

Results for symmetric TSPLIB instances (MLP)

Keld Helsgaun, February 18, 2023

Instance	BKS	LKH-3	Gap (%)
bays29	26862	26862	0.00
dantzig42	12528	12528	0.00
swiss42	22327	22327	0.00
att48	209320	209320	0.00
gr48	102378	102378	0.00
hk48	247926	247926	0.00
^a Beil51	10178	10178	0.00
berlin52	143721	143721	0.00
brazil58	512361	512361	0.00
st70	20557	20557	0.00
eil76	17976	17976	0.00
pr76	3455242	3455242	0.00
gr96	2097170	2097170	0.00
rat99	57986	57986	0.00
kroA100	983128	983128	0.00
kroB100	986008	986008	0.00
kroC100	961324	961324	0.00
kroD100	976965	976965	0.00
kroE100	971266	971266	0.00
rd100	340047	340047	0.00
eil101	27513	27513	0.00
lin105	603910	603910	0.00
pr107	2026626	2026626	0.00
gr120	363454	363454	0.00
pr124	3154346	3154346	0.00
bier127	4545005	4545005	0.00
ch130	349874	349874	0.00
pr136	6199268	6199268	0.00
gr137	4061498	4061498	0.00
pr144	3846137	3846137	0.00
ch150	444424	444424	0.00
kroA150	1825769	1825769	0.00
kroB150	1793204	1786546	-0.37
pr152	5064566	5064566	0.00
u159	2972030	2972030	0.00
sil75	1808532	1808532	0.00
brg180	174750	174750	0.00
rat195	218632	218632	0.00
d198	1186049	1186049	0.00
kroA200	2672437	2672437	0.00
kroB200	2669515	2669515	0.00

gr202	2909247	2909247	0.00
ts225	13240046	13240046	0.00
tsp225	402783	402783	0.00
pr226	7196869	7196869	0.00
gr229	10725914	10725914	0.00
gil262	285043	284824	-0.08
pr264	5471615	5471615	0.00
a280	346989	346989	0.00
pr299	6556628	6556628	0.00
lin318	5619810	5619810	0.00
rd400	2766708	2765848	-0.03
fl417	1874242	1874242	0.00
gr431	21159702	21158164	-0.01
pr439	17829541	17815374	-0.08
pcb442	10301705	10286605	-0.15
d493	6677458	6675045	-0.04
att532	5613010	5604635	-0.15
ali535	31860679	31860679	0.00
si535	12247211	12246833	0.00
pa561	658870	657458	-0.21
u574	9308820	9282611	-0.28
rat575	1847411	1845284	-0.12
p654	7827273	7827273	0.00
d657	14112540	14110334	-0.02
gr666	63519805	63462884	-0.09
u724	13504608	13463829	-0.30
rat783	3275858	3273171	-0.08
dsj1000	7642715113	7630359768	-0.16
dsj1000ceil	7646395679	7637690716	-0.11
pr1002	115420846	115100023	-0.28
si1032	46896355	46896355	0.00
u1060	102508056	102405262	-0.10
vm1084	94670122	94679835	0.01
pcb1173	30890385	30652107	-0.77
d1291	29383346	29373419	-0.03
rl1304	144592447	144513838	-0.05
rl1323	155697857	155525400	-0.11
nrw1379	35327900	35190527	-0.39