52615.385
truck_XL_own     .t10    69784.615
truckCOOL_XL_own.t5                                           46523.077
truckCOOL_XL_own.t8                                   46523.077
truckCOOL_XL_out.t6                                   46523.077


 INDEX 1 = f1   INDEX 2 = airPT   INDEX 3 = p2

                                  y1             y2             y6             y7

truck_XL_own     .t9                                  17.000
truck_XL_own     .t10    17.000
truck_XL_out     .t4                                                 17.000
truckCOOL_XL_own.t2                                   17.000
truckCOOL_XL_own.t3                    17.000


                     +          y8

truck_XL_own     .t3      7.752
truckCOOL_XL_own.t1     17.000
truckCOOL_XL_out.t3      9.248


 INDEX 1 = f1   INDEX 2 = airFR   INDEX 3 = p2

                                  y1             y7

truck_XL_own     .t7                    17.000
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truckCOOL_XL_own.t1          17.000

 INDEX 1 = f1   INDEX 2 = portPT   INDEX 3 = p2

                              y1          y2          y3          y4

 truck_XL_own      .t1                    17.000                  17.000
 truck_XL_own      .t2                                17.000
 truck_XL_own      .t3                                17.000      17.000
 truck_XL_own      .t4                    17.000                  17.000
 truck_XL_own      .t6                    17.000                  17.000
 truck_XL_own      .t7                    17.000
 truck_XL_own      .t8                                            17.000
 truck_XL_own      .t9                                            17.000
 truck_XL_own      .t10                   17.000      17.000      17.000
 truck_XL_own      .t11                   17.000
 truck_XL_own      .t12                               17.000      17.000
 truck_XL_out      .t3       12.346
 truckCOOL_XL_own.t1                                  17.000
 truckCOOL_XL_own.t2         17.000       17.000                  17.000
 truckCOOL_XL_own.t4                                  17.000
 truckCOOL_XL_own.t5                      17.000      17.000      17.000
 truckCOOL_XL_own.t6                                  17.000
 truckCOOL_XL_own.t7                                  17.000      17.000
 truckCOOL_XL_own.t8                                  17.000
 truckCOOL_XL_own.t9                      17.000      17.000
 truckCOOL_XL_own.t11        17.000                   17.000      17.000
 truckCOOL_XL_own.t12        17.000       17.000

                    +         y5          y6          y7          y8

 truck_XL_own      .t2       17.000                   17.000
 truck_XL_own      .t4       17.000       17.000                  17.000
 truck_XL_own      .t5       17.000
 truck_XL_own      .t6       17.000                               17.000
 truck_XL_own      .t7       17.000
 truck_XL_own      .t9       17.000
 truck_XL_own      .t10      17.000
 truck_XL_own      .t11      17.000
 truck_XL_out      .t12                               17.000
 truckCOOL_XL_own.t1         17.000       17.000      17.000
 truckCOOL_XL_own.t3         17.000                   17.000
 truckCOOL_XL_own.t6                      17.000
 truckCOOL_XL_own.t7                      17.000
 truckCOOL_XL_own.t8         17.000                               17.000
 truckCOOL_XL_own.t9                                  17.000
 truckCOOL_XL_own.t11                     17.000
 truckCOOL_XL_own.t12        17.000
 truckCOOL_XL_out.t5                                              17.000
 truckCOOL_XL_out.t11                                 17.000

                    +         y9          y10         y11         y12

 truck_XL_own      .t1       17.000       17.000      17.000      17.000
 truck_XL_own      .t2       17.000       17.000      17.000      17.000
 truck_XL_own      .t3       17.000       17.000      17.000      17.000
 truck_XL_own      .t4       17.000       17.000      17.000      17.000
 truck_XL_own      .t5       17.000       17.000      17.000      17.000
 truck_XL_own      .t6       17.000       17.000      17.000      17.000
 truck_XL_own      .t7       17.000       17.000      17.000      17.000
 truck_XL_own      .t8       17.000       17.000      17.000      17.000
 truck_XL_own      .t9       17.000       17.000      17.000      17.000
 truck_XL_own      .t10      17.000       17.000      17.000      17.000
 truck_XL_own      .t11      17.000       17.000      17.000      17.000
 truck_XL_own      .t12      17.000       17.000      17.000      17.000

                    +         y13         y14         y15

 truck_XL_own      .t1       17.000       17.000      17.000
 truck_XL_own      .t2       17.000       17.000      17.000
 truck_XL_own      .t3       17.000       17.000      17.000
 truck_XL_own      .t4       17.000       17.000      17.000
 truck_XL_own      .t5       17.000       17.000      17.000
 truck_XL_own      .t6       17.000       17.000      17.000
 truck_XL_own      .t7       17.000       17.000      17.000
 truck_XL_own      .t8       17.000       17.000      17.000
 truck_XL_own      .t9       17.000       17.000      17.000
 truck_XL_own      .t10      17.000       17.000      17.000
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truck_XL_own      .t11       17.000        17.000        17.000
truck_XL_own      .t12       17.000        17.000        17.000

 INDEX 1 = f1   INDEX 2 = portFR   INDEX 3 = p2

                               y1            y2            y6            y7

truck_XL_own      .t3         4.654
truck_XL_own      .t4        17.000
truck_XL_own      .t6                                                  17.000
truck_XL_own      .t8        17.000                                    17.000
truck_XL_out      .t10                                                 17.000
truckCOOL_XL_own.t3                                    17.000
truckCOOL_XL_own.t5         17.000                     17.000        17.000
truckCOOL_XL_own.t7         17.000
truckCOOL_XL_own.t8                        17.000      17.000
truckCOOL_XL_own.t9         17.000
truckCOOL_XL_own.t10                                   17.000
truckCOOL_XL_own.t12                                   17.000
truckCOOL_XL_out.t6         17.000

                                +            y8

truck_XL_own      .t7        17.000
truck_XL_out      .t9        17.000
truck_XL_out      .t10       17.000
truckCOOL_XL_own.t12        17.000
truckCOOL_XL_out.t2         17.000
truckCOOL_XL_out.t11        17.000

 INDEX 1 = airPT   INDEX 2 = airBR   INDEX 3 = p2

                               y1            y6            y7            y8

plane             .t1                                                17.000
plane             .t2                     11.575
plane             .t3        12.346
planeCOOL         .t1                                   17.000
planeCOOL         .t3                                                17.000
planeCOOL         .t4                                   17.000
planeCOOL         .t10       17.000

 INDEX 1 = airPT   INDEX 2 = portPT   INDEX 3 = p2

                               y6

truckCOOL_XL_own.t9         17.000

 INDEX 1 = airPT   INDEX 2 = portFR   INDEX 3 = p2

                               y2            y6

truck_XL_own      .t2                      5.425
truckCOOL_XL_own.t3         17.000

 INDEX 1 = airBR   INDEX 2 = j1   INDEX 3 = p2

                               y1            y3            y4            y6

truck_XL_own      .t1        17.000
truck_XL_own      .t2                                                17.000
truck_XL_own      .t6                     17.000                     17.000
truck_XL_own      .t10                                  17.000
truck_XL_own      .t11                                  17.000
truck_XL_out      .t10       17.000
truckCOOL_XL_own.t2                                     17.000
truckCOOL_XL_own.t3         12.346
truckCOOL_XL_own.t5                       17.000
truckCOOL_XL_own.t12                                    17.000

