

Test Problems for Irregular Packing: HAN

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: artificially created problems

reference	name	size	problem type	shapes	source	factor
Han and Na (1996)	Han	25	artificial	polygons	scanned from sample layout in paper	

name: Han
size: 23
object: width: 58

no.	quantity	x	y	0	5	5	0	13	18	17	13	9	5	1	0	1
1	1	x	y	0	0	0	0	0	13	17	13	9	5	1	0	1
2	1	x	y	9	13	17	18	17	13	9	5	1	0	1	0	1
3	1	x	y	0	1	5	9	13	17	18	17	13	9	5	0	5
4	1	x	y	2	6	8	8	6	2	0	0	0	0	0	0	0
5	1	x	y	0	0	2	9	11	11	9	0	0	0	0	0	0
6	1	x	y	0	5	5	0	0	6	0	0	0	0	0	0	0
7	3	x	y	5	7	4	2	2	4	7	5	2	0	0	0	0
8	1	x	y	0	0	3	6	9	12	15	15	12	9	6	0	6
9	1	x	y	0	0	8	8	0	17	0	0	0	0	0	0	0
10	1	x	y	0	0	17	0	0	0	0	0	0	0	0	0	0
11	1	x	y	0	5	6	6	3	3	8	8	0	0	0	0	0
12	1	x	y	0	0	2	3	3	6	6	11	0	0	2	2	0
13	1	x	y	0	1	3	3	1	0	0	2	2	0	0	0	0
14	1	x	y	0	0	5	8	13	13	9	9	4	0	0	0	0
15	1	x	y	0	11	0	0	0	0	0	0	0	0	0	0	0
16	1	x	y	6	6	11	11	23	20	20	8	8	5	0	0	0
17	1	x	y	0	2	2	0	0	3	5	10	15	15	0	0	0
18	2	x	y	6	15	15	0	0	0	0	0	0	0	0	0	0
19	1	x	y	0	0	12	12	8	0	0	2	0	0	0	0	0
20	1	x	y	0	6	6	2	2	0	0	16	16	7	0	0	0
21	1	x	y	0	0	16	16	7	0	0	0	0	0	0	0	0
22	1	x	y	6	11	15	12	12	0	0	2	0	0	0	0	0
23	1	x	y	2	0	5	10	13	13	11	10	0	0	0	0	0
24	1	x	y	0	0	3	5	8	11	11	0	0	0	0	0	0
25	1	x	y	8	2	0	3	6	6	8	0	0	0	0	0	0
26	1	x	y	0	4	6	2	6	0	0	0	0	0	0	0	0
27	1	x	y	5	0	0	5	10	0	0	0	0	0	0	0	0
28	1	x	y	11	17	17	15	15	17	17	14	3	0	2	3	8
29	1	x	y	0	0	5	5	8	8	10	10	15	12	11	8	0
30	1	x	y	0	0	19	19	6	6	16	16	2	2	0	0	0
31	2	x	y	13	0	0	13	13	11	11	3	3	13	0	0	0
32	2	x	y	0	0	5	12	12	0	0	0	0	0	0	0	0
33	1	x	y	8	0	0	7	8	0	0	0	0	0	0	0	0
34	1	x	y	0	0	10	0	0	0	0	0	0	0	0	0	0
35	1	x	y	13	0	0	0	0	0	0	0	0	0	0	0	0
36	1	x	y	0	0	7	0	0	0	0	0	0	0	0	0	0
37	1	x	y	5	0	0	0	0	0	0	0	0	0	0	0	0

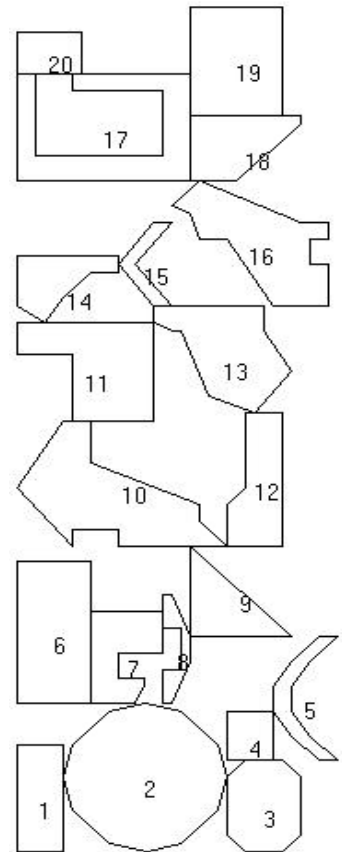


Figure: Data set for test problem Han

References

Han, G.C. and Na, S.J. 1996, Two-stage approach for nesting in two-dimensional cutting problems using neural networks and simulated annealing. In: Proceedings of the Institute of Mechanical Engineers, Part B, Journal of Engineering Manufacture 210, B6, pp. 509-519.