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

   NEOS Server Version 5.0
   Job#     : 6179566
   Password : sUrohvNi
   User     : None
   Solver   : milp:Gurobi:GAMS
   Start    : 2018-07-25 14:49:13
   End      : 2018-07-25 14:52:09
   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-1.neos-server.org
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/25/18 14:49:29 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     =        0.003 SECONDS      3 MB  24.9.2 r64480 LEX-LEG
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/25/18 14:49:29 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 07/25/18 14:49:29 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      =      100.708 SECONDS  1,068 MB  24.9.2 r64480 LEX-LEG


EXECUTION TIME       =      101.876 SECONDS  1,068 MB  24.9.2 r64480 LEX-LEG
             L O O P S                zz z1

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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         50.695 1728000000.000
 ITERATION COUNT, LIMIT     35547     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: 37.56sec (det. 34130.33 ticks)
Fixing integer variables, and solving final LP...
Fixed MIP status(1): optimal
Cplex Time: 11.43sec (det. 9811.72 ticks)
Solution satisfies tolerances.

MIP Solution:   -762307370.651457    (1687 iterations, 0 nodes)
Final Solve:    -762307370.651457    (33860 iterations)

Best possible:  -740746754.197615
Absolute gap:     21560616.453842
Relative gap:            0.028283



**** REPORT SUMMARY :        0     NONOPT
                             0 INFEASIBLE
                             0  UNBOUNDED
GAMS 24.9.2  r64480 Released Nov 14, 2017 LEX-LEG x86 64bit/Linux 07/25/18 14:49:29 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       29.185      29.687      17.000      17.000      17.000      17.000
p2.t2        4.815       4.313      17.000      17.000      17.000      17.000
p2.t3       17.000      17.000      17.000      17.000      34.000      17.000
p2.t4       34.000      17.000      17.000      17.000                  23.003
p2.t5                   17.000      30.511      17.000      17.000      25.846
p2.t6       17.000      17.000       3.489      34.000      30.721       2.151
p2.t7       17.000      17.000      34.000                   3.279      17.000
p2.t8       17.000      17.000                  29.582      17.000      17.000
p2.t9       17.000      17.000      17.000       4.418      17.000      17.000
p2.t10      17.000      34.000      17.000      17.000      17.000      25.846
p2.t11      17.000                  17.000      17.000      17.000       8.154
p2.t12      17.000      17.000      17.000      17.000      17.000      17.000

     +          y7          y8          y9         y10         y11         y12

p2.t1       17.000      17.000      17.000      17.000      17.000      17.000
p2.t2       25.846      25.846      17.000      17.000      17.000      17.000
p2.t3        8.154       8.154      17.000      17.000      17.000      17.000
p2.t4       17.000      17.000      17.000      17.000      17.000      17.000
p2.t5       23.431      17.000      17.000      17.000      17.000      17.000
p2.t6       25.846      17.000      17.000      17.000      17.000      17.000
p2.t7        1.723      17.000      17.000      17.000      17.000      17.000
p2.t8       17.000      17.000      17.000      17.000      17.000      17.000
p2.t9       17.000      17.000      17.000      17.000      17.000      17.000
p2.t10      17.000      23.390      17.000      17.000      17.000      17.000
```

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p2.t11      17.000      25.846      17.000      17.000      17.000      17.000
p2.t12      17.000       1.764      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                                 65076.000
truck_out       .t8                                                 113238.844
truckCOOL_own   .t4                     65076.000   65076.000
truckCOOL_own   .t5                                                  65076.000
truckCOOL_own   .t6                                 13354.581
truckCOOL_own   .t9                                 65076.000
truckCOOL_own   .t10    65076.000
truckCOOL_own   .t12    65076.000
truckCOOL_out   .t1                    113642.541
truckCOOL_out   .t3     65076.000
truckCOOL_out   .t6     65076.000
truckCOOL_out   .t7     65076.000
truckCOOL_out   .t9                     65076.000
truck_XL_own    .t3                                 65076.000
truck_XL_own    .t5                     65076.000
truck_XL_own    .t8                     65076.000
truck_XL_own    .t11    65076.000
truck_XL_own    .t12                    65076.000
truck_XL_out    .t7                     65076.000
truck_XL_out    .t8     65076.000
truck_XL_out    .t10                   130152.000
truckCOOL_XL_own.t1    111718.422
truckCOOL_XL_out.t2                     16509.459
truckCOOL_XL_out.t6                                             130152.000
truckCOOL_XL_out.t9                                              16913.156

                  +          y5          y6          y7          y8

truck_own       .t1     65076.000
truck_own       .t2                     65076.000
truck_own       .t12                                65076.000
truck_out       .t1                     65076.000
truck_out       .t5                     98939.077
truck_out       .t11                                                98939.077
truckCOOL_own   .t1                                 65076.000
truckCOOL_own   .t2                                 98939.077
truckCOOL_own   .t3    130152.000
truckCOOL_own   .t9                     65076.000
truckCOOL_out   .t2     65076.000
truckCOOL_out   .t7                                  6596.517
truckCOOL_out   .t10                    98939.077
truck_XL_own    .t4                                                 65076.000
truck_XL_own    .t8                                 65076.000
truck_XL_out    .t3                     65076.000
truck_XL_out    .t4                                 65076.000
truck_XL_out    .t11                    31212.923
truckCOOL_XL_own.t1                                                 65076.000
truckCOOL_XL_own.t3                                                 31212.923
truckCOOL_XL_own.t5     65076.000
truckCOOL_XL_own.t6                      8234.183
truckCOOL_XL_out.t2                                                 98939.077
truckCOOL_XL_out.t3                                 31212.923
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truckCOOL_XL_out.t4                88054.740
truckCOOL_XL_out.t5                                89692.406
truckCOOL_XL_out.t7                                                    65076.000
truckCOOL_XL_out.t8                65076.000

                    +           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      4903.003
truckCOOL_own    .t2                                 2856.000
truckCOOL_own    .t4                      2856.000
truckCOOL_own    .t7      2856.000
truckCOOL_out    .t3      2856.000                                     2856.000
truckCOOL_out    .t5                      2856.000
truckCOOL_out    .t7                                 5712.000
truckCOOL_out    .t11                                                 2856.000
truckCOOL_XL_own.t2                        724.553                    2856.000
truckCOOL_XL_own.t3                      2856.000
truckCOOL_XL_own.t4                                                   2856.000
truckCOOL_XL_own.t5                                 5125.906
truckCOOL_XL_own.t6                                                   5712.000
truckCOOL_XL_own.t8                                                   4969.730
truckCOOL_XL_own.t9                      2856.000                     742.270
truckCOOL_XL_own.t11     2856.000
truckCOOL_XL_out.t1                                 2856.000
truckCOOL_XL_out.t3                                 2856.000
truckCOOL_XL_out.t5                                                   2856.000
truckCOOL_XL_out.t6      2856.000                    586.094
truckCOOL_XL_out.t7                      2856.000
truckCOOL_XL_out.t9      2856.000                   2856.000
truckCOOL_XL_out.t10                                2856.000         2856.000
truckCOOL_XL_out.t11                                2856.000

                    +           y5           y6           y7           y8

truckCOOL_own    .t1                                                  2856.000
truckCOOL_own    .t3                      2856.000    1369.846
truckCOOL_own    .t5                                  3936.344
truckCOOL_own    .t7                      2856.000
truckCOOL_own    .t8                                  2856.000
truckCOOL_own    .t12                                 2856.000
truckCOOL_out    .t6      5161.198
truckCOOL_out    .t9                      2856.000
truckCOOL_out    .t11                                 2856.000
truckCOOL_XL_own.t2                                                   4342.154
truckCOOL_XL_own.t3      5712.000
truckCOOL_XL_own.t4                      3864.471    2856.000
```

