

Options: queue, random restart, no recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	97	97	98	15.81	16.07	25.50	23.23	4.26	3.19	3.19	4.26
G100p5D	94	98	98	97	99	17.14	17.33	25.53	26.90	4.26	4.26	3.19	5.32
G100p10E	83	94	92	92	93	20.55	24.54	38.74	38.03	13.25	10.84	10.84	12.05
G100p10D	84	92	93	93	95	22.58	29.39	44.97	48.33	9.52	10.71	10.71	13.10
G150p10E*	97	104	103	102	104	64.03	75.11	124.34	120.77	7.22	6.19	5.15	7.22
G150p10D*	97	104	104	103	112	70.30	85.45	142.77	141.71	7.22	7.22	6.19	15.46
G150p15E*	90	99	99	99	100	61.66	75.28	128.29	126.17	10.00	10.00	10.00	11.11
G150p15D*	90	100	101	99	101	70.90	92.15	163.14	170.14	11.11	12.22	10.00	12.22
Avg.						42.62	52.17	86.91	86.91	8.35	8.33	7.66	10.09

Options: queue, random restart, approximate recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	98	98	98	12.19	14.87	21.66	23.98	4.26	4.26	4.26	4.26
G100p5D	94	98	98	96	99	11.24	14.84	20.83	24.88	4.26	4.26	2.13	5.32
G100p10E	83	92	91	92	91	13.33	22.45	30.45	36.75	10.84	9.64	10.84	9.64
G100p10D	84	93	94	92	95	14.08	23.75	31.86	41.12	10.71	11.90	9.52	13.10
G150p10E*	97	102	102	102	102	40.47	59.46	93.76	120.02	5.15	5.15	5.15	5.15
G150p10D*	97	102	104	102	101	39.77	67.44	98.62	135.82	5.15	7.22	5.15	4.12
G150p15E*	90	99	99	99	100	37.28	59.19	86.88	129.77	10.00	10.00	10.00	11.11
G150p15D*	90	100	99	98	99	39.62	72.25	92.94	157.23	11.11	10.00	8.89	10.00
Avg.						25.75	42.03	59.88	83.70	7.69	8.06	7.25	7.84

Options: queue, random restart, exact recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	96	97	97	26.46	34.28	40.32	42.39	2.13	2.13	3.19	3.19
G100p5D	94	96	96	97	98	25.04	33.31	39.27	40.94	2.13	2.13	3.19	4.26
G100p10E	83	90	91	89	92	33.79	70.99	70.86	79.16	8.43	9.64	7.23	10.84
G100p10D	84	92	92	92	91	36.45	74.51	67.69	85.61	9.52	9.52	9.52	8.33
G150p10E*	97	102	101	100	101	98.63	159.85	194.69	241.57	5.15	4.12	3.09	4.12
G150p10D*	97	102	103	103	104	103.56	171.16	201.02	251.77	5.15	6.19	6.19	7.22
G150p15E*	90	97	98	97	99	117.12	276.08	248.23	325.91	7.78	8.89	7.78	10.00
G150p15D*	90	97	98	96	98	118.30	266.11	240.65	360.62	7.78	8.89	6.67	8.89
Avg.						69.67	136.04	138.09	178.50	6.01	6.69	6.11	7.11

Options: queue, perturbation restart, no recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	95	98	97	97	16.84	16.96	24.44	26.22	3.19	4.26	3.19	3.19
G100p5D	94	98	98	98	99	16.57	17.52	25.80	26.66	4.26	4.26	4.26	5.32
G100p10E	83	93	92	91	93	20.01	23.75	38.43	37.89	12.05	10.84	9.64	12.05
G100p10D	84	93	92	94	93	22.62	30.04	40.40	44.44	10.71	9.52	9.52	11.90
G150p10E*	97	103	101	104	104	64.25	70.60	113.98	124.89	6.19	4.12	7.22	7.22
G150p10D*	97	107	104	103	104	67.48	75.10	137.14	139.03	10.31	7.22	6.19	7.22
G150p15E*	90	99	100	97	101	61.74	69.77	122.82	124.05	10.00	11.11	7.78	12.22
G150p15D*	90	100	97	97	100	73.46	80.46	139.77	158.64	11.11	7.78	7.78	11.11
Avg.						42.62	48.28	80.60	85.23	8.48	7.64	7.20	8.78

