

## Results for MINSUM\_10 (mTSP)

Keld Helsgaun, November 19, 2017

Instance	LKH-3
a280	3095
ali535	207310
att48	14950
att532	31001
bayg29	2518
bays29	3230
berlin52	9345
bier127	128172
brazil58	33640
brd14051	470355
brg180	2190
burma14	7417
ch130	7412
ch150	7327
d198	39517
d493	72939
d657	75196
d1291	74744
d1655	88879
d2103	101420
d15112	1575770
d18512	646225
dantzig42	1162
dsj1000	18918427
eil51	577
eil76	660
eil101	762
fl417	12675
fl1400	24211
fl1577	22656
fl3795	32791
fnl4461	183556
fri26	2579
gil262	2878
gr17	4336
gr21	5140
gr24	3162
gr48	7129
gr96	75346
gr120	8758
gr137	111838

gr202	70016
gr229	155251
gr431	201388
gr666	329791
hk48	17544
kroA100	27136
kroB100	26698
kroC100	27989
kroD100	26925
kroE100	25786
kroA150	31369
kroB150	31927
kroA200	32612
kroB200	33058
lin105	19662
lin318	47312
linhp318	46991
nrw1379	57602
p654	45368
pa561	2951
pcb442	53351
pcb1173	59204
pcb3038	139046
pla7397	23475146
pla33810	66519390
pla85900	144141801
pr76	156861
pr107	53158
pr124	76868
pr136	112076
pr144	69200
pr152	92595
pr226	103193
pr264	56270
pr299	57627
pr439	113420
pr1002	292090
pr2392	387468
rat99	1689
rat195	2769
rat575	7118
rat783	9232
rd100	9368
rd400	16215
rl1304	258987
rl1323	277933

rl1889	321732
rl5915	569658
rl5934	558498
rl11849	925278
si175	23303
si535	50861
si1032	93999
st70	887
swiss42	1729
ts225	148942
tsp225	4832
u159	56555
u574	38191
u724	45650
u1060	229708
u1432	154889
u1817	58583
u2152	65015
u2319	236009
ulysses16	12308
ulysses22	11206
usa13509	20215592
vm1084	247541
vm1748	348755