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truckCOOL_XL_own.t6                                          2856.000
truckCOOL_XL_own.t7                                          2856.000
truckCOOL_XL_own.t8     2856.000
truckCOOL_XL_own.t11                1369.846                 4342.154
truckCOOL_XL_own.t12                                          296.400
truckCOOL_XL_out.t1                             2856.000
truckCOOL_XL_out.t2     2856.000
truckCOOL_XL_out.t5                 4342.154
truckCOOL_XL_out.t7                              289.502
truckCOOL_XL_out.t8                 2856.000
truckCOOL_XL_out.t9     2856.000
truckCOOL_XL_out.t10                            2856.000    3929.446

                    +          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                                         17749.035
truck_out       .t5                 10200.000
truckCOOL_out   .t4                             10200.000
truckCOOL_out   .t9                 10200.000
truck_XL_own    .t1    17510.724
truck_XL_own    .t4    20400.000
truck_XL_own    .t6                              2093.195
truck_XL_own    .t12                                        10200.000
truckCOOL_XL_own.t2                             10200.000
truckCOOL_XL_own.t5                                         10200.000
truckCOOL_XL_own.t9                             10200.000
truckCOOL_XL_out.t12                            10200.000

                    +          y5          y6          y7          y9

truck_own       .t11                            10200.000
truck_out       .t7     1967.149
truckCOOL_own   .t4                 13801.683
truckCOOL_out   .t5                 15507.692
truckCOOL_out   .t9                             10200.000
truckCOOL_out   .t10                15507.692
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
truckCOOL_XL_out.t8    10200.000              10200.000

                    +         y10         y11         y12         y13

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

                    +         y14         y15

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

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

                               y1          y2          y3          y4

truck_own       .t4                 30600.000
truck_own       .t9    30600.000
truck_own       .t10   30600.000
truck_out       .t9                              30600.000
truck_out       .t12                30600.000
truckCOOL_own   .t4                                          30600.000
truckCOOL_own   .t7                              61200.000
truckCOOL_out   .t8    30600.000
truckCOOL_out   .t12                             30600.000
truck_XL_own    .t5                              54920.416
truck_XL_own    .t10                             30600.000
truck_XL_own    .t12   30600.000
truck_XL_out    .t3    30600.000
truck_XL_out    .t8                                          53247.105
truckCOOL_XL_own.t2                              30600.000
truckCOOL_XL_out.t1                 53436.931
truckCOOL_XL_out.t3                                          30600.000
truckCOOL_XL_out.t7                 30600.000
truckCOOL_XL_out.t9                                           7952.895

                    +          y5          y6          y7          y8

truck_own       .t3                 30600.000
truck_own       .t9                              30600.000
truck_own       .t11                             30600.000
truck_out       .t4                              30600.000
truck_out       .t6    55298.553
truck_out       .t7                               3101.810
truck_out       .t10                46523.077
truckCOOL_own   .t5    30600.000
truckCOOL_own   .t6                                          30600.000
truck_XL_own    .t12                             30600.000    3175.719
truckCOOL_XL_own.t2                                          46523.077
truckCOOL_XL_own.t11   30600.000                             46523.077
truckCOOL_XL_out.t2                              46523.077
truckCOOL_XL_out.t4                 41405.050
truckCOOL_XL_out.t5                              42175.113