                                +            y7            y8

truck_XL_own      .t3                      17.000
truck_XL_own      .t4        17.000
truck_XL_out      .t1        17.000
truckCOOL_XL_out.t7         17.000

 INDEX 1 = airBR   INDEX 2 = portBR   INDEX 3 = p2
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                                 y8

truckCOOL_XL_own.t1        17.000

 INDEX 1 = airFR   INDEX 2 = airBR   INDEX 3 = p2

                           y1           y6           y7

plane            .t1       17.000
plane            .t6                    17.000
planeCOOL        .t7                                 17.000

 INDEX 1 = portUS   INDEX 2 = portBR   INDEX 3 = p2

                           y1           y7

boat             .t4       17.000
boatCOOL         .t5                    17.000

 INDEX 1 = portPT   INDEX 2 = airPT   INDEX 3 = p2

                           y1           y7

truck_XL_own     .t1                    17.000
truck_XL_own     .t3       12.346

 INDEX 1 = portPT   INDEX 2 = airFR   INDEX 3 = p2

                           y6

truck_XL_own     .t6       17.000

 INDEX 1 = portPT   INDEX 2 = portBR   INDEX 3 = p2

                           y1           y2           y3           y4

boat             .t1                    17.000       17.000       17.000
boat             .t2       17.000       17.000       17.000       17.000
boat             .t3                                 17.000       17.000
boat             .t4                    17.000       17.000       17.000
boat             .t5                    17.000       17.000       17.000
boat             .t6                    17.000       17.000       17.000
boat             .t7                    17.000       17.000       17.000
boat             .t8                                 17.000       17.000
boat             .t9                                 17.000       17.000
boat             .t10                   17.000       17.000       17.000
boat             .t11                   17.000       17.000       17.000
boat             .t12      17.000       17.000       17.000       17.000
boatCOOL         .t9                    17.000
boatCOOL         .t11      17.000

                   +       y5           y6           y7           y8

boat             .t1       17.000
boat             .t2       17.000
boat             .t3       17.000
boat             .t4       17.000       17.000
boat             .t5       17.000
boat             .t6       17.000
boat             .t7       17.000
boat             .t8       17.000                                 17.000
boat             .t9       17.000
boat             .t10      17.000
boat             .t11      17.000       17.000
boat             .t12      17.000
boatCOOL         .t1                    17.000
boatCOOL         .t2                                 17.000
boatCOOL         .t3                                 17.000
boatCOOL         .t4                                              17.000
boatCOOL         .t7                    17.000
boatCOOL         .t9                    17.000
boatCOOL         .t12                                17.000

                   +       y9           y10          y11          y12

boat             .t1       17.000       17.000       17.000       17.000
boat             .t2       17.000       17.000       17.000       17.000
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boat               .t3       17.000      17.000      17.000      17.000
boat               .t4       17.000      17.000      17.000      17.000
boat               .t5       17.000      17.000      17.000      17.000
boat               .t6       17.000      17.000      17.000      17.000
boat               .t7       17.000      17.000      17.000      17.000
boat               .t8       17.000      17.000      17.000      17.000
boat               .t9       17.000      17.000      17.000      17.000
boat               .t10      17.000      17.000      17.000      17.000
boat               .t11      17.000      17.000      17.000      17.000
boat               .t12      17.000      17.000      17.000      17.000

                     +         y13         y14         y15

boat               .t1       17.000      17.000      17.000
boat               .t2       17.000      17.000      17.000
boat               .t3       17.000      17.000      17.000
boat               .t4       17.000      17.000      17.000
boat               .t5       17.000      17.000      17.000
boat               .t6       17.000      17.000      17.000
boat               .t7       17.000      17.000      17.000
boat               .t8       17.000      17.000      17.000
boat               .t9       17.000      17.000      17.000
boat               .t10      17.000      17.000      17.000
boat               .t11      17.000      17.000      17.000
boat               .t12      17.000      17.000      17.000


 INDEX 1 = portPT   INDEX 2 = portFR   INDEX 3 = p2

                               y7          y8

boat               .t11      17.000
boatCOOL           .t5                   17.000
boatCOOL           .t6                   17.000
boatCOOL           .t9       17.000


 INDEX 1 = portBR   INDEX 2 = j1   INDEX 3 = p2

                               y1          y2          y3          y4

truck_XL_own       .t2       17.000
truck_XL_own       .t3        4.654                  17.000
truck_XL_own       .t4                               17.000
truck_XL_own       .t5       17.000      17.000
truck_XL_own       .t6                                           17.000
truck_XL_own       .t7                               17.000      17.000
truck_XL_own       .t8                                           17.000
truck_XL_own       .t9                                           17.000
truck_XL_own       .t11                  17.000      17.000
truck_XL_own       .t12                  17.000
truck_XL_out       .t6       17.000
truckCOOL_XL_own.t1                      17.000      17.000      17.000
truckCOOL_XL_own.t2                      17.000      17.000
truckCOOL_XL_own.t3                      17.000                  17.000
truckCOOL_XL_own.t4          17.000      17.000                  17.000
truckCOOL_XL_own.t5                                              17.000
truckCOOL_XL_own.t6                      17.000
truckCOOL_XL_own.t7          17.000      17.000
truckCOOL_XL_own.t8          17.000      17.000      17.000
truckCOOL_XL_own.t9          17.000      17.000      17.000
truckCOOL_XL_own.t10                     17.000      17.000
truckCOOL_XL_own.t11         17.000
truckCOOL_XL_own.t12                                 17.000
truckCOOL_XL_out.t12         17.000


                     +         y5          y6          y7          y8

truck_XL_own       .t1       17.000
truck_XL_own       .t2       17.000                  15.566
truck_XL_own       .t3       17.000      17.000
truck_XL_own       .t4                   17.000
truck_XL_own       .t5                   17.000
truck_XL_own       .t6                               17.000
truck_XL_own       .t7       17.000
truck_XL_own       .t8       17.000
truck_XL_own       .t10      17.000
truck_XL_own       .t12      17.000
truck_XL_out       .t1                   17.000
truck_XL_out       .t2                                1.434
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truck_XL_out    .t4                                                      17.000
truck_XL_out    .t5                                                      17.000
truck_XL_out    .t7                                                      17.000
truckCOOL_XL_own.t4          17.000
truckCOOL_XL_own.t5          17.000
truckCOOL_XL_own.t6          17.000
truckCOOL_XL_own.t7                        17.000
truckCOOL_XL_own.t8                        17.000       17.000       17.000
truckCOOL_XL_own.t9          17.000        17.000       17.000       17.000
truckCOOL_XL_own.t10                       17.000       17.000       17.000
truckCOOL_XL_own.t11         17.000        17.000       17.000       17.000
truckCOOL_XL_own.t12                       17.000       17.000       17.000
truckCOOL_XL_out.t1                                                   17.000
truckCOOL_XL_out.t2                                                   17.000
truckCOOL_XL_out.t3                                     17.000
truckCOOL_XL_out.t5                                     17.000
truckCOOL_XL_out.t6                                                   17.000


