Test Problems for Irregular Packing: DAGLI

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

Irregular test problems from literature: textile industry

reference	name	size	problem type	shapes	source	factor
Ratanapan and Dagli (1997b)	Dagli	30	textile	polygons, non-polygonal pieces with arcs	scanned from sample layout in paper; approximated by polygons	

```
name:       Dagli
size:         30
object:   width:      60
  no.   quantity
   1       3      x     1    0    1    7   12   15   10   11    1
                  y     1    8    7    5    0    3    8    9    9
   2       3      x     2    2    0    4    4    5    5    9    9    5    2
                  y     2   12    0    0    1    1    0    0    2   12   12
   3       3      x     3    2    0    0    2    9   11   11    9
                  y     3   24   18    6    0    0    6   18   24
   4       3      x     4    0    0   14   14
                  y     4   15    0    0   15
   5       3      x     5    0    9    7    2
                  y     5    0    0    5    5
   6       3      x     6    0    1    3    6   11    5    2
                  y     6   32    3    0    1   11   31   33
   7       3      x     7    0    5   23   13    1
                  y     7    3    0    0    5    5
   8       3      x     8    1    4    5    4    4    3    2    1    1    0
                  y     8    0    0    6    6    5    4    4    5    6    6
   9       3      x     9    0    1    8    6
                  y     9    2    0    0    3
  10       3      x    10    0   14    5
                  y    10    0    0  6.4
```
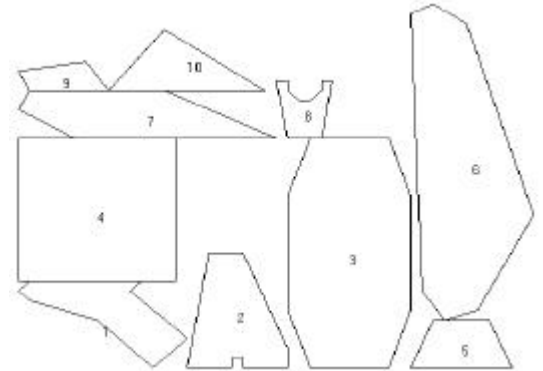

Data set for test problem Dagli

References

Ratanapan, K. and Dagli, C.H. 1997, An object-based evolutionary algorithm for solving irregular nesting problems. In: Proceedings for Artificial Neural Networks in Engineering Conference (ANNIE'97), vol.7, ASME Press, New York, pp. 383-388.