                    +          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    65076.000
truck_out       .t2                                        65076.000
truck_out       .t3                65076.000
truckCOOL_own   .t10                                       65076.000
truckCOOL_out   .t1                            65076.000
truckCOOL_out   .t6                65076.000
truckCOOL_out   .t7                           130152.000
truckCOOL_out   .t10                           65076.000
truck_XL_own    .t1                                        65076.000
truck_XL_own    .t5                           116797.419
truck_XL_own    .t11                           65076.000   65076.000
truck_XL_out    .t2    18433.578
truckCOOL_XL_own.t4                                        65076.000
truckCOOL_XL_own.t12                           65076.000
truckCOOL_XL_out.t3                                        65076.000
truckCOOL_XL_out.t4   130152.000
truckCOOL_XL_out.t12                                       65076.000

                  +          y5          y6          y7          y8

truck_out       .t5                                        65076.000
truck_out       .t7                65076.000
truck_out       .t10                                       89535.227
truck_out       .t12   65076.000
truckCOOL_own   .t8                                        65076.000
truckCOOL_own   .t10   65076.000
truckCOOL_own   .t11                           65076.000
truckCOOL_out   .t6                            98939.077   65076.000
truckCOOL_out   .t7    12550.412
truckCOOL_out   .t8    65076.000
truckCOOL_out   .t9                            65076.000
truck_XL_own    .t9    65076.000
truck_XL_own    .t10                           65076.000
truck_XL_own    .t11   65076.000
truck_XL_own    .t12               65076.000                6753.697
truckCOOL_XL_own.t6   117601.588
truckCOOL_XL_own.t9                                        65076.000

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

                             y1          y2          y3          y4

truckCOOL_own   .t4     5712.000                2856.000
truckCOOL_own   .t6                 2856.000
truckCOOL_own   .t10                5712.000
truckCOOL_own   .t12                2856.000    2856.000
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truckCOOL_out   .t1                                          2856.000
truckCOOL_out   .t12    2856.000
truckCOOL_XL_own.t1                4987.447
truckCOOL_XL_own.t10    2856.000
truckCOOL_XL_own.t12                                         2856.000
truckCOOL_XL_out.t2      808.997
truckCOOL_XL_out.t8     2856.000    2856.000

                    +          y5          y6          y7          y8

truckCOOL_own   .t1                2856.000
truckCOOL_own   .t5                                          2856.000
truckCOOL_own   .t7      550.802
truckCOOL_own   .t9                                2856.000
truckCOOL_own   .t10    2856.000    4342.154
truckCOOL_own   .t12    2856.000
truckCOOL_out   .t2                2856.000    4342.154
truckCOOL_out   .t3                                          1369.846
truckCOOL_out   .t5     2856.000
truckCOOL_out   .t6                 361.375
truckCOOL_XL_own.t9                                          2856.000
truckCOOL_XL_own.t12               2856.000
truckCOOL_XL_out.t1     2856.000
truckCOOL_XL_out.t4                                          2856.000
truckCOOL_XL_out.t6                                2856.000
truckCOOL_XL_out.t8                                          2856.000
truckCOOL_XL_out.t11    2856.000

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

                            y1          y2          y3          y4

truck_own       .t3    10200.000                            10200.000
truck_own       .t9                                          2650.965
truck_own       .t10                                        10200.000
truck_own       .t11                           10200.000
truck_out       .t6                                         20400.000
truckCOOL_own   .t5                            18306.805
truckCOOL_own   .t7                10200.000
truckCOOL_out   .t2     2889.276                            10200.000
truckCOOL_out   .t4                10200.000
truckCOOL_out   .t7    10200.000
truckCOOL_out   .t10               20400.000
truckCOOL_out   .t12   10200.000
truck_XL_own    .t1                                         10200.000
truck_XL_own    .t2                 2587.690
truck_XL_own    .t6                10200.000
truck_XL_own    .t9    10200.000
truck_XL_own    .t11                                        10200.000
truck_XL_out    .t1                17812.310
truck_XL_out    .t6    10200.000
truck_XL_out    .t8    10200.000   10200.000
truck_XL_out    .t10   10200.000               10200.000
truck_XL_out    .t11   10200.000
truckCOOL_XL_own.t1                            10200.000
truckCOOL_XL_own.t3                10200.000   10200.000
truckCOOL_XL_own.t4                                         10200.000
truckCOOL_XL_own.t7                            20400.000
truckCOOL_XL_own.t12               10200.000

                    +          y5          y6          y7          y8

truck_own       .t3                                4892.308
truck_own       .t6    18432.851
truck_own       .t7                10200.000
truck_own       .t10                                        14033.735
truck_out       .t3    20400.000
truck_out       .t5    10200.000
truck_out       .t8                                         10200.000
truck_out       .t9                                         10200.000
truck_out       .t11                4892.308                15507.692
truckCOOL_own   .t1                10200.000   10200.000
truckCOOL_own   .t2                10200.000   15507.692
truckCOOL_own   .t3                                          4892.308
truckCOOL_own   .t6                            15507.692
truckCOOL_own   .t10                           10200.000
truckCOOL_out   .t1                                         10200.000
truckCOOL_out   .t3                10200.000
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truckCOOL_out   .t9               10200.000
truckCOOL_out   .t12              10200.000   10200.000
truck_XL_own    .t4                                     10200.000
truck_XL_own    .t5                           14058.371
truck_XL_own    .t12   10200.000                        1058.573
truck_XL_out    .t4                           10200.000
truck_XL_out    .t5                                     10200.000
truckCOOL_XL_own.t1    10200.000
truckCOOL_XL_own.t2                                     15507.692
truckCOOL_XL_own.t6                                     10200.000
truckCOOL_XL_own.t7                            1033.937
truckCOOL_XL_own.t8               10200.000
truckCOOL_XL_own.t9    10200.000
truckCOOL_XL_own.t11   10200.000
truckCOOL_XL_out.t2    10200.000
truckCOOL_XL_out.t6                1290.624
truckCOOL_XL_out.t7                                     10200.000
truckCOOL_XL_out.t10   10200.000