                        +          y9          y10          y11          y12

truck_XL_own    .t1          17.000                     17.000       17.000
truck_XL_own    .t2                                     17.000
truck_XL_own    .t3          17.000                     17.000       17.000
truck_XL_own    .t4          17.000        17.000       17.000
truck_XL_own    .t5          17.000        17.000
truck_XL_own    .t6          17.000                     17.000
truck_XL_own    .t7                        17.000                    17.000
truck_XL_own    .t8                                                  17.000
truck_XL_own    .t9                        17.000                    17.000
truck_XL_own    .t10         17.000                     17.000
truck_XL_own    .t11                       17.000       17.000       17.000
truck_XL_own    .t12         17.000                                  17.000
truckCOOL_XL_own.t1                        17.000
truckCOOL_XL_own.t2          17.000        17.000                    17.000
truckCOOL_XL_own.t3                        17.000
truckCOOL_XL_own.t4                                                  17.000
truckCOOL_XL_own.t5                                     17.000       17.000
truckCOOL_XL_own.t6                        17.000                    17.000
truckCOOL_XL_own.t7          17.000                     17.000
truckCOOL_XL_own.t8          17.000        17.000       17.000
truckCOOL_XL_own.t9          17.000                     17.000
truckCOOL_XL_own.t10                       17.000                    17.000
truckCOOL_XL_own.t11         17.000
truckCOOL_XL_own.t12                       17.000       17.000


                        +          y13         y14          y15

truck_XL_own    .t1          17.000
truck_XL_own    .t3                        17.000       17.000
truck_XL_own    .t4          17.000
truck_XL_own    .t5                        17.000       17.000
truck_XL_own    .t6          17.000                     17.000
truck_XL_own    .t7                                     17.000
truck_XL_own    .t8          17.000        17.000
truck_XL_own    .t9          17.000        17.000       17.000
truck_XL_own    .t10         17.000        17.000       17.000
truck_XL_own    .t12         17.000
truckCOOL_XL_own.t1                        17.000       17.000
truckCOOL_XL_own.t2          17.000        17.000       17.000
truckCOOL_XL_own.t3          17.000
truckCOOL_XL_own.t4                        17.000       17.000
truckCOOL_XL_own.t5          17.000
truckCOOL_XL_own.t6                        17.000
truckCOOL_XL_own.t7          17.000        17.000
truckCOOL_XL_own.t8                                     17.000
truckCOOL_XL_own.t11         17.000        17.000       17.000
truckCOOL_XL_own.t12                       17.000       17.000


 INDEX 1 = portBR   INDEX 2 = airBR   INDEX 3 = p2

                                   y3          y4           y6

truck_XL_own    .t5          17.000
truck_XL_own    .t6          17.000
truck_XL_own    .t11                       17.000
truck_XL_own    .t12                       17.000
truckCOOL_XL_own.t2                        17.000        5.425
truckCOOL_XL_own.t10                       17.000
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 INDEX 1 = portFR  INDEX 2 = portUS  INDEX 3 = p2

                                y1              y7

 boat            .t4          17.000
 boatCOOL        .t5                          17.000

 INDEX 1 = portFR  INDEX 2 = portBR  INDEX 3 = p2

                        y1          y2          y6          y7

 boat            .t2                                  5.425
 boat            .t3       4.654      17.000      17.000
 boat            .t5      17.000
 boat            .t6      17.000                              17.000
 boat            .t8                  17.000      17.000      17.000
 boat            .t9      17.000
 boat            .t10                                         17.000
 boat            .t11                                         17.000
 boatCOOL        .t5                              17.000
 boatCOOL        .t7      17.000
 boatCOOL        .t8      17.000
 boatCOOL        .t9                                          17.000
 boatCOOL        .t10                 17.000
 boatCOOL        .t12                 17.000

                         +          y8

 boat            .t2      17.000
 boat            .t6      17.000
 boat            .t11     17.000
 boatCOOL        .t5      17.000
 boatCOOL        .t7      17.000
 boatCOOL        .t9      17.000
 boatCOOL        .t10     17.000
 boatCOOL        .t12     17.000


 ----    1219 VARIABLE Forming.L  Forming scenario s is active

 p2 1.000


 ----    1219 VARIABLE MatOrder.L  Order quantity of material m from supplier i t
                         o plant f in day d (in units)

 INDEX 1 = i1  INDEX 2 = f1

               y1          y2          y3          y4          y5          y6

 rm2.t1    301.337     301.337                             301.337     200.892
 rm2.t2                 95.065     236.556                 301.337     200.892
 rm2.t3     57.995                 401.783                 258.290     200.892
 rm2.t4                301.337                                         179.367
 rm2.t5                301.337                 301.337                 200.892
 rm2.t6    264.268                             203.029
 rm2.t8    301.337                             301.337                 200.892
 rm2.t9                                                                200.892
 rm2.t10               301.337                                         200.892
 rm2.t11   132.134
 rm2.t12   132.134      16.297
 rm3.t1     28.318                  12.417
 rm3.t2                  8.934      22.230                  28.318
 rm3.t3      5.450                  37.758      12.417      24.273      18.879
 rm3.t4                 28.318                 28.318                   16.856
 rm3.t5                 28.318      37.758      28.318                  18.879
 rm3.t6     24.835                             19.080      18.429
 rm3.t7                              1.593
 rm3.t8                                        28.318                  18.879
 rm3.t9      8.934                                         21.351      18.879
 rm3.t10                            37.252
 rm3.t11    12.417
 sp1.t1    465.231
 sp1.t2                            365.215
 sp1.t4                                                                276.923
 sp1.t5                465.231                 465.231                 310.154
 sp1.t8                                        465.231
```

	C1	C2	C3	C4	C5	C6
sp1.t10						310.154
sp1.t12				126.853		
sp2.t1		1395.692				
sp2.t2			1095.645			
sp2.t3	268.615			612.000		930.462
sp2.t4		1395.692		1395.692		830.769
sp2.t5			1860.923			
sp2.t6					908.306	
sp2.t7			78.509			
sp2.t8	1395.692			1395.692		
sp2.t9	440.308					
sp2.t10			1836.000			930.462
sp2.t12	612.000	75.482				

+	y7	y8	y9	y10	y11	y12
rm2.t1	200.892	200.892	132.134	132.134	132.134	132.134
rm2.t2	200.892	200.892	132.134	132.134	132.134	132.134
rm2.t3			132.134	132.134	132.134	132.134
rm2.t4	200.892	200.892	132.134	132.134	132.134	132.134
rm2.t5	200.892		132.134	132.134	132.134	132.134
rm2.t6			132.134	132.134	132.134	132.134
rm2.t7			132.134	132.134	132.134	132.134
rm2.t8	200.892		132.134	132.134	132.134	132.134
rm2.t9			132.134	132.134	132.134	132.134
rm2.t10			132.134	132.134	132.134	132.134
rm2.t11		200.892	132.134	132.134	132.134	132.134
rm2.t12	132.134		132.134	132.134	132.134	132.134
rm3.t1	18.879	18.879	12.417	12.417	12.417	12.417
rm3.t2		18.879	12.417	12.417	12.417	12.417
rm3.t3			12.417	12.417	12.417	12.417
rm3.t4	18.879		12.417	12.417	12.417	12.417
rm3.t5	18.879		12.417	12.417	12.417	12.417
rm3.t6		11.406	12.417	12.417	12.417	12.417
rm3.t7			12.417	12.417	12.417	12.417
rm3.t8	18.879		12.417	12.417	12.417	12.417
rm3.t9			12.417	12.417	12.417	12.417
rm3.t10	18.879	18.373	12.417	12.417	12.417	12.417
rm3.t11		18.879	12.417	12.417	12.417	12.417
rm3.t12	12.417		12.417	12.417	12.417	12.417
sp1.t1			204.000	204.000	204.000	204.000
sp1.t2			204.000	204.000	204.000	204.000
sp1.t3			204.000	204.000	204.000	204.000
sp1.t4			204.000	204.000	204.000	204.000
sp1.t5			204.000	204.000	204.000	204.000
sp1.t6			204.000	204.000	204.000	204.000
sp1.t7			204.000	204.000	204.000	204.000
sp1.t8	310.154		204.000	204.000	204.000	204.000
sp1.t9	72.923		204.000	204.000	204.000	204.000
sp1.t10			204.000	204.000	204.000	204.000
sp1.t11			204.000	204.000	204.000	204.000
sp1.t12			204.000	204.000	204.000	204.000
sp2.t1			612.000	612.000	612.000	612.000
sp2.t2	930.462	930.462	612.000	612.000	612.000	612.000
sp2.t3			612.000	612.000	612.000	612.000
sp2.t4	930.462		612.000	612.000	612.000	612.000
sp2.t5	930.462		612.000	612.000	612.000	612.000
sp2.t6		562.154	612.000	612.000	612.000	612.000
sp2.t7			612.000	612.000	612.000	612.000
sp2.t8			612.000	612.000	612.000	612.000
sp2.t9	218.769		612.000	612.000	612.000	612.000
sp2.t10			612.000	612.000	612.000	612.000
sp2.t11		930.462	612.000	612.000	612.000	612.000
sp2.t12	612.000		612.000	612.000	612.000	612.000

+	y13	y14	y15
rm2.t1	132.134	132.134	132.134
rm2.t2	132.134	132.134	132.134
rm2.t3	132.134	132.134	132.134
rm2.t4	132.134	132.134	132.134
rm2.t5	132.134	132.134	132.134
rm2.t6	132.134	132.134	132.134
rm2.t7	132.134	132.134	132.134
rm2.t8	132.134	132.134	132.134
rm2.t9	132.134	132.134	132.134
rm2.t10	132.134	132.134	132.134
rm2.t11	132.134	132.134	132.134

