



Gangrun example

This example originates from the 'green'-sector where labels are printed on polypropylene for plants. This case combines 20 orders with 2 different label-sizes and very different quantities.

Orders

orderID	Width	Height	Bleed	Requested
a	45	90	2	100.000
b	45	90	2	100.000
c	45	90	2	25.000
d	45	90	2	10.000
e	45	90	2	50.000
f	45	90	2	25.000
g	45	90	2	200.000
h	45	90	2	10.000
i	45	90	2	18.500
j	45	90	2	105.000
k	45	90	2	595.000
l	45	90	2	1.000
m	72	160	2	187.600
n	72	160	2	31.500
o	72	160	2	19.500
p	72	160	2	19.500
q	72	160	2	52.000
r	72	160	2	10.000
s	72	160	2	16.350
t	72	160	2	16.350

Paper

paperID	Length	Width	Grain	Type
72x100S	1.000	720	ShortGrain	PolyProp

Result

Based on production cost, the engine automatically determines the number of impositions. For this example, 2 impositions are cost-optimal.

cpu time: 3.43 sec

Imposition 1: 5.000 sheet + 200 waste

Imposition 2: 10.439 sheet + 200 waste

Produced quantities

orderID	Requested	produced	Overproduction	replicas	Imposition
a	100.000	100.000	0	20	1
b	100.000	104.390	4.390	10	2
c	25.000	25.000	0	5	1
d	10.000	10.000	0	2	1
e	50.000	50.000	0	10	1
f	25.000	25.000	0	5	1
g	200.000	208.780	8.780	20	2
h	10.000	10.000	0	2	1
i	18.500	20.000	1.500	4	1
j	105.000	114.829	9.829	11	2
k	595.000	595.023	23	57	2
l	1.000	5.000	4.000	1	1
m	187.600	187.902	302	18	2
n	31.500	35.000	3.500	7	1
o	19.500	20.000	500	4	1
p	19.500	20.000	500	4	1
q	52.000	55.000	3.000	11	1
r	10.000	10.000	0	2	1
s	16.350	20.000	3.650	4	1
t	16.350	20.000	3.650	4	1
Total	1.592.300	1.635.924	43.624		
			2,74%		

The largest example the Workflower gang run-engine has solved thus far contained 987 orders. The solution contained 25 impositions and the computation time was 19 seconds.

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