

## Results for Rakke instances (TRP)

Keld Helsgaun, March 13, 2018

Instance	BKS	LKH-3	Gap (%)
ulysses16_10_1	6859	6859	0.00
ulysses16_10_2	6859	6859	0.00
ulysses16_10_3	6859	6859	0.00
ulysses16_10_4	6859	6859	0.00
ulysses16_10_5	6859	6859	0.00
ulysses16_10_6	6951	6951	0.00
ulysses16_10_7	6859	6859	0.00
ulysses16_10_8	6859	6859	0.00
ulysses16_10_9	6859	6859	0.00
ulysses16_10_10	6859	6859	0.00
ulysses16_25_1	6890	6890	0.00
ulysses16_25_2	6859	6859	0.00
ulysses16_25_3	6859	6859	0.00
ulysses16_25_4	7401	7401	0.00
ulysses16_25_5	7671	7671	0.00
ulysses16_25_6	7029	7029	0.00
ulysses16_25_7	7446	7446	0.00
ulysses16_25_8	6859	6859	0.00
ulysses16_25_9	6859	6859	0.00
ulysses16_25_10	7781	7781	0.00
ulysses16_50_1	7264	7264	0.00
ulysses16_50_2	7715	7715	0.00
ulysses16_50_3	9612	9612	0.00
ulysses16_50_4	7313	7313	0.00
ulysses16_50_5	6909	6909	0.00
ulysses16_50_6	7301	7301	0.00
ulysses16_50_7	8118	8118	0.00
ulysses16_50_8	7065	7065	0.00
ulysses16_50_9	6900	6900	0.00
ulysses16_50_10	7706	7706	0.00

Instance	BKS	LKH-3	Gap (%)
ulysses22_10_1	7013	7013	0.00
ulysses22_10_2	7013	7013	0.00
ulysses22_10_3	7013	7013	0.00
ulysses22_10_4	7013	7013	0.00
ulysses22_10_5	7013	7013	0.00
ulysses22_10_6	7250	7250	0.00
ulysses22_10_7	7246	7246	0.00
ulysses22_10_8	7181	7181	0.00
ulysses22_10_9	7047	7047	0.00
ulysses22_10_10	7087	7087	0.00
ulysses22_25_1	7083	7083	0.00
ulysses22_25_2	7415	7415	0.00
ulysses22_25_3	8177	8177	0.00
ulysses22_25_4	7385	7385	0.00
ulysses22_25_5	7449	7449	0.00
ulysses22_25_6	7589	7589	0.00
ulysses22_25_7	7729	7729	0.00
ulysses22_25_8	7123	7123	0.00
ulysses22_25_9	7176	7176	0.00
ulysses22_25_10	7961	7961	0.00
ulysses22_50_1	8290	8290	0.00
ulysses22_50_2	7538	7538	0.00
ulysses22_50_3	8833	8833	0.00
ulysses22_50_4	9324	9324	0.00
ulysses22_50_5	8284	8284	0.00
ulysses22_50_6	7570	7570	0.00
ulysses22_50_7	7897	7897	0.00
ulysses22_50_8	9558	9558	0.00
ulysses22_50_9	9021	9021	0.00
ulysses22_50_10	7941	7941	0.00