Options: queue, perturbation restart, approximate recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	95	98	97	98	11.90	15.66	21.49	23.71	1.06	4.26	3.19	4.26
G100p5D	94	98	97	98	98	11.48	14.91	22.05	23.78	4.26	3.19	4.26	4.26
G100p10E	83	91	92	90	92	13.38	22.85	30.15	35.03	9.64	10.84	8.43	10.84
G100p10D	84	93	92	94	93	13.00	21.47	30.03	39.39	10.71	9.52	11.90	10.71
G150p10E*	97	102	103	99	102	38.30	58.63	94.09	106.26	5.15	6.19	2.06	5.15
G150p10D*	97	103	100	100	101	37.52	52.25	88.07	118.65	6.19	3.09	3.09	4.12
G150p15E*	90	97	97	97	97	33.70	57.83	84.55	107.99	7.78	7.78	7.78	7.78
G150p15D*	90	98	98	97	97	32.31	54.29	85.84	114.58	8.89	8.89	7.78	7.78
Avg.						23.70	37.49	57.29	71.17	6.71	6.97	6.31	6.86

Options: queue, perturbation restart, exact recentring

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	97	97	96	98	26.22	33.24	41.21	40.78	3.19	3.19	2.13	4.26
G100p5D	94	95	98	97	98	25.09	31.50	38.44	40.03	1.06	4.26	3.19	4.26
G100p10E	83	90	90	89	91	33.31	64.92	69.07	77.34	8.43	8.43	7.23	9.64
G100p10D	84	91	92	91	92	31.04	60.09	66.53	75.93	8.33	9.52	8.33	9.52
G150p10E*	97	102	101	98	101	94.54	137.56	172.47	220.50	5.15	4.12	1.03	4.12
G150p10D*	97	100	101	100	101	95.43	142.97	182.64	231.42	3.09	4.12	3.09	4.12
G150p15E*	90	96	97	95	97	107.71	248.69	221.21	309.24	6.67	7.78	5.56	7.78
G150p15D*	90	97	97	97	97	100.36	212.73	221.58	324.32	7.78	7.78	7.78	7.78
Avg.						63.96	116.71	126.90	164.95	5.46	6.40	5.04	6.43

Options: stack, random restart, no recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	98	98	98	16.68	17.24	27.18	26.57	4.26	4.26	4.26	4.26
G100p5D	94	98	98	98	98	17.23	18.05	29.23	30.93	4.26	4.26	4.26	4.26
G100p10E	83	92	91	92	92	23.79	28.62	50.14	49.91	10.84	9.64	10.84	10.84
G100p10D	84	92	93	94	95	27.23	32.19	59.45	61.04	9.52	10.71	11.90	13.10
G150p10E*	97	104	105	101	105	73.88	85.41	165.44	171.71	7.22	8.25	4.12	8.25
G150p10D*	97	111	107	103	108	81.59	92.08	194.86	195.20	14.43	10.31	6.19	11.34
G150p15E*	90	100	100	99	99	73.84	82.93	189.97	187.55	11.11	11.11	10.00	10.00
G150p15D*	90	100	100	101	101	89.39	109.30	239.71	221.74	11.11	11.11	12.22	12.22
Avg.						50.20	58.48	119.75	118.08	9.09	8.96	8.23	9.28