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

                            y1          y2          y3          y4

truck_own       .t10                                    30600.000
truck_out       .t1                                     30600.000
truck_out       .t4    61200.000
truck_out       .t5                                     30600.000
truck_out       .t11                          30600.000
truckCOOL_out   .t2     8667.827
truckCOOL_out   .t11                                    30600.000
truck_XL_own    .t2                7763.069
truck_XL_own    .t4                           30600.000
truck_XL_own    .t6                30600.000              61200.000
truck_XL_own    .t8                30600.000
truck_XL_out    .t2                                     30600.000
truck_XL_out    .t3                30600.000
truckCOOL_XL_own.t3                           30600.000
truckCOOL_XL_own.t6                            6279.584
truckCOOL_XL_own.t9                30600.000
truckCOOL_XL_own.t10               61200.000
truckCOOL_XL_own.t11   30600.000
truckCOOL_XL_out.t1    52532.173              30600.000
truckCOOL_XL_out.t5                30600.000
truckCOOL_XL_out.t6    30600.000
truckCOOL_XL_out.t7    30600.000
truckCOOL_XL_out.t12                                    30600.000

                  +          y5          y6          y7          y8

truck_own       .t1                                     30600.000
truck_own       .t7                30600.000
truck_own       .t8                30600.000
truck_own       .t9                30600.000
truck_own       .t10                          30600.000
truck_out       .t1    30600.000
truck_out       .t5                46523.077
truck_out       .t6                 3871.873
truck_out       .t9                                     30600.000
truck_out       .t10                                    42101.204
truckCOOL_own   .t2                30600.000
truckCOOL_own   .t3                           14676.923
truckCOOL_own   .t7     5901.447
truckCOOL_own   .t8    30600.000
truckCOOL_out   .t1                30600.000
truckCOOL_out   .t7                                     30600.000
truckCOOL_out   .t8                                     30600.000
truck_XL_own    .t1                           30600.000
truck_XL_own    .t2    30600.000
truck_XL_own    .t3    61200.000
truck_XL_own    .t4                                     30600.000
truck_XL_own    .t9    30600.000
truck_XL_own    .t10   30600.000
truck_XL_own    .t11               14676.923
truck_XL_out    .t12   30600.000
truckCOOL_XL_own.t5                                     30600.000
truckCOOL_XL_own.t8                           30600.000
truckCOOL_XL_own.t12               30600.000
truckCOOL_XL_out.t3                                     14676.923
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truckCOOL_XL_out.t6 46523.077

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

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truck_XL_own    .t9       17.000      17.000      17.000
truck_XL_own    .t10      17.000      17.000      17.000
truck_XL_own    .t11      17.000      17.000      17.000
truck_XL_own    .t12      17.000      17.000      17.000

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

                              y1          y2          y4          y6

truck_XL_own    .t1                                               17.000
truck_XL_own    .t2                                               17.000
truck_XL_own    .t10                                    17.000
truck_XL_own    .t11                    17.000          17.000
truck_XL_own    .t12                                              17.000
truckCOOL_XL_own.t2                                     17.000
truckCOOL_XL_own.t4                     17.000
truckCOOL_XL_own.t12      17.000                        17.000

                     +          y7          y8

truck_XL_own    .t3                     17.000
truck_XL_own    .t4                     17.000
truckCOOL_XL_own.t5       17.000

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

                              y1          y2          y3          y4

boat            .t1       17.000      17.000      17.000      17.000
boat            .t2       17.000      17.000      17.000      17.000
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

                     +          y5          y6          y7          y8

boat            .t1       17.000      17.000      17.000      17.000
boat            .t2       17.000      17.000      17.000      17.000
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

                     +         y9         y10         y11         y12

boat            .t1       17.000      17.000      17.000      17.000
boat            .t2       17.000      17.000      17.000      17.000
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
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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 = portBR  INDEX 2 = j1  INDEX 3 = p2

                              y1          y2          y3          y4

truck_XL_own    .t1       17.000
truck_XL_own    .t2       17.000      17.000
truck_XL_own    .t3       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    .t12                  17.000      17.000
truckCOOL_XL_own.t1                   17.000      17.000      17.000
truckCOOL_XL_own.t2                               17.000
truckCOOL_XL_own.t3                                           17.000
truckCOOL_XL_own.t4       17.000                  17.000      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      17.000
truckCOOL_XL_own.t11      17.000                  17.000

                    +         y5          y6          y7          y8

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
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
truck_XL_own    .t10      17.000
truck_XL_own    .t12      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      17.000
truckCOOL_XL_own.t7                   17.000      17.000      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

                    +         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

                               y1          y2          y4          y6

truck_XL_own    .t1                                               17.000
truck_XL_own    .t11                                  17.000
truck_XL_own    .t12      17.000                      17.000      17.000
truckCOOL_XL_own.t2                                   17.000      17.000
truckCOOL_XL_own.t4                   17.000
truckCOOL_XL_own.t10                                  17.000
truckCOOL_XL_own.t11                  17.000