Instance	BKS	LKH-3	Gap (%)
burma14_10_1	3416	3416	0.00
burma14_10_2	3323	3323	0.00
burma14_10_3	3323	3323	0.00
burma14_10_4	3751	3751	0.00
burma14_10_5	3323	3323	0.00
burma14_10_6	3323	3323	0.00
burma14_10_7	3323	3323	0.00
burma14_10_8	3346	3346	0.00
burma14_10_9	3416	3416	0.00
burma14_10_10	3323	3323	0.00
burma14_25_1	4036	4036	0.00
burma14_25_2	3465	3465	0.00
burma14_25_3	3336	3336	0.00
burma14_25_4	3696	3696	0.00
burma14_25_5	3346	3346	0.00
burma14_25_6	3610	3610	0.00
burma14_25_7	3346	3346	0.00
burma14_25_8	3371	3371	0.00
burma14_25_9	3834	3834	0.00
burma14_25_10	3928	3928	0.00
burma14_50_1	4412	4412	0.00
burma14_50_2	3748	3748	0.00
burma14_50_3	3870	3870	0.00
burma14_50_4	3323	3323	0.00
burma14_50_5	3524	3524	0.00
burma14_50_6	3846	3846	0.00
burma14_50_7	3408	3408	0.00
burma14_50_8	3506	3506	0.00
burma14_50_9	4519	4519	0.00
burma14_50_10	4467	4467	0.00

Instance	BKS	LKH-3	Gap (%)
fri26_10_1	937	937	0.00
fri26_10_2	937	937	0.00
fri26_10_3	1009	1009	0.00
fri26_10_4	955	955	0.00
fri26_10_5	997	997	0.00
fri26_10_6	937	937	0.00
fri26_10_7	1039	1039	0.00
fri26_10_8	953	953	0.00
fri26_10_9	937	937	0.00
fri26_10_10	937	937	0.00
fri26_25_1	1055	1055	0.00
fri26_25_2	1201	1201	0.00
fri26_25_3	1139	1139	0.00
fri26_25_4	1233	1233	0.00
fri26_25_5	1017	1017	0.00
fri26_25_6	1172	1172	0.00
fri26_25_7	1101	1101	0.00
fri26_25_8	955	955	0.00
fri26_25_9	1081	1081	0.00
fri26_25_10	1093	1093	0.00
fri26_50_1	1273	1273	0.00
fri26_50_2	1045	1045	0.00
fri26_50_3	1035	1035	0.00
fri26_50_4	1185	1185	0.00
fri26_50_5	1185	1185	0.00
fri26_50_6	1158	1158	0.00
fri26_50_7	1150	1150	0.00
fri26_50_8	1441	1441	0.00
fri26_50_9	1267	1267	0.00
fri26_50_10	1048	1048	0.00

Instance	BKS	LKH-3	Gap (%)
bayg29_10_1	1610	1610	0.00
bayg29_10_2	1654	1654	0.00
bayg29_10_3	1753	1753	0.00
bayg29_10_4	1622	1622	0.00
bayg29_10_5	1645	1645	0.00
bayg29_10_6	1622	1622	0.00
bayg29_10_7	1833	1833	0.00
bayg29_10_8	2114	2114	0.00
bayg29_10_9	1628	1628	0.00
bayg29_10_10	1655	1655	0.00
bayg29_25_1	2027	2027	0.00
bayg29_25_2	1655	1655	0.00
bayg29_25_3	1827	1827	0.00
bayg29_25_4	1799	1799	0.00
bayg29_25_5	1709	1709	0.00
bayg29_25_6	1841	1841	0.00
bayg29_25_7	1805	1805	0.00
bayg29_25_8	1718	1718	0.00
bayg29_25_9	1683	1683	0.00
bayg29_25_10	1862	1862	0.00
bayg29_50_1	1928	1928	0.00
bayg29_50_2	2255	2255	0.00
bayg29_50_3	2093	2093	0.00
bayg29_50_4	2019	2019	0.00
bayg29_50_5	1785	1785	0.00
bayg29_50_6	2340	2340	0.00
bayg29_50_7	2400	2400	0.00
bayg29_50_8	2204	2204	0.00
bayg29_50_9	1987	1987	0.00
bayg29_50_10	1899	1899	0.00