```
rm2.t12      132.134      132.134      132.134
rm3.t1        12.417       12.417       12.417
rm3.t2        12.417       12.417       12.417
rm3.t3        12.417       12.417       12.417
rm3.t4        12.417       12.417       12.417
rm3.t5        12.417       12.417       12.417
rm3.t6        12.417       12.417       12.417
rm3.t7        12.417       12.417       12.417
rm3.t8        12.417       12.417       12.417
rm3.t9        12.417       12.417       12.417
rm3.t10       12.417       12.417       12.417
rm3.t11       12.417       12.417       12.417
rm3.t12       12.417       12.417       12.417
sp1.t1       204.000      204.000      204.000
sp1.t2       204.000      204.000      204.000
sp1.t3       204.000      204.000      204.000
sp1.t4       204.000      204.000      204.000
sp1.t5       204.000      204.000      204.000
sp1.t6       204.000      204.000      204.000
sp1.t7       204.000      204.000      204.000
sp1.t8       204.000      204.000      204.000
sp1.t9       204.000      204.000      204.000
sp1.t10      204.000      204.000      204.000
sp1.t11      204.000      204.000      204.000
sp1.t12      204.000      204.000      204.000
sp2.t1       612.000      612.000      612.000
sp2.t2       612.000      612.000      612.000
sp2.t3       612.000      612.000      612.000
sp2.t4       612.000      612.000      612.000
sp2.t5       612.000      612.000      612.000
sp2.t6       612.000      612.000      612.000
sp2.t7       612.000      612.000      612.000
sp2.t8       612.000      612.000      612.000
sp2.t9       612.000      612.000      612.000
sp2.t10      612.000      612.000      612.000
sp2.t11      612.000      612.000      612.000
sp2.t12      612.000      612.000      612.000
```

INDEX 1 = i3   INDEX 2 = f1

	y1	y2	y3	y4	y5	y6
rm2.t1			132.134	264.268		
rm2.t2	301.337					
rm2.t3				132.134		
rm2.t4				301.337		
rm2.t5			401.783			
rm2.t6		268.897			196.108	
rm2.t7			16.950			
rm2.t9	95.065				227.199	
rm2.t10			396.402		301.337	
rm2.t12				82.165		
rm3.t1		28.318		24.835	28.318	18.879
rm3.t2	28.318					18.879
rm3.t6		25.270				
rm3.t8	28.318					
rm3.t10		28.318			28.318	18.879
rm3.t12	12.417	1.532		7.722		
sp1.t1		465.231	204.000	408.000	465.231	310.154
sp1.t2	465.231	146.769			465.231	310.154
sp1.t3	89.538		620.308	204.000	398.770	310.154
sp1.t4		465.231		465.231		
sp1.t5			620.308			
sp1.t6	408.000	415.147		313.454	302.769	
sp1.t7			26.170			
sp1.t8	465.231					310.154
sp1.t9	146.769				350.769	310.154
sp1.t10		465.231	612.000		465.231	
sp1.t11	204.000					
sp1.t12	204.000	25.161				
sp2.t1	1395.692		612.000	1224.000	1395.692	930.462
sp2.t2	1395.692	440.308			1395.692	930.462
sp2.t3			1860.923		1196.310	
sp2.t5		1395.692		1395.692		930.462
sp2.t6	1224.000	1245.441		940.363		
sp2.t8						930.462
sp2.t9					1052.308	930.462
sp2.t10		1395.692			1395.692	

```
 sp2.t11      612.000
 sp2.t12                                               380.560


          +            y7           y8

 rm2.t5                   200.892
 rm2.t6       200.892     121.372
 rm2.t8                   200.892
 rm2.t9        47.233      63.376
 rm2.t10      200.892     195.511
 rm3.t2        18.879
 rm3.t4                    18.879
 rm3.t5                    18.879
 rm3.t6        18.879
 rm3.t8                    18.879
 rm3.t9         4.439       5.956
 sp1.t1       310.154     310.154
 sp1.t2       310.154     310.154
 sp1.t4       310.154     310.154
 sp1.t5       310.154     310.154
 sp1.t6       310.154     187.385
 sp1.t8                   310.154
 sp1.t9                    97.846
 sp1.t10      310.154     301.846
 sp1.t11                  310.154
 sp1.t12      204.000
 sp2.t1       930.462     930.462
 sp2.t4                   930.462
 sp2.t5                   930.462
 sp2.t6       930.462
 sp2.t8       930.462     930.462
 sp2.t9                   293.538
 sp2.t10      930.462     905.538


 ----    1219 VARIABLE StockLevel.L  Amount of material m stored in facility w in
                                     day d