Options: stack, random restart, approximate recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	97	98	98	12.96	14.94	24.96	27.50	2.13	4.26	4.26	4.26
G100p5D	94	99	98	98	98	12.54	14.60	23.79	27.73	5.32	4.26	4.26	4.26
G100p10E	83	91	92	92	92	16.06	26.33	41.32	45.12	9.64	10.84	10.84	10.84
G100p10D	84	93	94	92	93	15.84	28.03	36.07	53.12	10.71	11.90	9.52	10.71
G150p10E*	97	102	104	101	106	45.17	68.73	124.46	143.36	5.15	7.22	4.12	9.28
G150p10D*	97	104	102	101	107	46.88	75.05	122.46	163.82	7.22	5.15	4.12	10.31
G150p15E*	90	99	100	99	100	44.26	72.31	143.30	164.74	10.00	11.11	10.00	11.11
G150p15D*	90	98	100	99	100	50.88	83.60	131.03	217.65	8.89	11.11	10.00	11.11
Avg.						30.32	48.20	81.18	105.38	7.38	8.48	7.39	8.98

Options: stack, random restart, exact recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	97	97	96	97	26.89	33.78	45.80	47.17	3.19	3.19	2.13	3.19
G100p5D	94	96	98	95	96	25.74	34.05	41.60	45.64	2.13	4.26	1.06	2.13
G100p10E	83	91	91	92	90	37.92	69.27	75.13	89.45	9.64	9.64	10.84	8.43
G100p10D	84	92	92	91	91	39.22	71.02	74.61	89.20	9.52	9.52	8.33	8.33
G150p10E*	97	101	102	104	102	113.28	176.51	238.05	292.62	4.12	5.15	7.22	5.15
G150p10D*	97	101	102	101	101	118.54	184.32	235.73	301.16	4.12	5.15	4.12	4.12
G150p15E*	90	97	97	97	98	139.23	267.06	335.09	396.38	7.78	7.78	7.78	8.89
G150p15D*	90	97	97	97	99	154.78	289.21	335.06	442.85	7.78	7.78	7.78	10.00
Avg.						81.70	140.90	172.89	213.06	6.04	6.81	6.41	6.28

Options: stack, perturbation restart, no recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	98	98	96	17.00	16.60	29.00	27.86	2.13	4.26	4.26	2.13
G100p5D	94	98	98	98	98	17.04	18.23	30.06	29.49	4.26	4.26	4.26	4.26
G100p10E	83	92	93	92	93	23.45	26.65	52.68	50.57	10.84	12.05	10.84	12.05
G100p10D	84	94	94	92	94	26.91	31.12	55.54	58.80	11.90	11.90	9.52	11.90
G150p10E*	97	103	105	104	102	71.63	74.26	155.27	156.04	6.19	8.25	7.22	5.15
G150p10D*	97	101	101	105	106	77.32	82.48	188.45	189.66	4.12	4.12	8.25	9.28
G150p15E*	90	100	99	99	101	76.22	84.93	180.07	169.60	11.11	10.00	10.00	12.22
G150p15D*	90	99	99	100	98	84.67	91.58	211.96	220.80	10.00	10.00	11.11	8.89
Avg.						49.03	53.48	113.13	112.85	7.57	8.36	8.43	8.24

Options: stack, perturbation restart, approximate recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	96	96	96	12.56	16.49	25.58	27.63	2.13	2.13	2.13	2.13
G100p5D	94	96	97	97	95	12.15	15.37	23.33	27.43	2.13	3.19	3.19	1.06
G100p10E	83	90	91	91	90	15.95	24.34	38.53	46.03	8.43	9.64	9.64	8.43
G100p10D	84	91	92	92	92	14.31	23.94	34.79	50.09	8.33	9.52	9.52	9.52
G150p10E*	97	104	100	102	102	43.44	59.12	113.80	131.71	7.22	3.09	5.15	5.15
G150p10D*	97	102	100	102	104	41.54	62.44	113.89	157.34	5.15	3.09	5.15	7.22
G150p15E*	90	98	96	97	97	41.59	68.79	123.06	151.98	8.89	6.67	7.78	7.78
G150p15D*	90	97	97	98	99	38.49	66.35	108.77	166.22	7.78	7.78	8.89	10.00
Avg.						27.25	42.36	72.97	94.80	6.26	5.89	6.68	6.41

