Test Problems for Irregular Packing:MARQUES

Description of table entries:

reference:	publication in which test problem has been used
name:	name which the problem is referred to in this work
size:	number of items
shapes:	geometric shape type which the problem consists of
source:	source where the co-ordinates used for the experiments in this work have been obtained from; i.e. supplied by authors, stated in publication, extracted from sample layout in publication or extracted from scanned sample layout in publication
factor:	scaling factor between problem instance used in the current work and the problem used in the publication; only stated if dimensions are used in publication

Table: Irregular test problems from literature: textile industry

reference	name	size	problem type	shapes	source	factor
Marques et al. (1991)	Marques	24	textile	polygons, non-polygonal pieces with arcs	scanned from sample layout in paper; approximated by polygons	

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name:        Marques
size:          24
object:    width:   104
  no.   quantity
   1       4     x      0    21    21    14     7     0
                 y      0     0    22    28    28    22
   2       4     x      0     2    11    19    21    17    11     4     0
                 y      5     0     2     0     5     4     6     4     5
   3       2     x      0    33    33    30    26    13     0
                 y      0     0    14    14    17    15    17
   4       2     x      0     4     4     0
                 y      0     0    39    39
   5       4     x      0    10    10     0
                 y      0     0    11    11
   6       4     x      2     0     2     0     2     4     2
                 y     20    18    10     2     0    10    20
   7       2     x      0    29    27    29    25    25    18    16    14    12     4     4     0     2
                 y      0     0    12    22    26    33    37    35    35    37    34    26    22    12
   8       2     x      0    33    37    35    28    25    14     0
                 y      0     0     6    13    13    15    13    15
```
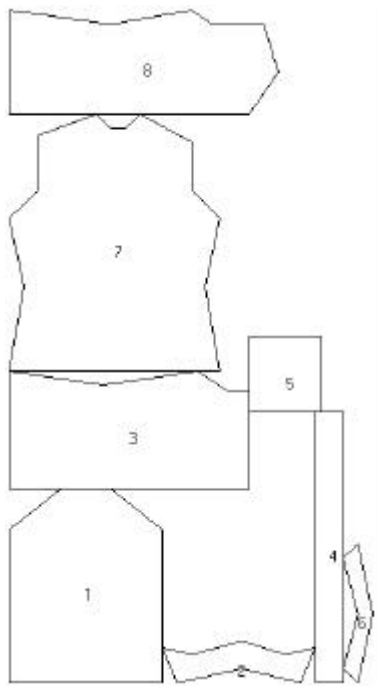
Figure: Data set for test problem Marques

Figure: Problem: Marques

References

Marques, V.M.M., Bispo, C.F.G. and Sentieiro, J.J.S. 1991, A system for the compaction of two-dimensional irregular shapes based on simulated annelaing. Proceedings of the 1991 International Conference On Industrial Electronics, Control and Instrumentation - IECON'91, Kobe, Japan, Oct. 1991, 99. 1911-1916.