 INDEX 1 = f1
```

	y1	y2	y3	y4	y5	y6
p2 .t1	21.769	21.769		17.000	21.769	8.846
p2 .t2	43.538	17.000	13.435		43.538	17.692
p2 .t3	34.000		48.127		59.769	26.538
p2 .t4	17.000	21.769	31.127	21.769	42.769	32.615
p2 .t5		43.538	65.819	43.538	25.769	41.462
p2 .t6	17.000	61.134	48.819	52.660	34.000	24.462
p2 .t7		44.134	34.000	35.660	17.000	7.462
p2 .t8	21.769	27.134	17.000	57.429		16.308
p2 .t9	17.000	10.134		40.429	12.231	25.154
p2 .t10		31.903	34.000	23.429	34.000	34.000
p2 .t11		14.903	17.000	6.429	17.000	17.000

	y7	y8
p2 .t1	8.846	8.846
p2 .t2	17.692	17.692
p2 .t3	0.692	0.692
p2 .t4	9.538	9.538
p2 .t5	18.385	18.385
p2 .t6	27.231	17.000
p2 .t7	10.231	
p2 .t8	19.077	8.846
p2 .t9	8.154	
p2 .t10	17.000	8.154
p2 .t11		17.000

```
 ----    1219 VARIABLE vFixedCapInvest.L  Fixed capital investment of each invest
                                          ment gamma

 fac    550000.000,    equip 7.506514E+8


 ----    1219 VARIABLE vCashFlow.L  Cash Flow

 y9  -4.52024E+6,    y10 -4.52024E+6,    y11 -4.52684E+6,    y12 -4.52684E+6
```

```
 y13 -4.52684E+6,    y14 -4.52684E+6,    y15 -4.22434E+6


 ----    1219 VARIABLE HireResource.L  Hire resource

          y1          y3

o2      1.000
o4      1.000
l1      3.000       1.000


 ----    1219 VARIABLE FireResource.L  Fire resource

          y4          y6

l1      1.000       1.000


 ----    1219 VARIABLE Manuf_NrResource.L  Number of resources to hire for line f
                                in period t

          y1          y2          y3          y4          y5          y6

o2      1.000       1.000       1.000       1.000       1.000       1.000
o4      1.000       1.000       1.000       1.000       1.000       1.000
l1      3.000       3.000       4.000       3.000       3.000       2.000

 +       y7          y8          y9         y10         y11         y12

o2      1.000       1.000       1.000       1.000       1.000       1.000
o4      1.000       1.000       1.000       1.000       1.000       1.000
l1      2.000       2.000       2.000       2.000       2.000       2.000

 +      y13         y14         y15

o2      1.000       1.000       1.000
o4      1.000       1.000       1.000
l1      2.000       2.000       2.000


 ----    1219 VARIABLE NrTrips.L  Number of trips with transportation mode trm be
                                tween entity lo and entity ld in time period (d
                                t)

INDEX 1 = truck_own  INDEX 2 = i1

                  y1          y2          y4          y5          y6

f1    .t1                                             1.152
f1    .t2                                                         0.768
f1    .t3                                                         1.861
f1    .t4                    2.791
f1    .t8                                 0.930
f1    .t9        0.881

          +          y7

f1    .t9        0.438
f1    .t12       0.505

INDEX 1 = truck_own  INDEX 2 = i3

                  y1          y4          y5          y6          y7

f1    .t3        0.179       0.408
f1    .t6                                 0.606
f1    .t8                                             1.861
f1    .t9        0.363                                1.861
f1    .t10                                                        1.861

          +          y8

f1    .t1        1.861
f1    .t10       0.604

INDEX 1 = truck_out  INDEX 2 = i1
```

```
                    y2          y3          y4          y5          y6

f1    .t1                                                        0.768
f1    .t2                      0.904
f1    .t5       0.930                                            0.768
f1    .t6                                             1.817
f1    .t8                                  1.152
f1    .t10                                                       1.861
f1    .t12      0.151

         +          y7          y8

f1    .t4       1.861
f1    .t11                  0.768
```

INDEX 1 = truck_out   INDEX 2 = i3

```
                    y4          y5          y6          y8

f1    .t1       2.448       2.791
f1    .t3                   0.798
f1    .t5       2.791                   1.861       0.768
f1    .t6       0.627
f1    .t8                                           0.620
f1    .t9                                           0.783
f1    .t10                                          2.558
f1    .t11                                          0.620
```

INDEX 1 = truckCOOL_own   INDEX 2 = i1

```
                    y1          y2          y3          y4          y5

f1    .t1       0.261
f1    .t2                                  0.205
f1    .t3                                                       0.987
f1    .t4                   1.412                   2.791
f1    .t5                                           1.152
f1    .t7                                  0.157
f1    .t12      0.505

         +          y6          y7          y8

f1    .t1                   0.768       0.174
f1    .t2                   0.768
f1    .t3       0.174
f1    .t4       0.554
f1    .t5                   0.174
f1    .t6                               1.124
f1    .t8                   0.174
f1    .t9       0.768
f1    .t12                  0.114
```

INDEX 1 = truckCOOL_own   INDEX 2 = i3

```
                    y2          y3          y5          y6          y7

f1    .t1                                           0.794       0.620
f1    .t2                                           2.481       0.620
f1    .t5                   1.241
f1    .t6       0.232                                           0.620
f1    .t9                                                       0.041
f1    .t10      0.261                   1.412       0.174       0.620
f1    .t12      0.014

         +          y8

f1    .t5       0.174
f1    .t8       0.768
```

INDEX 1 = truckCOOL_out   INDEX 2 = i1

```
                    y1          y2          y3          y4          y5

f1    .t1                   1.152
f1    .t2                                                       1.152
f1    .t3       0.272                               0.114
f1    .t5                   0.261
f1    .t6       1.010                                           0.170
```

```
f1    .t7                                  0.015
f1    .t8          2.791

             +          y6          y7

f1    .t5          0.620
f1    .t9          0.174       0.146
f1    .t10         1.388
```

INDEX 1 = truckCOOL_out   INDEX 2 = i3

		y1	y2	y3	y4	y6
f1	.t1			0.505	0.228	1.861
f1	.t2	3.722				0.174
f1	.t3					0.620
f1	.t4		0.930			
f1	.t6		1.028			
f1	.t7			0.065		
f1	.t9					0.620
f1	.t10		0.930	1.515		
f1	.t12	0.522				

		y7	y8
f1	.t1		0.620
f1	.t2	0.174	
f1	.t6	0.768	0.464
f1	.t8		1.861
f1	.t9	0.181	
f1	.t12	0.408	

INDEX 1 = truck_XL_own   INDEX 2 = i1

		y1	y2	y3	y4	y7
f1	.t1	0.582				
f1	.t3			0.960		
f1	.t5		0.720	2.326		
f1	.t8					0.480
f1	.t10			2.295		
f1	.t11	0.316				
f1	.t12	0.765	0.039		0.159	0.765

		y8	y9	y10	y11	y12
f1	.t1		1.336	1.336	1.336	1.336
f1	.t2		1.336	1.336	1.336	1.336
f1	.t3		1.336	1.336	1.336	1.336
f1	.t4	0.480	1.336	1.336	1.336	1.336
f1	.t5		1.336	1.336	1.336	1.336
f1	.t6		1.336	1.336	1.336	1.336
f1	.t7		1.336	1.336	1.336	1.336
f1	.t8		1.336	1.336	1.336	1.336
f1	.t9		1.336	1.336	1.336	1.336
f1	.t10		1.336	1.336	1.336	1.336
f1	.t11		1.336	1.336	1.336	1.336
f1	.t12		1.336	1.336	1.336	1.336

		y13	y14	y15
f1	.t1	1.336	1.336	1.336
f1	.t2	1.336	1.336	1.336
f1	.t3	1.336	1.336	1.336
f1	.t4	1.336	1.336	1.336
f1	.t5	1.336	1.336	1.336
f1	.t6	1.336	1.336	1.336
f1	.t7	1.336	1.336	1.336
f1	.t8	1.336	1.336	1.336
f1	.t9	1.336	1.336	1.336
f1	.t10	1.336	1.336	1.336
f1	.t11	1.336	1.336	1.336
f1	.t12	1.336	1.336	1.336

INDEX 1 = truck_XL_own   INDEX 2 = i3

		y1	y2	y3	y4	y5