                    +          y7          y8

truck_XL_own    .t4                   17.000
truck_XL_own    .t5       17.000
truckCOOL_XL_own.t3                   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      226.839     230.746                             132.134     132.134
rm2.t2                   33.522     132.134                  132.134     132.134
rm2.t3      132.134                 132.134                  264.268     132.134
rm2.t4                  132.134     132.134                              178.791
rm2.t5                  132.134                 132.134     132.134     200.892
rm2.t6      132.134                  27.116     264.268                  16.719
rm2.t7      132.134     132.134
rm2.t8      132.134     132.134                 229.927                  132.134
rm2.t9                  132.134     132.134      34.341                  132.134
rm2.t10     132.134     264.268                                          200.892
rm2.t11     132.134                                                      63.376
rm2.t12     132.134     132.134
rm3.t1       21.317                  12.417
rm3.t2                    3.150      12.417      12.417      12.417
rm3.t3       12.417      12.417      12.417      12.417      24.835      12.417
rm3.t4                   12.417                  12.417                  16.802
rm3.t5                   12.417      22.287      12.417                  18.879
rm3.t6       12.417                   2.548      24.835      22.440
rm3.t7       12.417      12.417      24.835                              12.417
rm3.t8                                           21.608      12.417      12.417
```

rm3.t9	12.417	12.417	12.417	3.227	12.417	12.417
rm3.t10			12.417	12.417		
rm3.t11	12.417		12.417	12.417		5.956
sp1.t1	350.214					
sp1.t2			204.000			
sp1.t4	408.000		204.000			276.034
sp1.t5		204.000		204.000		310.154
sp1.t6			41.864			
sp1.t7					39.343	
sp1.t8				354.981	204.000	
sp1.t9		204.000	204.000			
sp1.t10						310.154
sp1.t12			204.000	204.000		
sp2.t1		1068.739				
sp2.t2			612.000			
sp2.t3	612.000			612.000		612.000
sp2.t4		612.000		612.000		828.101
sp2.t5			1098.408		612.000	
sp2.t6					1105.971	
sp2.t7		612.000	1224.000			
sp2.t8	612.000			1064.942		
sp2.t9	612.000		612.000	159.058		
sp2.t10	612.000		612.000			930.462
sp2.t11					612.000	
sp2.t12	612.000	612.000	612.000			

+	y7	y8	y9	y10	y11	y12
rm2.t1	132.134	132.134	132.134	132.134	132.134	132.134
rm2.t2	200.892	200.892	132.134	132.134	132.134	132.134
rm2.t3	63.376	63.376	132.134	132.134	132.134	132.134
rm2.t4	132.134	132.134	132.134	132.134	132.134	132.134
rm2.t5	182.117		132.134	132.134	132.134	132.134
rm2.t6			132.134	132.134	132.134	132.134
rm2.t7	13.394	132.134	132.134	132.134	132.134	132.134
rm2.t8	132.134		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	12.417	12.417	12.417	12.417	12.417	12.417
rm3.t2		18.879	12.417	12.417	12.417	12.417
rm3.t3	5.956		12.417	12.417	12.417	12.417
rm3.t4	12.417		12.417	12.417	12.417	12.417
rm3.t5	17.115		12.417	12.417	12.417	12.417
rm3.t6		12.417	12.417	12.417	12.417	12.417
rm3.t7	1.259	12.417	12.417	12.417	12.417	12.417
rm3.t8	12.417		12.417	12.417	12.417	12.417
rm3.t9			12.417	12.417	12.417	12.417
rm3.t10	12.417	17.085	12.417	12.417	12.417	12.417
rm3.t11	12.417	18.879	12.417	12.417	12.417	12.417
rm3.t12	12.417	1.289	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	204.000		204.000	204.000	204.000	204.000
sp1.t9	204.000		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	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	612.000		612.000	612.000	612.000	612.000
sp2.t5	843.502		612.000	612.000	612.000	612.000
sp2.t6		612.000	612.000	612.000	612.000	612.000
sp2.t7	62.036		612.000	612.000	612.000	612.000
sp2.t8			612.000	612.000	612.000	612.000
sp2.t9	612.000		612.000	612.000	612.000	612.000
sp2.t10			612.000	612.000	612.000	612.000
sp2.t11	612.000	930.462	612.000	612.000	612.000	612.000
sp2.t12	612.000	63.514	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     132.134
rm2.t2       37.429                                132.134
rm2.t3                  132.134                    132.134
rm2.t4      264.268                                132.134
rm2.t5                                 237.152
rm2.t6                  132.134                                238.785
rm2.t7                                 264.268                  25.483     132.134
rm2.t8                                                          132.134
rm2.t9      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     132.134
rm3.t1                   21.685                     12.417      12.417      12.417
rm3.t2        3.517                                                        12.417
rm3.t4       24.835                    12.417
rm3.t5                                                          12.417
rm3.t6                   12.417                                              1.571
rm3.t7                                                           2.395
rm3.t8       12.417      12.417
rm3.t10      12.417      24.835                                 12.417      18.879
rm3.t11                                                         12.417
rm3.t12      12.417      12.417      12.417      12.417      12.417      12.417
sp1.t1                  356.246     204.000     204.000     204.000     204.000
sp1.t2       57.786      51.754                 204.000     204.000     204.000
```

sp1.t3	204.000	204.000	204.000	204.000	408.000	204.000
sp1.t4		204.000		204.000		
sp1.t5			366.136		204.000	
sp1.t6	204.000	204.000		408.000	368.657	25.812
sp1.t7	204.000	204.000	408.000			204.000
sp1.t8	204.000	204.000				204.000
sp1.t9	204.000			53.019	204.000	204.000
sp1.t10	204.000	408.000	204.000	204.000	204.000	
sp1.t11	204.000		204.000	204.000	204.000	97.846
sp1.t12	204.000	204.000			204.000	204.000
sp2.t1	1050.643		612.000	612.000	612.000	612.000
sp2.t2	173.357	155.261		612.000	612.000	612.000
sp2.t3		612.000	612.000		1224.000	
sp2.t4	1224.000		612.000			
sp2.t5		612.000		612.000		930.462
sp2.t6	612.000	612.000	125.592	1224.000		77.437
sp2.t7	612.000				118.029	612.000
sp2.t8		612.000			612.000	612.000
sp2.t9		612.000			612.000	612.000
sp2.t10		1224.000		612.000	612.000	
sp2.t11	612.000		612.000	612.000		293.538
sp2.t12				612.000	612.000	612.000

