

GLKH results for MOM instances

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The paper “M. Mestria, L. S. Ochi, and S. de Lima Martins: [GRASP with path relinking for the symmetric Euclidean clustered traveling salesman problem](#). Computers & Operations Research, Vol. 40, Issue 12, pp. 3218–3229 (2013)” provides a suite of 249 test instances for the Euclidean CTSP. These instances have been converted to [GTSPLIB format](#). The current best g-tour costs found by GLKH are reported below.

Type 1 - Small

Name	Cost
5eil51	75
10eil51	145
15eil51	201
5berlin52	2065
10berlin52	3223
15berlin52	4691
5st70	103
10st70	211
15st70	248
5eil76	74
10eil76	127
15eil76	186
5pr76	19246
10pr76	35795
15pr76	52156
10rat99	324
25rat99	509
50rat99	814
25kroA100	10429
50kroA100	15944
10kroB100	5920
50kroB100	15842
25eil101	237
50eil101	396
25lin105	8223
50lin105	11294
75lin105	13134

Type 1 - Large

Name	Cost
10gil262	373
25gil262	674
50gil262	956
10a280	429
25a280	648
50a280	1019
10lin318	6889
25lin318	11722
50lin318	18163
10pr439	18284
25pr439	33750
50pr439	45253
10pcb442	5889
50pcb442	14430
25pcb442	10120
50rat783	1626
100rat783	2496
150rat783	3131
50pr1002	54583
100pr1002	74269
150pr1002	92969
50vm1084	54156
100vm1084	78440
150vm1084	95922
50pcb1173	9385
100pcb1173	13901
150pcb1173	17082
50nrw1379	7449
100nrw1379	10566
150nrw1379	13370

Type 2 - Large

<u>Name</u>	<u>Cost</u>
10C1k.0	2522585
10C1k.1	2459554
10C1k.2	2588528
10C1k.3	2738977
10C1k.4	2470676
10C1k.5	2165333
10C1k.6	1875128
10C1k.7	2091613
10C1k.8	2583455
10C1k.9	2242795

Type 3 - Large

<u>Name</u>	<u>Cost</u>
6i300	270
6i350	247
6i400	262
6i450	257
6i500	245
20i550	522
20i600	516
20i650	503
20i700	500
25i750	532
25i850	520
25i900	517
30i950	557
30i1000	552

Type 4 - Large

<u>Name</u>	<u>Cost</u>
4i200a	144
4i200h	444
4i200x1	336
4i200x2	336
4i200z	336
4i400a	53
4i400h	161
4i400x1	160
4i400x2	160
4i400z	160
8i600a	230
8i600h	1247
8i600x1	1217
8i600x2	1217
8i600z	1217
8i1000a	161
8i1000h	1180
8i1000x1	1180
8i1000x2	1180
8i1000z	1224
10i1400a	189
10i1400h	1408
10i1400x1	1408
10i1400x2	1385
10i1400z	1385
10i2000a	149
10i2000h	1282
10i2000x1	1296
10i2000x2	1301
10i2000z	1301
20i2400a	331
20i2400h	1686
20i2400x1	1705
20i2400x2	1705
20i2400z	1722
20i3000a	270
20i3000h	1710
20i3000x1	1671
20i3000x2	1671
20i3000z	1661

Type 5 - Small

<u>Name</u>	<u>Cost</u>
5i30-17	1180
7i30-17	1743
10i30-17	1528
5i45-18	939
7i45-18	1289
10i45-18	1631
5i60-21	1322
7i60-21	1652
10i60-21	1798
5i65-21	1363
7i65-21	1674
10i65-21	1756
5i70-21	1404
7i70-21	1716
10i70-21	1784
5i75-22	2063
10i75-22	2783
5i90-33	1212
5i120-46	1042
10i90-33	1570
10i120-46	2412

Type 5 - Large

Name	Cost
5i300-108	1846
10i300-109	1357
15i300-110	1970
20i300-111	3279
25i300-112	2660
5i400-205	1017
10i400-206	1979
15i400-207	2262
20i400-208	2929
25i400-209	2857
5i500-304	963
10i500-305	2198
15i500-306	2489
20i500-307	2650
25i500-308	2999
10i1000-407	2260
20i1000-408	2898
50i1000-409	4215
100i1000-410	5481
150i1000-411	6296
10i1500-503	1535
20i1500-504	2741
50i1500-505	4160
100i1500-506	5088
150i1500-507	6085
20i2000-602	3101
50i2000-603	4325
100i2000-604	5316
150i2000-605	5940
200i2000-606	7272
20i2500-706	3462
50i2500-707	3961
100i2500-708	5297
150i2500-709	6158
200i2500-710	7191
20i3000-801	3626
50i3000-802	4070
100i3000-803	5458
150i3000-804	6551
200i3000-805	6902

Type 6 - Small

Name	Cost
4eil51-2x2	37
9eil51-3x3	142
12eil51-3x4	163
16eil51-4x4	176
20eil51-4x5	219
25eil51-5x5	252
4berlin52-2x2	534
6berlin52-2x3	2360
8berlin52-2x4	2666
10berlin52-2x5	3185
6st70-2x3	133
9st70-3x3	188
12st70-3x4	209
16st70-4x4	256
20st70-4x5	296
4eil76-2x2	27
9eil76-3x3	120
12eil76-3x4	152
16eil76-4x4	201
20eil76-4x5	219
25eil76-5x5	255
4pr76-2x2	4552
6pr76-2x3	15729
9pr76-3x3	30846
12pr76-3x4	36631
15pr76-3x5	40201
18pr76-3x6	44135
25rat99-5x5	482
42rat99-6x7	679
28kroA100-4x7	10606
30kroB100-5x6	11459
35kroB100-5x5	9808
9eil101-3x3	137
25eil101-5x5	252
36eil101-6x6	302
2lin105-2x1	126
16lin105-4x4	5959

Type 6 - Large

Name	Cost
9gil262-3x3	338
25gil262-5x5	611
49gil262-7x7	920
9a280-3x3	416
25a280-5x5	643
42a280-6x7	885
9lin318-3x3	5794
25lin318-5x5	10283
49lin318-7x7	16722
9pr439-3x3	19239
18pr439-3x6	29343
20pr439-4x5	26399
9pcb442-3x3	5875
25pcb442-5x5	10063
36pcb442-6x6	11472
49rat783-7x7	1531
100rat783-10x10	2216
144rat783-12x12	2813
36pr1002-6x6	41970
42pr1002-6x7	44112
49pr1002-7x7	52825
49vm1084-7x7	52350
72vm1084-8x9	64647
81vm1084-9x9	60959
49pcb1173-7x7	9064
100prb1173-10x10	12644
144pcb1173-12x12	16412
10nrw1379-2x5	3310
12nrw1379-2x6	3878
12nrw1379-3x4	4198