```
f1    .t1                                          1.141
f1    .t2                       0.734                              1.745
f1    .t3                                                          1.495
f1    .t5                                  0.960
f1    .t6                       2.076                1.175
f1    .t9           0.183                                          1.858
f1    .t10                                                         1.745


             +           y7           y8

f1    .t1           1.163
f1    .t4                        1.551
f1    .t5           0.388
f1    .t10          0.480
```

INDEX 1 = truck_XL_own   INDEX 2 = f1

```
                    y1           y2           y3           y4           y5

airPT .t10         4.250
portPT.t1                       4.250                     4.250
portPT.t2                                    4.250                     4.250
portPT.t3                                    4.250        4.250
portPT.t4                       4.250                     4.250        4.250
portPT.t5                                                              4.250
portPT.t6                       4.250                     4.250        4.250
portPT.t7                       4.250                                  4.250
portPT.t8                                                 4.250
portPT.t9                                                 4.250        4.250
portPT.t10                      4.250        4.250        4.250        4.250
portPT.t11                      4.250                                  4.250
portPT.t12                                   4.250        4.250
portFR.t3          1.164
portFR.t4          4.250
portFR.t8          4.250


             +           y6           y7           y8           y9           y10

airPT .t3                                    1.938
airPT .t9          4.250
airFR .t7                       4.250
portPT.t1                                                 4.250        4.250
portPT.t2                       4.250                     4.250        4.250
portPT.t3                                                 4.250        4.250
portPT.t4          4.250                     4.250        4.250        4.250
portPT.t5                                                 4.250        4.250
portPT.t6                                    4.250        4.250        4.250
portPT.t7                                                 4.250        4.250
portPT.t8                                                 4.250        4.250
portPT.t9                                                 4.250        4.250
portPT.t10                                                4.250        4.250
portPT.t11                                                4.250        4.250
portPT.t12                                                4.250        4.250
portFR.t6                       4.250
portFR.t7                                    4.250
portFR.t8                       4.250


             +           y11          y12          y13          y14          y15

portPT.t1          4.250        4.250        4.250        4.250        4.250
portPT.t2          4.250        4.250        4.250        4.250        4.250
portPT.t3          4.250        4.250        4.250        4.250        4.250
portPT.t4          4.250        4.250        4.250        4.250        4.250
portPT.t5          4.250        4.250        4.250        4.250        4.250
portPT.t6          4.250        4.250        4.250        4.250        4.250
portPT.t7          4.250        4.250        4.250        4.250        4.250
portPT.t8          4.250        4.250        4.250        4.250        4.250
portPT.t9          4.250        4.250        4.250        4.250        4.250
portPT.t10         4.250        4.250        4.250        4.250        4.250
portPT.t11         4.250        4.250        4.250        4.250        4.250
portPT.t12         4.250        4.250        4.250        4.250        4.250
```

INDEX 1 = truck_XL_own   INDEX 2 = airPT

```
                    y6

portFR.t2          1.356
```

```
 INDEX 1 = truck_XL_own   INDEX 2 = airBR

                      y1            y3            y4            y6            y7

 j1    .t1           4.250
 j1    .t2                                                     4.250
 j1    .t4                                                                   4.250
 j1    .t6                         4.250                       4.250
 j1    .t10                                      4.250
 j1    .t11                                      4.250

           +            y8

 j1    .t3           4.250

 INDEX 1 = truck_XL_own   INDEX 2 = portPT

                      y1            y6            y7

 airPT .t1                                       4.250
 airPT .t3           3.086
 airFR .t6                         4.250

 INDEX 1 = truck_XL_own   INDEX 2 = portBR

                      y1            y2            y3            y4            y5

 j1    .t1                                                                   4.250
 j1    .t2           4.250                                                   4.250
 j1    .t3           1.164                       4.250                       4.250
 j1    .t4                                       4.250
 j1    .t5           4.250         4.250
 j1    .t6                                                     4.250
 j1    .t7                                       4.250         4.250         4.250
 j1    .t8                                                     4.250         4.250
 j1    .t9                                                     4.250
 j1    .t10                                                                  4.250
 j1    .t11                        4.250         4.250
 j1    .t12                        4.250                                     4.250
 airBR .t5                                       4.250
 airBR .t6                                       4.250
 airBR .t11                                                    4.250
 airBR .t12                                                    4.250

           +            y6            y7            y9           y10           y11

 j1    .t1                                       4.250                       4.250
 j1    .t2                         3.891                                     4.250
 j1    .t3           4.250                       4.250                       4.250
 j1    .t4           4.250                       4.250         4.250         4.250
 j1    .t5           4.250                       4.250         4.250
 j1    .t6                         4.250         4.250                       4.250
 j1    .t7                                                     4.250
 j1    .t9                                                     4.250
 j1    .t10                                      4.250                       4.250
 j1    .t11                                                    4.250         4.250
 j1    .t12                                      4.250

           +           y12           y13           y14           y15

 j1    .t1           4.250         4.250
 j1    .t3           4.250                       4.250         4.250
 j1    .t4                         4.250
 j1    .t5                                       4.250         4.250
 j1    .t6                         4.250                       4.250
 j1    .t7           4.250                                     4.250
 j1    .t8           4.250         4.250         4.250
 j1    .t9           4.250         4.250         4.250         4.250
 j1    .t10                        4.250         4.250         4.250
 j1    .t11          4.250
 j1    .t12          4.250         4.250

 INDEX 1 = truck_XL_out   INDEX 2 = i1

                      y1            y2            y4            y6            y7

 f1    .t3           0.336                                     0.480
 f1    .t4                                                                   0.480
```