	+	y7	y8
rm2.t5			132.134
rm2.t6		200.892	132.134
rm2.t8			132.134
rm2.t9		132.134	132.134
rm2.t10		132.134	181.797
rm2.t11		132.134	
rm2.t12			13.713
rm3.t2		18.879	
rm3.t3			5.956
rm3.t4			12.417
rm3.t5			12.417
rm3.t6		18.879	
rm3.t8			12.417
rm3.t9		12.417	12.417
sp1.t1		204.000	204.000
sp1.t2		310.154	310.154
sp1.t3		97.846	97.846
sp1.t4		204.000	204.000
sp1.t5		281.167	204.000
sp1.t6		310.154	204.000
sp1.t7		20.679	204.000
sp1.t8			204.000
sp1.t9			204.000
sp1.t10		204.000	280.675
sp1.t11			310.154
sp1.t12		204.000	21.171
sp2.t1		612.000	612.000
sp2.t3		293.538	293.538
sp2.t4			612.000
sp2.t5			612.000
sp2.t6		930.462	
sp2.t7			612.000
sp2.t8		612.000	612.000
sp2.t9			612.000
sp2.t10		612.000	842.024

---- 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	12.185	12.687				
p2 .t3					17.000	
p2 .t4	17.000					6.003
p2 .t5			13.511			14.849
p2 .t6				17.000	13.721	
p2 .t7			17.000			
p2 .t8				12.582		
p2 .t10		17.000				8.846

```
      +          y7          y8

p2 .t2        8.846       8.846
p2 .t5        6.431
p2 .t6       15.277
p2 .t10                    6.390
p2 .t11                   15.236


----   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

o2        1.000
o4        1.000
l1        3.000


----   1219 VARIABLE FireResource.L  Fire resource

            y6

l1        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       3.000       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                                               0.505
f1    .t2                                                           0.505
f1    .t3                                                           1.224
f1    .t4                     1.224
f1    .t8                                 0.710
f1    .t9         1.224
f1    .t10        1.224

         +          y7

f1    .t9         1.224
```

```
f1    .t11       1.632
f1    .t12       0.505

INDEX 1 = truck_own  INDEX 2 = i3

                     y1          y3          y4          y5          y6

f1    .t3        0.408                   0.408
f1    .t6                                            0.737
f1    .t7                                                        1.632
f1    .t8                                                        1.224
f1    .t9        0.505                   0.106                   1.224
f1    .t10                               1.632
f1    .t11                   0.408

         +          y7          y8

f1    .t1                    1.224
f1    .t3        0.196
f1    .t10       1.224       0.561

INDEX 1 = truck_out  INDEX 2 = i1

                     y2          y3          y4          y5          y6

f1    .t1                                                        0.505
f1    .t2                    0.505
f1    .t5        0.408                                           0.768
f1    .t6                                            2.212
f1    .t7                                            0.079
f1    .t8                                0.879
f1    .t9                    1.224
f1    .t10                                                       1.861
f1    .t12       1.224

         +          y7          y8

f1    .t4        1.224
f1    .t7        0.124
f1    .t11                   0.768

INDEX 1 = truck_out  INDEX 2 = i3

                     y1          y2          y3          y4          y5

f1    .t1                                            1.224       1.224
f1    .t2                                            0.505
f1    .t3                    0.505                                   0.816
f1    .t4        2.448
f1    .t5                                            1.224       0.408
f1    .t6                                            0.816
f1    .t11                               1.224
f1    .t12                                                       0.505

         +          y6          y8

f1    .t5        1.861       0.505
f1    .t6        0.155
f1    .t7        0.505
f1    .t8                    0.408
f1    .t9                    1.632
f1    .t10                   2.379
f1    .t11       0.196       0.620

INDEX 1 = truckCOOL_own  INDEX 2 = i1

                     y1          y2          y3          y4          y5

f1    .t1        0.196
f1    .t2                                0.114
f1    .t3                                                        1.010
f1    .t4                    0.619       0.505       1.224
f1    .t5                                            0.505       1.224
f1    .t6                                0.104
f1    .t7        0.114                   2.448
f1    .t9                                0.505
f1    .t10       0.505
f1    .t12       0.505
```

```
          +          y6          y7          y8

f1     .t1                    0.505       0.114
f1     .t2                    0.768
f1     .t3         0.114      0.055
f1     .t4         0.552
f1     .t5                    0.157
f1     .t6                               1.224
f1     .t7         0.114
f1     .t8                    0.114
f1     .t9         0.505
f1     .t12                   0.114

 INDEX 1 = truckCOOL_own  INDEX 2 = i3

                     y1          y2          y3          y4          y5

f1     .t4         0.228                 0.114
f1     .t5                               0.732
f1     .t6                    0.114
f1     .t7                    0.408                               0.258
f1     .t8                                                        1.224
f1     .t10                   0.228                 0.505       0.619
f1     .t12                   0.114       0.114                   0.114

          +          y6          y7          y8

f1     .t1         0.522      0.408
f1     .t2         1.632      0.620
f1     .t3                    0.587       0.196
f1     .t5                               0.114
f1     .t6                    0.620
f1     .t8                               0.505
f1     .t9                    0.114
f1     .t10        0.174      0.408
f1     .t11                   0.505

 INDEX 1 = truckCOOL_out  INDEX 2 = i1

                     y1          y2          y3          y4          y5

f1     .t1                    0.882
f1     .t2                                                        0.505
f1     .t3         0.619                                 0.114
f1     .t4                               0.408
f1     .t5                    0.114
f1     .t6         0.505                                          0.206
f1     .t7         0.505                 0.228
f1     .t8         1.224
f1     .t9                    0.913
f1     .t11                                                0.114
f1     .t12                              1.224

          +          y6          y7

f1     .t5         0.620
f1     .t7                    0.051
f1     .t9         0.114      0.408
f1     .t10        1.388
f1     .t11                   0.114

 INDEX 1 = truckCOOL_out  INDEX 2 = i3

                     y1          y2          y3          y4          y5

f1     .t1                               0.505       0.114
f1     .t2         0.462                             0.408
f1     .t4                    0.408
f1     .t5                                                        0.114
f1     .t6                    0.505
f1     .t7         0.408                 1.010                   0.097
