CPLEX 12.7.0.0: optimal integer solution; objective 0.2

21329 MIP simplex iterations

13165 branch-and-bound nodes

No basis.

ampl: show K;

param K{PATTERNS} >= 0;

===============================================================================

K[i] is the stock length to be used for the corresponding pattern.

ampl: display K;

K [\*] :=

1 1 11 5.5 21 9.5 31 18 41 17.5 51 16 61 17.5 71 16.5

2 1 12 6.5 22 10.5 32 18 42 17.5 52 17 62 16 72 17.5

3 1.5 13 7 23 10.5 33 18 43 16 53 18 63 18 73 18

4 2 14 7 24 11 34 18 44 18 54 18 64 16 74 18

5 2.5 15 7.5 25 11.5 35 18 45 18 55 18 65 18 75 18

6 4 16 7.5 26 11.5 36 18 46 18 56 18 66 18 76 18

7 4 17 7.5 27 12 37 18 47 18 57 17 67 18

8 4.5 18 8 28 12.5 38 18 48 18 58 18 68 18

9 4.5 19 8 29 12.5 39 18 49 18 59 18 69 18

10 5 20 9.5 30 13.5 40 17.5 50 18 60 16 70 16.5

;

===============================================================================

W[i] is the wastes per pattern, if a pattern is ued.

ampl: display W;

W [\*] :=

1 0.2 10 0.2 19 0 28 0.4 37 0 46 0 55 0 64 0 73 0

2 0.1 11 0.3 20 0.3 29 0 38 0 47 0 56 0 65 0 74 0

3 0.3 12 0.3 21 0 30 0.3 39 0 48 0 57 0.1 66 0 75 0

4 0.4 13 0.4 22 0.4 31 0 40 0 49 0 58 0.1 67 0 76 0

5 0.4 14 0.2 23 0.1 32 0 41 0 50 0 59 0 68 0

6 0.3 15 0.4 24 0.1 33 0.4 42 0 51 0 60 0 69 0

7 0.2 16 0.3 25 0.4 34 0 43 0 52 0 61 0 70 0

8 0.3 17 0 26 0 35 0 44 0 53 0 62 0 71 0

9 0.1 18 0.4 27 0.3 36 0 45 0 54 0 63 0 72 0

;

===============================================================================

**X[i] is the number of times the corresponding pattern is used.**

ampl: display x;

x [\*] :=

1 0 10 0 19 68 28 0 37 0 46 8 55 10 64 81 73 59

2 0 11 0 20 0 29 51 38 8 47 0 56 15 65 0 74 8

3 0 12 0 21 108 30 0 39 3 48 0 57 0 66 0 75 23

4 0 13 0 22 0 31 0 40 40 49 1 58 0 67 0 76 3

5 0 14 0 23 0 32 0 41 11 50 1 59 51 68 57

6 0 15 0 24 1 33 0 42 1 51 3 60 59 69 12

7 0 16 0 25 0 34 1 43 0 52 0 61 0 70 46

8 0 17 91 26 33 35 0 44 0 53 44 62 5 71 42

9 1 18 0 27 0 36 0 45 0 54 16 63 37 72 6