```
f1     .t8          0.720                    1.745
f1     .t10                     0.720
```

INDEX 1 = truck_XL_out   INDEX 2 = i3

		y1	y2	y3	y7	y8
f1	.t1		0.582			
f1	.t2	0.720				
f1	.t4				0.388	
f1	.t5					0.388
f1	.t6	0.510				
f1	.t8	0.582				
f1	.t10				0.765	
f1	.t11	0.255				

INDEX 1 = truck_XL_out   INDEX 2 = f1

	y1	y7	y8
airPT .t4		4.250	
portPT.t3	3.086		
portPT.t12		4.250	
portFR.t9			4.250
portFR.t10		4.250	4.250

INDEX 1 = truck_XL_out   INDEX 2 = airBR

		y1	y7
j1	.t1		4.250
j1	.t10	4.250	

INDEX 1 = truck_XL_out   INDEX 2 = portBR

		y1	y6	y7	y8
j1	.t1		4.250		
j1	.t2			0.359	
j1	.t4				4.250
j1	.t5				4.250
j1	.t6	4.250			
j1	.t7				4.250

INDEX 1 = truckCOOL_XL_own   INDEX 2 = i1

		y1	y2	y3	y4	y5
f1	.t1	0.720				
f1	.t2		0.051	1.826		
f1	.t3					0.140
f1	.t4				0.163	
f1	.t5			0.217	0.582	
f1	.t6				0.110	
f1	.t8				0.163	
f1	.t11	0.071				

	+	y6	y7	y8	y9	y10
f1	.t1			0.480	0.071	0.071
f1	.t2			1.272	0.071	0.071
f1	.t3				0.071	0.071
f1	.t4	0.097	0.109		0.071	0.071
f1	.t5				0.071	0.071
f1	.t6			0.066	0.071	0.071
f1	.t7				0.071	0.071
f1	.t8				0.071	0.071
f1	.t9				0.071	0.071
f1	.t10				0.071	0.071
f1	.t11			1.272	0.071	0.071
f1	.t12				0.071	0.071

	+	y11	y12	y13	y14	y15
f1	.t1	0.071	0.071	0.071	0.071	0.071
f1	.t2	0.071	0.071	0.071	0.071	0.071
f1	.t3	0.071	0.071	0.071	0.071	0.071
f1	.t4	0.071	0.071	0.071	0.071	0.071

```
f1    .t5     0.071     0.071     0.071     0.071     0.071
f1    .t6     0.071     0.071     0.071     0.071     0.071
f1    .t7     0.071     0.071     0.071     0.071     0.071
f1    .t8     0.071     0.071     0.071     0.071     0.071
f1    .t9     0.071     0.071     0.071     0.071     0.071
f1    .t10    0.071     0.071     0.071     0.071     0.071
f1    .t11    0.071     0.071     0.071     0.071     0.071
f1    .t12    0.071     0.071     0.071     0.071     0.071
```

INDEX 1 = truckCOOL_XL_own   INDEX 2 = i3

		y1	y2	y3	y4	y5
f1	.t1		0.163	0.255		0.582
f1	.t3			3.102		
f1	.t4				1.301	
f1	.t6					0.468
f1	.t7			0.033		
f1	.t9					0.438
f1	.t10		1.745			
f1	.t11	0.765				
f1	.t12		0.031		0.044	

		y6	y7	y8
f1	.t2			0.388
f1	.t5			1.163
f1	.t6			0.234
f1	.t8	0.388	1.163	
f1	.t9			0.186

INDEX 1 = truckCOOL_XL_own   INDEX 2 = f1

	y1	y2	y3	y4	y5
airPT .t3		4.250			
airFR .t1	4.250				
portPT.t1			4.250		4.250
portPT.t2	4.250	4.250		4.250	
portPT.t3					4.250
portPT.t4			4.250		
portPT.t5		4.250	4.250	4.250	
portPT.t6			4.250		
portPT.t7			4.250	4.250	
portPT.t8			4.250		4.250
portPT.t9		4.250	4.250		
portPT.t11	4.250		4.250	4.250	
portPT.t12	4.250	4.250			4.250
portFR.t5	4.250				
portFR.t7	4.250				
portFR.t8		4.250			
portFR.t9	4.250				

	y6	y7	y8
airPT .t1			4.250
airPT .t2	4.250		
portPT.t1	4.250	4.250	
portPT.t3		4.250	
portPT.t6	4.250		
portPT.t7	4.250		
portPT.t8			4.250
portPT.t9		4.250	
portPT.t11	4.250		
portFR.t3	4.250		
portFR.t5	4.250	4.250	
portFR.t8	4.250		
portFR.t10	4.250		
portFR.t12	4.250		4.250

INDEX 1 = truckCOOL_XL_own   INDEX 2 = airPT

	y2	y6
portPT.t9		4.250
portFR.t3	4.250	

INDEX 1 = truckCOOL_XL_own   INDEX 2 = airBR

```
                     y1          y3          y4          y8

j1    .t2                                  4.250
j1    .t3         3.086
j1    .t5                     4.250
j1    .t12                                 4.250
portBR.t1                                              4.250
```

INDEX 1 = truckCOOL_XL_own   INDEX 2 = portBR

```
                     y1          y2          y3          y4          y5

j1    .t1                     4.250       4.250       4.250
j1    .t2                     4.250       4.250
j1    .t3                     4.250                   4.250
j1    .t4         4.250       4.250                   4.250       4.250
j1    .t5                                             4.250       4.250
j1    .t6                     4.250                               4.250
j1    .t7         4.250       4.250
j1    .t8         4.250       4.250       4.250
j1    .t9         4.250       4.250       4.250                   4.250
j1    .t10                    4.250       4.250
j1    .t11        4.250                                           4.250
j1    .t12                                4.250
airBR .t2                                             4.250
airBR .t10                                            4.250
```

```
         +           y6          y7          y8          y9          y10

j1    .t1                                                         4.250
j1    .t2                                             4.250       4.250
j1    .t3                                                         4.250
j1    .t6                                                         4.250
j1    .t7         4.250                               4.250
j1    .t8         4.250       4.250       4.250       4.250       4.250
j1    .t9         4.250       4.250       4.250       4.250
j1    .t10        4.250       4.250       4.250                   4.250
j1    .t11        4.250       4.250       4.250       4.250
j1    .t12        4.250       4.250       4.250                   4.250
airBR .t2         1.356
```

```
         +           y11         y12         y13         y14         y15

j1    .t1                                             4.250       4.250
j1    .t2                     4.250       4.250       4.250       4.250
j1    .t3                                 4.250
j1    .t4                     4.250                   4.250       4.250
j1    .t5         4.250       4.250       4.250
j1    .t6                     4.250                   4.250
j1    .t7         4.250                   4.250       4.250
j1    .t8         4.250                                           4.250
j1    .t9         4.250
j1    .t10                    4.250
j1    .t11                                4.250       4.250       4.250
j1    .t12        4.250                               4.250       4.250
```

INDEX 1 = truckCOOL_XL_out   INDEX 2 = i1

```
                     y1          y2          y3          y4          y5

f1    .t1                     1.745       0.071
f1    .t2                     0.227                               0.163
f1    .t3                                 0.217       0.765
f1    .t5                                             0.163
f1    .t6         0.143                               0.485
f1    .t9         0.051                                           0.123
f1    .t10                                0.214
```

```
         +           y6          y7          y8

f1    .t1                     0.109
f1    .t2                     1.163       0.480
f1    .t4         1.467
f1    .t5         0.109       1.643
f1    .t8         0.588       0.388
f1    .t10                    0.109       0.106
```

```
  INDEX 1 = truckCOOL_XL_out   INDEX 2 = i3

                        y1          y2          y3          y4          y5

  f1     .t1         1.745                   0.765                   0.163
  f1     .t2         0.163                                           0.582
  f1     .t3                                             0.316
  f1     .t5                     1.745
  f1     .t6         1.530
  f1     .t8         0.163
  f1     .t10                                                        0.582
  f1     .t12                                            0.672

