Table of Contents

A. Test Problems for 2D Rectangular Strip Packing: Benchmark Problems in Literature

A.1 Overview of Rectangular Test Problems

Description of table entries:

reference: publication in which test problem has been used
name: name which the problem is referred to in the current 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. stated in publication, extracted from sample layout in publication or extracted from scanned sample layout in publication

Table B.1: Rectangular test problems from literature; optimum known

reference	name	size	source
Jakobs (1996)	J1	25	extracted from a sample layout in paper
Jakobs (1996)	J2	50	extracted from a sample layout in paper
Ratanapan and Dagli (1997b)	D2	21	dimensions are stated in paper
Kendall and Burke (1999)	Kendall	13	dimensions are stated in paper

Table B.2: Rectangular test problems from literature; optimum not known

reference	name	size	source
Ratanapan and Dagli (1997b)	D1	31	dimensions are stated in paper
Ratanapan and Dagli (1998)	D3	37	dimensions are stated in paper
Dagli and Poshyanonda (1997)	D4	37	dimensions are stated in paper

A.2 Test Problems

Rectangular test problems from literature; optimum known

name: J1
size: 25
object: width = 40

no.	width	height
1	12	6
2	4	7
3	6	7
4	10	2
5	2	5
6	6	4
7	4	2
8	4	6
9	7	9
10	4	5
11	6	4
12	4	6
13	6	3
14	4	5
15	2	4
16	8	4
17	8	6
18	8	3
19	6	3
20	2	6
21	8	2
22	3	5
23	2	5
24	3	4
25	2	4

name: J2
size: 50
object: width = 40

no.	width	height
1	5	6
2	7	6
3	4	3
4	4	4
5	6	4
6	6	3
7	4	2
8	6	2
9	3	4
10	3	4
11	2	5
12	4	2
13	3	3
14	3	6
15	4	3
16	4	6
17	4	3
18	4	3
19	4	2
20	4	4
21	4	2
22	4	3
23	3	4
24	3	4
25	2	5

no.	width	height
26	2	5
27	2	4
28	3	6
29	5	2
30	5	4
31	3	3
32	5	3
33	2	3
34	4	3
35	2	3
36	4	3
37	2	2
38	2	4
39	3	4
40	3	4
41	2	4
42	3	2
43	3	2
44	2	2
45	3	2
46	2	2
47	3	3
48	2	3
49	3	4
50	2	4

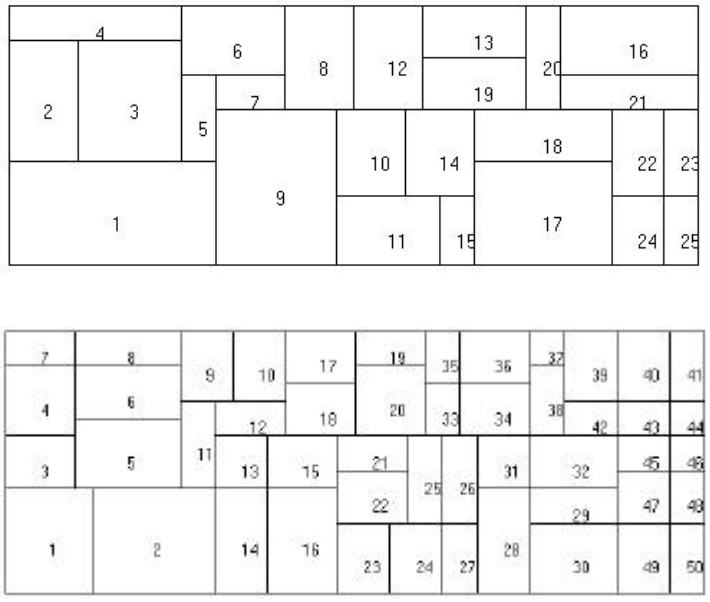

Figure B.1: Data set and optimal solution for test problems J1 and J2

name: **Dagli**
size: 21
object: width = 60

no.	width	height	quantity
1	12	12	4
2	12	10	5
3	12	9	6
4	12	8	6

name: **Kendall**
size: 13
object: width = 80

no.	width	height	quantity
1	24	16	1
2	28	16	2
3	60	14	2
4	20	28	1
5	22	26	2
6	42	44	1
7	18	70	1
8	62	26	1
9	18	48	2

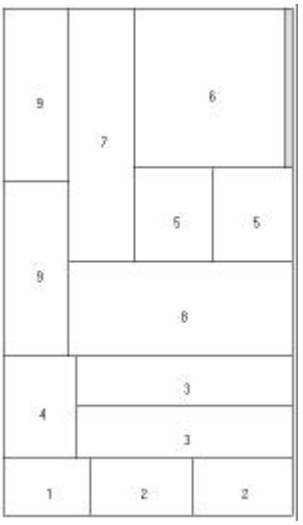

Figure B.2: Data sets for problems D2 and Kendall and optimal solution for Kendall

Rectangular test problems from literature; optimum not known

name: **D1**
size: 31
object: width = 60

width	height	no
12	10	5
10	11	7
9	13	4
4	5	4
9	10	6
6	8	5

name: **D3**
size: 37
object: width = 30

width	height	no
12	10	3
8	11	4
9	13	6
4	5	4
9	10	3
6	8	6
10	12	9
15	7	2

name: **D4**
size: 37
object: width = 20

width	height	no
10	12	3
11	8	4
13	9	6
5	4	4
10	9	3
8	6	6
12	10	9
7	5	2

B. References

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