f1     .t8                                                        0.505
f1     .t10                   0.816       0.505
f1     .t11                                              1.224
f1     .t12        0.522

          +          y6          y7          y8
```

```
f1    .t1        1.224                  0.408
f1    .t2        0.114       0.174
f1    .t3        0.408                  0.055
f1    .t6        0.014       0.768      0.505
f1    .t7                               1.224
f1    .t8                               1.224
f1    .t9        0.408       0.505
f1    .t12       0.408       0.408

INDEX 1 = truck_XL_own  INDEX 2 = i1

                    y1          y2          y3          y4          y7

f1    .t1        0.438
f1    .t3                               0.316
f1    .t4        0.510
f1    .t5                    0.316       1.373
f1    .t6                               0.052
f1    .t8                    0.316                                  0.316
f1    .t10                              0.765
f1    .t11       0.316
f1    .t12       0.765       0.316                  0.255       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        0.316       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       0.079       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                                               0.571
f1    .t2                    0.259                                  0.765
f1    .t3                                                           1.530
f1    .t4                               0.765
f1    .t5                               0.566
f1    .t6                    1.020                      1.530
f1    .t8                    0.765
f1    .t9        0.255                                              1.081
f1    .t10                                                          0.765
f1    .t11                              0.316       0.571       0.316
f1    .t12                                                          0.255

         +          y6          y7          y8

f1    .t1                    0.765
f1    .t4                               1.020
f1    .t5                    0.351
f1    .t10                   0.316
f1    .t11       0.367
f1    .t12       0.316                  0.059
```

```
INDEX 1 = truck_XL_own  INDEX 2 = f1

                    y1          y2          y3          y4          y5

portPT.t1                    4.250                   4.250
portPT.t2                                4.250                   4.250
portPT.t3        4.250       4.250       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       4.250                   4.250
portPT.t9        4.250                               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

         +          y6          y7          y8          y9         y10

portPT.t1                                                4.250       4.250
portPT.t2        4.250       4.250                       4.250       4.250
portPT.t3                                                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
portPT.t6                    4.250       4.250           4.250       4.250
portPT.t7                                4.250           4.250       4.250
portPT.t8        4.250                                   4.250       4.250
portPT.t9                                4.250           4.250       4.250
portPT.t10                   4.250       4.250           4.250       4.250
portPT.t11                   4.250                       4.250       4.250
portPT.t12       4.250       4.250                       4.250       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 = airBR

                    y2          y4          y6          y8

j1    .t1                                4.250
j1    .t2                                4.250
j1    .t3                                            4.250
j1    .t4                                            4.250
j1    .t10                  4.250
j1    .t11       4.250      4.250
j1    .t12                               4.250

INDEX 1 = truck_XL_own  INDEX 2 = portBR

                    y1          y2          y3          y4          y5

j1    .t1         4.250                                           4.250
j1    .t2         4.250      4.250                                4.250
j1    .t3         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       4.250
j1    .t8                                                4.250       4.250
j1    .t9                    4.250                       4.250
j1    .t10                                                           4.250
j1    .t12                   4.250       4.250                       4.250
airBR .t11                                               4.250
airBR .t12        4.250                                  4.250

         +          y6          y7          y8          y9         y10
```

```
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
j1    .t5       4.250                   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
j1    .t11                                                    4.250
j1    .t12                  4.250       4.250     4.250
airBR .t1       4.250
airBR .t4                                 4.250
airBR .t5                   4.250
airBR .t12      4.250

         +         y11         y12         y13         y14         y15

j1    .t1       4.250       4.250       4.250
j1    .t2       4.250
j1    .t3       4.250       4.250                   4.250       4.250
j1    .t4       4.250                   4.250
j1    .t5                                           4.250       4.250
j1    .t6       4.250                   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       4.250
j1    .t11      4.250       4.250
j1    .t12                  4.250       4.250

INDEX 1 = truck_XL_out  INDEX 2 = i1

                    y1          y2          y4          y6          y7

f1    .t3       0.765                                 0.316
f1    .t4                                                     0.316
f1    .t7                   0.316
f1    .t8       0.316                   1.331
f1    .t10                  0.631
f1    .t11                                          0.151

INDEX 1 = truck_XL_out  INDEX 2 = i3

                    y1          y2          y3          y4          y5

f1    .t1                   0.445
f1    .t2       0.089                               0.765
f1    .t3                   0.765
f1    .t6       0.255
f1    .t8       0.255       0.255
f1    .t10      0.255                   0.255
f1    .t11      0.255
f1    .t12                                                    0.765

         +          y7          y8

f1    .t4       0.255
f1    .t5                   0.255

INDEX 1 = truckCOOL_XL_own  INDEX 2 = i1

                    y1          y2          y3          y4          y5

f1    .t1       0.542
f1    .t2                   0.018       1.020       0.071
f1    .t3                   0.071                               0.143
f1    .t4                                           0.071
f1    .t5                               0.128       0.255       0.316
f1    .t6                                           0.143
f1    .t8                                           0.124       0.071