             +            y7          y8

  f1     .t4                     0.109
  f1     .t6         1.272
  f1     .t8                     0.109

  INDEX 1 = truckCOOL_XL_out   INDEX 2 = f1

                        y1          y7          y8

  airPT .t3                                   2.312
  portPT.t5                                   4.250
  portPT.t11                     4.250
  portFR.t2                                   4.250
  portFR.t6         4.250
  portFR.t11                                  4.250

  INDEX 1 = truckCOOL_XL_out   INDEX 2 = airBR

                        y7

  j1     .t7         4.250

  INDEX 1 = truckCOOL_XL_out   INDEX 2 = portBR

                        y1          y7          y8

  j1     .t1                                   4.250
  j1     .t2                                   4.250
  j1     .t3                     4.250
  j1     .t5                     4.250
  j1     .t6                                   4.250
  j1     .t12        4.250

  INDEX 1 = plane   INDEX 2 = airPT

                        y1          y6          y8

  airBR .t1                                   0.850
  airBR .t2                     0.579
  airBR .t3         0.617

  INDEX 1 = plane   INDEX 2 = airFR

                        y1          y6

  airBR .t1         0.850
  airBR .t6                     0.850

  INDEX 1 = planeCOOL   INDEX 2 = airPT

                        y1          y7          y8

  airBR .t1                     0.850
  airBR .t3                                   0.850
  airBR .t4                     0.850
  airBR .t10        0.850

  INDEX 1 = planeCOOL   INDEX 2 = airFR

                        y7

  airBR .t7         0.850

  INDEX 1 = boat   INDEX 2 = portUS
```

```
                        y1

 portBR.t4          0.213
```

INDEX 1 = boat   INDEX 2 = portPT

	y1	y2	y3	y4	y5
portBR.t1		0.213	0.213	0.213	0.213
portBR.t2	0.213	0.213	0.213	0.213	0.213
portBR.t3			0.213	0.213	0.213
portBR.t4		0.213	0.213	0.213	0.213
portBR.t5		0.213	0.213	0.213	0.213
portBR.t6		0.213	0.213	0.213	0.213
portBR.t7		0.213	0.213	0.213	0.213
portBR.t8			0.213	0.213	0.213
portBR.t9			0.213	0.213	0.213
portBR.t10		0.213	0.213	0.213	0.213
portBR.t11		0.213	0.213	0.213	0.213
portBR.t12	0.213	0.213	0.213	0.213	0.213

+	y6	y7	y8	y9	y10
portBR.t1				0.213	0.213
portBR.t2				0.213	0.213
portBR.t3				0.213	0.213
portBR.t4	0.213			0.213	0.213
portBR.t5				0.213	0.213
portBR.t6				0.213	0.213
portBR.t7				0.213	0.213
portBR.t8			0.213	0.213	0.213
portBR.t9				0.213	0.213
portBR.t10				0.213	0.213
portBR.t11	0.213			0.213	0.213
portBR.t12				0.213	0.213
portFR.t11		0.213			

+	y11	y12	y13	y14	y15
portBR.t1	0.213	0.213	0.213	0.213	0.213
portBR.t2	0.213	0.213	0.213	0.213	0.213
portBR.t3	0.213	0.213	0.213	0.213	0.213
portBR.t4	0.213	0.213	0.213	0.213	0.213
portBR.t5	0.213	0.213	0.213	0.213	0.213
portBR.t6	0.213	0.213	0.213	0.213	0.213
portBR.t7	0.213	0.213	0.213	0.213	0.213
portBR.t8	0.213	0.213	0.213	0.213	0.213
portBR.t9	0.213	0.213	0.213	0.213	0.213
portBR.t10	0.213	0.213	0.213	0.213	0.213
portBR.t11	0.213	0.213	0.213	0.213	0.213
portBR.t12	0.213	0.213	0.213	0.213	0.213

INDEX 1 = boat   INDEX 2 = portFR

	y1	y2	y6	y7	y8
portUS.t4	0.213				
portBR.t2			0.068		0.213
portBR.t3	0.058	0.213	0.213		
portBR.t5	0.213				
portBR.t6	0.213			0.213	0.213
portBR.t8		0.213	0.213	0.213	
portBR.t9	0.213				
portBR.t10				0.213	
portBR.t11				0.213	0.213

INDEX 1 = boatCOOL   INDEX 2 = portUS

```
                        y7

 portBR.t5          0.213
```

INDEX 1 = boatCOOL   INDEX 2 = portPT

	y1	y2	y6	y7	y8
portBR.t1			0.213		

```
portBR.t2                                         0.213
portBR.t3                                         0.213
portBR.t4                                                            0.213
portBR.t7                            0.213
portBR.t9                   0.213    0.213
portBR.t11        0.213
portBR.t12                                        0.213
portFR.t5                                                   0.213
portFR.t6                                                   0.213
portFR.t9                                         0.213
```

```
 INDEX 1 = boatCOOL   INDEX 2 = portFR
```

	y1	y6	y7	y8
portUS.t5			0.213	
portBR.t5		0.213		0.213
portBR.t7	0.213			0.213
portBR.t8	0.213			
portBR.t9			0.213	0.213
portBR.t10		0.213		0.213
portBR.t12		0.213		0.213

```
----     1219 VARIABLE manuf_var_cost.L   Variable costs of manufacturing

y1  2533561.871,    y2  2531323.894,    y3  3147322.076,    y4  2663263.600
y5  2537311.783,    y6  2043423.143,    y7  1929019.090,    y8  1933563.185
y9  1930383.669,    y10 1930383.669,    y11 1930383.669,    y12 1930383.669
y13 1930383.669,    y14 1930383.669,    y15 1930383.669


----     1219 VARIABLE transp_var_cost.L   Variable costs of transportation

y1  2.048400E+7,    y2  8351965.487,    y3  6145249.158,    y4  7727732.560
y5  6903306.480,    y6  1.302798E+7,    y7  2.461162E+7,    y8  2.767630E+7
y9  4538893.705,    y10 4538893.705,    y11 4538893.705,    y12 4538893.705
y13 4538893.705,    y14 4538893.705,    y15 4538893.705


----     1219 VARIABLE store_var_cost.L   Variable costs of storage

y1 1.720769E+7,    y2 2.934196E+7,    y3 3.093268E+7,    y4 2.983426E+7
y5 3.078463E+7,    y6 2.515385E+7,    y7 1.368462E+7,    y8 1.061538E+7


----     1219 VARIABLE vNPV.L              = -7.62307E+8  Expected Profit

**** REPORT FILE SUMMARY

result /var/lib/condor/execute/dir_3160854/result.put


EXECUTION TIME      =        3.186 SECONDS    794 MB  24.9.2 r64480 LEX-LEG


USER: Small MUD - 5 User License                    G170411/0001AS-LNX
      University of Wisconsin-Madison, Computer Sciences Dept.   DC8499
      License for teaching and research at degree granting institutions


**** FILE SUMMARY

Input     /var/lib/condor/execute/dir_3160854/MODEL.gms
Output    /var/lib/condor/execute/dir_3160854/solve.out
```