Instance	BKS	LKH-3	Gap (%)
gr17_10_1	2153	2153	0.00
gr17_10_2	2165	2165	0.00
gr17_10_3	2085	2085	0.00
gr17_10_4	2590	2590	0.00
gr17_10_5	2085	2085	0.00
gr17_10_6	2085	2085	0.00
gr17_10_7	2085	2085	0.00
gr17_10_8	2085	2085	0.00
gr17_10_9	2085	2085	0.00
gr17_10_10	2085	2085	0.00
gr17_25_1	2265	2265	0.00
gr17_25_2	2505	2505	0.00
gr17_25_3	2270	2270	0.00
gr17_25_4	2103	2103	0.00
gr17_25_5	2088	2088	0.00
gr17_25_6	2160	2160	0.00
gr17_25_7	2085	2085	0.00
gr17_25_8	2088	2088	0.00
gr17_25_9	2138	2138	0.00
gr17_25_10	2675	2675	0.00
gr17_50_1	2743	2743	0.00
gr17_50_2	2216	2216	0.00
gr17_50_3	3000	3000	0.00
gr17_50_4	2946	2946	0.00
gr17_50_5	2205	2205	0.00
gr17_50_6	2579	2579	0.00
gr17_50_7	2812	2812	0.00
gr17_50_8	3014	3014	0.00
gr17_50_9	3454	3454	0.00
gr17_50_10	2134	2134	0.00

Instance	BKS	LKH-3	Gap (%)
gr21_10_1	2707	2707	0.00
gr21_10_2	3002	3002	0.00
gr21_10_3	2851	2851	0.00
gr21_10_4	2760	2760	0.00
gr21_10_5	2707	2707	0.00
gr21_10_6	2760	2760	0.00
gr21_10_7	3093	3093	0.00
gr21_10_8	2962	2962	0.00
gr21_10_9	2787	2787	0.00
gr21_10_10	2707	2707	0.00
gr21_25_1	2788	2788	0.00
gr21_25_2	2946	2946	0.00
gr21_25_3	3109	3109	0.00
gr21_25_4	2707	2707	0.00
gr21_25_5	3159	3159	0.00
gr21_25_6	3159	3159	0.00
gr21_25_7	2921	2921	0.00
gr21_25_8	3421	3421	0.00
gr21_25_9	2709	2709	0.00
gr21_25_10	2707	2707	0.00
gr21_50_1	3115	3115	0.00
gr21_50_2	4041	4041	0.00
gr21_50_3	3892	3892	0.00
gr21_50_4	3570	3570	0.00
gr21_50_5	4132	4132	0.00
gr21_50_6	3417	3417	0.00
gr21_50_7	4249	4249	0.00
gr21_50_8	3296	3296	0.00
gr21_50_9	4186	4186	0.00
gr21_50_10	3483	3483	0.00

Instance	BKS	LKH-3	Gap (%)
gr48_10_1	5046	5046	0.00
gr48_10_2	5542	5542	0.00
gr48_10_3	5300	5300	0.00
gr48_10_4	5293	5293	0.00
gr48_10_5	5679	5679	0.00
gr48_10_6	5610	5610	0.00
gr48_10_7	5063	5063	0.00
gr48_10_8	5103	5103	0.00
gr48_10_9	5153	5153	0.00
gr48_10_10	5055	5055	0.00
gr48_25_1	5524	5524	0.00
gr48_25_2	5895	5895	0.00
gr48_25_3	5754	5754	0.00
gr48_25_4	5588	5588	0.00
gr48_25_5	6159	6159	0.00
gr48_25_6	5760	5760	0.00
gr48_25_7	5955	5955	0.00
gr48_25_8	5562	5562	0.00
gr48_25_9	5792	5792	0.00
gr48_25_10	6014	6014	0.00
gr48_50_1	6096	6096	0.00
gr48_50_2	6629	6629	0.00
gr48_50_3	5896	5896	0.00
gr48_50_4	6404	6404	0.00
gr48_50_5	6617	6617	0.00
gr48_50_6	8533	8533	0.00
gr48_50_7	6166	6166	0.00
gr48_50_8	6535	6535	0.00
gr48_50_9	7150	7150	0.00
gr48_50_10	6331	6331	0.00