

Test Problems for Irregular Packing: MAO

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
Bounsaythip and Maouche (1997)	Mao	20	textile	polygons, non-polygonal pieces with arcs	scanned from sample layout in paper; approximated by polygons	5

name:	Mao																			
size:	20																			
object:	width: 2550																			
no.	quantity																			
1	2	x	10	478	727	856	930	1049	1097	1078	0									
		y	115	113	21	44	47	0	295	396	407									
2	2	x	0	316	316	0														
		y	0	2	274	275														
3	4	x	0	239	242	0														
		y	1	0	80	78														
4	2	x	0	0	384	384	759	758												
		y	310	119	0	70	69	310												
5	2	x	0	0	150	148														
		y	252	75	0	175														
6	2	x	852	503	387	355	300	45	0	0	55	145	329	407	539	597	668	736	784	849
		y	412	414	451	505	451	325	221	154	53	16	25	35	38	51	20	0	3	194
7	2	x	0	827	894	975	1097	1003	884	845	761	732	694	616	539	0				
		y	232	0	20	258	260	500	463	453	490	547	544	477	414	426				
8	2	x	151	97	0	75	126	191	271	316	359	436	442	694	726	1091	1094	1033	987	926
		y	427	266	259	28	21	61	50	64	10	6	43	75	42	0	211	208	346	393
9	2	x	0	745	619	590	522	6												
		y	0	24	196	276	260	282												

Data set for test problem Mao

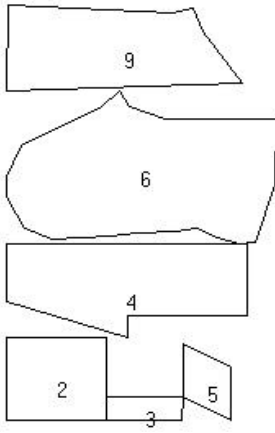


Figure: Problem: Mao

References

Bounsaythip, C. and Maouche, S. 1997, Irregular Shape Nesting and Placing with Evolutionary Approach, In: Proceedings of the IEEE International Conference On Systems, Man and Cybernetics, vol. 4, pp. 3425-3430.