Options: stack, perturbation restart, exact recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	97	96	98	27.06	32.57	43.67	44.97	2.13	3.19	2.13	4.26
G100p5D	94	96	96	97	98	24.93	31.07	41.03	44.11	2.13	2.13	3.19	4.26
G100p10E	83	89	91	90	91	37.11	60.37	67.74	82.48	7.23	9.64	8.43	9.64
G100p10D	84	89	90	91	90	36.68	64.98	64.40	81.46	5.95	7.14	8.33	7.14
G150p10E*	97	100	100	99	100	107.63	153.00	229.38	278.48	3.09	3.09	2.06	3.09
G150p10D*	97	100	101	100	101	108.14	163.48	227.68	284.66	3.09	4.12	3.09	4.12
G150p15E*	90	96	96	96	97	139.53	251.44	313.86	374.78	6.67	6.67	6.67	7.78
G150p15D*	90	97	97	97	99	131.83	238.09	300.28	383.69	7.78	7.78	7.78	10.00
Avg.						76.36	124.63	161.26	196.83	4.76	5.72	5.46	6.29

Options: priority queue, random restart, no recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	98	98	99	20.55	20.22	26.38	26.35	4.26	4.26	4.26	5.32
G100p5D	94	98	98	98	99	21.59	22.07	27.64	29.80	4.26	4.26	4.26	5.32
G100p10E	83	92	93	92	93	26.22	27.33	41.56	41.75	10.84	12.05	10.84	12.05
G100p10D	84	94	94	94	94	29.99	31.84	48.94	53.13	11.90	11.90	11.90	11.90
G150p10E*	97	103	105	103	104	82.94	85.41	142.57	143.37	6.19	8.25	6.19	7.22
G150p10D*	97	106	102	102	107	94.97	99.69	167.80	175.74	9.28	5.15	5.15	10.31
G150p15E*	90	99	97	100	99	89.47	93.89	150.79	142.49	10.00	7.78	11.11	10.00
G150p15D*	90	98	99	101	102	102.27	103.50	191.72	201.53	8.89	10.00	12.22	13.33
Avg.						58.25	60.75	99.93	101.77	8.20	8.21	8.49	9.43

Options: priority queue, random restart, approximate recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	98	98	96	16.83	18.88	22.30	24.28	4.26	4.26	4.26	2.13
G100p5D	94	98	98	95	98	15.77	18.43	22.06	24.93	4.26	4.26	1.06	4.26
G100p10E	83	93	92	93	93	20.21	26.69	34.64	40.73	12.05	10.84	12.05	12.05
G100p10D	84	92	94	92	94	19.56	27.73	34.06	46.35	9.52	11.90	9.52	11.90
G150p10E*	97	103	102	104	103	61.08	85.21	105.46	128.62	6.19	5.15	7.22	6.19
G150p10D*	97	104	108	101	104	60.94	79.02	106.62	158.70	7.22	11.34	4.12	7.22
G150p15E*	90	98	97	99	98	60.32	76.03	108.06	139.78	8.89	7.78	10.00	8.89
G150p15D*	90	99	100	98	100	60.63	84.62	121.72	180.33	10.00	11.11	8.89	11.11
Avg.						39.17	52.33	69.62	92.97	7.80	8.58	7.39	7.97

Options: priority queue, random restart, exact recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	96	97	97	30.84	35.85	37.33	40.61	2.13	2.13	3.19	3.19
G100p5D	94	96	96	96	97	29.33	35.83	36.26	39.86	2.13	2.13	2.13	3.19
G100p10E	83	90	91	91	91	41.07	65.94	65.53	78.61	8.43	9.64	9.64	9.64
G100p10D	84	92	92	93	93	41.61	64.19	65.18	87.84	9.52	9.52	10.71	10.71
G150p10E*	97	101	101	103	101	118.14	163.12	181.35	231.26	4.12	4.12	6.19	4.12
G150p10D*	97	102	102	103	102	122.75	165.95	185.73	246.24	5.15	5.15	6.19	5.15
G150p15E*	90	97	98	97	97	137.60	249.76	228.80	337.89	7.78	8.89	7.78	7.78
G150p15D*	90	98	98	98	99	137.20	230.51	241.55	368.65	8.89	8.89	8.89	10.00
Avg.						82.07	126.65	130.47	178.87	6.02	6.56	7.09	6.72

