

		Exact MILP Return	Exact MILP Return gap	Exact MILP Return LB	PA obj Return	PA Return time
480	10	8300.4	0.725892728	2275.2	6622.8	100
	15	6290.4	0.740620628	1631.6	4924	100
	20	8210.8	0.721391338	2287.6	6507.2	100
600	10	8641.6	0.789576004	1818.4	6312	100
	15	11414.4	0.762335296	2712.8	8180.8	100
	20	8125.6	0.774145909	1835.2	5799.6	100
720	10	12641.6	0.752784458	3125.2	9961.2	100
	15	10043.2	0.791699857	2092	7252.8	100
	20	13366.4	0.766279627	3124	9845.2	100
840	10	11254.8	0.792479653	2335.6	8452.8	100
	15	14466.8	0.754527608	3551.2	11142.4	100
	20	11154.8	0.79187435	2321.6	8252.4	100
960	10	16815.6	0.764575751	3958.8	12868	100
	15	12269.2	0.789097904	2587.6	9544.8	100
	20	17256	0.770607325	3958.4	13052.4	100
1080	10	15756.4	0.820974334	2820.8	10822	100
	15	21954.4	0.800823525	4372.8	14504.4	100
	20	15460.4	0.817417402	2822.8	10366	100
1200	10	21626	0.777989457	4801.2	15852.8	100
	15	15734.8	0.805145283	3066	11470	100
	20	22496	0.786895448	4794	16520.8	100

PA+ils Return obj	PA+ils Return time	ils Return	ratio	ils Return time	Seed save Return obj	ratio
6468.4	4.29170084	6492.4	0.99630337	11.44057202	9160	0.706157205
4760.8	7.59781909	5009.2	0.950411243	12.40885711	6803.6	0.699747193
6390.4	3.90459156	6683.6	0.956131426	11.24526811	8903.6	0.717732153
5981.2	11.60349059	6308.8	0.948072534	12.25188661	8486.4	0.704798265
8088	2.96514535	8569.2	0.9438454	10.11067581	11318.8	0.714563381
5784	2.189289331	5959.6	0.970534935	20.17454267	8385.6	0.689753864
9745.6	4.030213833	10073.2	0.967478061	12.33291173	13528	0.720402129
7184.4	4.563607454	7704.8	0.932457689	18.03428602	10468	0.686320214
9724.8	4.065022945	9985.2	0.973921404	15.02816701	13512.8	0.719673199
8301.6	5.333477497	8650.4	0.959678165	21.51719546	11575.6	0.717163689
11049.6	2.86468339	11936.8	0.925675223	10.76889277	15118	0.730890329
8136.4	4.696430683	9006.8	0.903361904	12.93845773	11774.8	0.691001121
12814.4	2.084380865	13659.6	0.938124103	14.62254167	17987.2	0.712417719
9378	6.310232401	9847.2	0.952351938	22.01864576	13042.8	0.719017389
12933.2	3.576427221	13984.8	0.924804073	13.87204623	18002.8	0.71839936
10522.8	9.037302732	11246	0.935692691	23.70290065	14357.2	0.732928426
14362.4	3.721452951	15174.4	0.946488823	18.27627897	20025.2	0.717216307
10322	2.64302063	11282.8	0.914843833	22.62053633	14692.4	0.702540089
15812.8	2.263510942	17146.8	0.922201227	17.5197773	22035.2	0.717615452
11413.2	2.702772141	12597.6	0.905982092	17.43928409	15867.6	0.719277017
16341.6	4.509973764	17366.4	0.940989497	16.37074327	22304	0.732675753

Seed save Return time	CWI Return obj	ratio	CWI Return time	CWII Return obj	ratio
13.16047263	7711.6	0.838788319	14.48861146	6870.8	0.941433312
15.68052435	6056.4	0.786077538	14.54501605	5222	0.911681348
13.02946591	7717.6	0.828029439	14.27868724	6920.4	0.923414832
24.5568018	7346.4	0.814167483	25.35640264	6339.2	0.943525997
20.60374141	9675.2	0.835951712	24.5681777	8482	0.953548691
25.16481209	7349.6	0.786981604	25.00221658	6336.4	0.91282116
29.60381866	11619.2	0.838749656	51.36901879	10131.6	0.961901378
36.10631275	9257.2	0.776087802	39.43703318	7842.4	0.916097113
29.52968168	11589.6	0.839097122	44.31040072	10146.8	0.958410533
48.38123941	10343.2	0.802614278	62.27323508	8704.8	0.953680728
40.9523108	13002	0.849838486	73.18706203	11560	0.955847751
48.54453635	10288.4	0.790832394	58.85011053	8652.8	0.940319896
53.63839555	15270.8	0.839143987	115.2703514	13081.6	0.979574364
63.60326076	11862.8	0.79053849	94.12544179	9819.6	0.955028718
53.52588677	15286.4	0.846059242	94.46298456	13274.4	0.97429639
80.96636391	13118	0.802164964	118.8964717	10938.8	0.961970234
67.72906709	17172.8	0.836345849	156.5998299	14761.6	0.972956861
80.96681643	13360.8	0.772558529	114.563185	11093.6	0.930446384
84.03000283	19248.8	0.821495366	265.0736015	15969.6	0.990181345
100.8771067	14324.4	0.796766357	150.3570666	12044.4	0.947593903
83.84694099	19158.4	0.852973108	215.4527533	16484.8	0.99131321

CWII Return time

35.2304399
41.9295826
35.34842825
78.99494481
66.57342076
79.46908021
115.0826292
130.2397907
112.1792099
202.4534779
177.4509838
202.2048359
263.7145092
294.7710836
269.0393071
419.8777671
368.276314
413.4642999
501.9318666
559.5749481
496.5849547