f1    .t9                   0.071       0.255       0.019
f1    .t11      0.071                                           0.765

         +          y6          y7          y8          y9         y10

f1    .t1                               0.316       0.071       0.071
```

```
f1    .t2                                  1.272       0.071       0.071
f1    .t3                                  0.151       0.071       0.071
f1    .t4        0.097       0.071                     0.071       0.071
f1    .t5                                              0.071       0.071
f1    .t6        0.040                    0.071       0.071       0.071
f1    .t7                                 0.071       0.071       0.071
f1    .t8                                              0.071       0.071
f1    .t9                                              0.071       0.071
f1    .t10                                             0.071       0.071
f1    .t11       0.034                    1.272       0.071       0.071
f1    .t12                                0.007       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                    0.125       0.255                   0.255
f1    .t3                    0.255       1.020
f1    .t4                                                0.571
f1    .t6                                0.157                   0.570
f1    .t7                                0.510
f1    .t9                    0.765                           0.255
f1    .t10       0.071       1.530
f1    .t11       0.765                                       0.255
f1    .t12                   0.255       0.316       0.071

          +          y6          y7          y8

f1    .t2                                0.388
f1    .t5                                0.765
f1    .t6                                0.255
f1    .t7                    0.026
f1    .t8        0.255       0.765
f1    .t9                                0.387
f1    .t12       0.836

INDEX 1 = truckCOOL_XL_own  INDEX 2 = f1

                     y1          y2          y3          y4          y5

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

          +          y6          y7          y8

portPT.t1        4.250       4.250       4.250
portPT.t2                                4.250
portPT.t3        4.250       4.250       4.250
portPT.t5        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.t10       4.250
portPT.t11       4.250                   4.250
portPT.t12                               4.250

INDEX 1 = truckCOOL_XL_own  INDEX 2 = airBR

                    y1          y2          y4          y7

j1    .t2                                   4.250
j1    .t4                    4.250
j1    .t5                                                4.250
j1    .t12       4.250                     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
j1    .t3                                            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                   4.250
j1    .t8        4.250       4.250       4.250
j1    .t9        4.250                   4.250                   4.250
j1    .t10       4.250       4.250       4.250
j1    .t11       4.250                   4.250                   4.250
airBR .t2                                            4.250
airBR .t4                    4.250
airBR .t10                                           4.250
airBR .t11                   4.250

         +          y6          y7          y8          y9         y10

j1    .t1                                                        4.250
j1    .t2                                                4.250   4.250
j1    .t3                    4.250                               4.250
j1    .t4                    4.250
j1    .t6        4.250                                           4.250
j1    .t7        4.250       4.250       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
airBR .t2        4.250
airBR .t3                                4.250

         +         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                    1.336       0.071
f1    .t2                    0.080                               0.071
f1    .t3                                0.071       0.765
f1    .t5                                            0.071
f1    .t6        0.071                   0.015       0.631
f1    .t7                    0.836
f1    .t8                                                        0.255
f1    .t9        0.071                   0.071       0.281       0.071
f1    .t10                               0.071       0.071
f1    .t11                               0.071
```

```
f1    .t12                              0.255

          +          y6          y7          y8

f1    .t1                    0.071
f1    .t2                    1.163       0.480
f1    .t3                    0.151
f1    .t4        1.462
f1    .t5        0.109       1.489
f1    .t7                    0.007       0.316
f1    .t8        0.387       0.255
f1    .t10                   0.071       0.098

INDEX 1 = truckCOOL_XL_out  INDEX 2 = i3

                     y1          y2          y3          y4          y5

f1    .t1        1.313                   0.765                   0.071
f1    .t2        0.020                                           0.255
f1    .t3                                                0.316
f1    .t4        0.631
f1    .t5                    0.765
f1    .t6        0.765
f1    .t7        0.765
f1    .t8        0.071       0.071
f1    .t10                                                        0.255
f1    .t11                                                        0.071
f1    .t12                                               1.081

          +          y6          y7          y8

f1    .t3                                0.367
f1    .t4                                0.071
f1    .t6        0.032       1.272
f1    .t7                                0.255
f1    .t8                                0.071

INDEX 1 = boat  INDEX 2 = portPT

                     y1          y2          y3          y4          y5

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

          +          y6          y7          y8          y9         y10

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

          +         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


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

y1  2535672.012,    y2  2530952.998,    y3  2546775.017,    y4  2544462.335
y5  2542262.553,    y6  2048363.329,    y7  1932969.037,    y8  1932409.245
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  8505038.733,    y2  8007114.322,    y3  7167134.018,    y4  8099063.892
y5  6961570.810,    y6  8478968.895,    y7  7738738.426,    y8  7821419.270
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 2.918454E+7,    y2 2.968718E+7,    y3 3.051134E+7,    y4 2.958173E+7
y5 3.072142E+7,    y6 2.969792E+7,    y7 3.055354E+7,    y8 3.047142E+7


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

**** REPORT FILE SUMMARY

result /var/lib/condor/execute/dir_749910/result.put


EXECUTION TIME       =        1.818 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_749910/MODEL.gms
Output     /var/lib/condor/execute/dir_749910/solve.out
```