Options: priority queue, perturbation restart, no recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	98	98	98	98	20.35	20.95	26.84	27.06	4.26	4.26	4.26	4.26
G100p5D	94	97	97	96	100	21.63	21.26	27.70	29.44	3.19	3.19	2.13	6.38
G100p10E	83	92	90	91	93	26.50	28.69	41.44	44.38	10.84	8.43	9.64	12.05
G100p10D	84	93	93	94	94	27.55	29.36	49.55	48.69	10.71	10.71	11.90	11.90
G150p10E*	97	102	104	102	103	87.26	86.23	135.30	143.31	5.15	7.22	5.15	6.19
G150p10D*	97	106	107	102	108	85.94	89.39	157.15	157.25	9.28	10.31	5.15	11.34
G150p15E*	90	98	98	98	99	84.85	84.07	136.73	145.27	8.89	8.89	8.89	10.00
G150p15D*	90	100	99	99	100	94.91	98.75	174.85	196.24	11.11	10.00	10.00	11.11
Avg.						55.87	57.59	93.95	98.96	7.93	8.13	7.39	9.15

Options: priority queue, perturbation restart, approximate recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	98	98	96	16.77	19.36	21.92	24.29	4.26	4.26	4.26	2.13
G100p5D	94	98	98	98	98	15.67	18.09	21.34	26.11	4.26	4.26	4.26	4.26
G100p10E	83	92	92	91	92	19.68	25.61	34.38	39.74	10.84	10.84	9.64	10.84
G100p10D	84	92	93	90	92	17.72	25.65	33.88	42.03	9.52	10.71	7.14	9.52
G150p10E*	97	102	101	102	102	60.04	69.86	101.98	116.72	5.15	4.12	5.15	5.15
G150p10D*	97	103	102	101	103	55.38	70.62	96.17	141.25	6.19	5.15	4.12	6.19
G150p15E*	90	98	97	98	97	56.22	74.84	95.05	124.77	8.89	7.78	8.89	7.78
G150p15D*	90	99	98	98	99	52.74	67.78	101.45	145.78	10.00	8.89	8.89	10.00
Avg.						36.53	46.73	63.52	82.59	7.39	7.25	6.80	6.98

Options: priority queue, perturbation restart, exact recentering

Pr. No.	Objective Value					Time				% Deviation			
	BK	1S	tS	1B	tB	1S	tS	1B	tB	1S	tS	1B	tB
G100p5E	94	96	98	97	97	30.53	35.41	36.38	37.99	2.13	4.26	3.19	3.19
G100p5D	94	98	96	96	98	29.23	35.50	36.23	38.98	4.26	2.13	2.13	4.26
G100p10E	83	87	90	91	90	37.96	58.89	63.75	79.39	4.82	8.43	9.64	8.43
G100p10D	84	91	90	91	90	37.89	58.00	59.21	78.82	8.33	7.14	8.33	7.14
G150p10E*	97	101	100	101	100	111.70	154.32	166.42	213.97	4.12	3.09	4.12	3.09
G150p10D*	97	101	99	101	101	113.76	154.99	175.01	227.96	4.12	2.06	4.12	4.12
G150p15E*	90	97	96	97	97	130.87	226.11	220.09	306.34	7.78	6.67	7.78	7.78
G150p15D*	90	96	97	97	96	122.07	195.59	230.13	300.59	6.67	7.78	7.78	6.67
Avg.						76.50	115.10	123.66	160.50	5.28	5.45	6.14	5.59