

Instance	Method	BKS	#runs	run1	run2	run3	run4	run5	s*	s	t*	t
/TSP/berlin52.tsp	CGRASP	7542	5	7542	7542	7542	7542	7542	7542	7542	0.116	0.116
/TSP/st70.tsp	CGRASP	675	5	675	675	675	675	675	675	675	1.248	1.248
/TSP/eil76.tsp	CGRASP	538	5	540	541	538	542	546	538	541.4	25.311	61.178
/TSP/pr76.tsp	CGRASP	108159	5	108159	108159	108159	108159	108159	108159	108159	0.425	0.425
/TSP/kroA100.tsp	CGRASP	21282	5	21282	21282	21282	21282	21282	21282	21282	3.157	3.157
/TSP/pr124.tsp	CGRASP	59030	5	59030	59030	59030	59030	59030	59030	59030	1.468	1.468
/TSP/pr136.tsp	CGRASP	96772	5	96772	96772	96772	96781	96772	96772	96773.8	53.51	61.836
/TSP/pr152.tsp	CGRASP	73682	5	73682	73682	73682	73682	73682	73682	73682	38.78	38.78
/TSP/u159.tsp	CGRASP	42080	5	42080	42080	42080	42080	42080	42080	42080	44.848	44.848
/TSP/d198.tsp	CGRASP	15780	5	15785	15793	15793	15781	15811	15781	15792.6	100.606	202.803
/TSP/ts225.tsp	CGRASP	126643	5	126643	126643	126962	126643	126643	126643	126706.8	16.748	62.253
/TSP/pr226.tsp	CGRASP	80369	5	80369	80369	80369	80369	80373	80369	80369.8	15.132	57.163
/TSP/gil262.tsp	CGRASP	2378	5	2391	2393	2409	2395	2396	2391	2396.8	109.715	279.072
/TSP/pr264.tsp	CGRASP	49135	5	49378	49135	49203	49274	49135	49135	49225	110.536	175.01
/TSP/lin318.tsp	CGRASP	42029	5	42959	42458	42402	42223	42848	42223	42578	267.799	330.908
/TSP/rd400.tsp	CGRASP	15281	5	15331	15453	15613	15594	15450	15331	15488.2	316.47	461.862
/TSP/fl417.tsp	CGRASP	11861	5	11920	11869	11924	11869	11876	11869	11891.6	266.529	477.667
/TSP/pr439.tsp	CGRASP	107217	5	109562	107961	108713	108242	107848	107848	108465.2	396.868	533.197
/TSP/d493.tsp	CGRASP	35002	5	35700	35624	35464	35783	35572	35464	35628.6	489.366	593.078
/TSP/rat575.tsp	CGRASP	6773	5	6966	7033	6970	6924	6938	6924	6966.2	373.013	625.611
Instance	Method	BKS	#runs	run1	run2	run3	run4	run5	s*	s	t*	t
/THLP/CAB20_3_02.txt	CGRASP	4170.1	5	4518.3	4398.6	4259.1	4364.5	4309.6	4259.1	4370.0	5.699	20.021
/THLP/CAB20_3_05.txt	CGRASP	5234.9	5	5234.9	5468.8	5468.8	5340.4	5313.1	5234.9	5365.2	7.603	18.332
/THLP/CAB20_3_08.txt	CGRASP	6279.4	5	6329.5	6386.0	6279.4	6366.7	6402.0	6279.4	6352.7	9.492	18.186
/THLP/CAB20_5_02.txt	CGRASP	2808.7	5	3152.2	3177.1	3087.3	3538.3	3435.4	3087.3	3278.1	7.09	20.051
/THLP/CAB20_5_05.txt	CGRASP	4384.3	5	4857.0	5015.0	4558.0	4806.4	4660.6	4558.0	4779.4	10.458	20.044
/THLP/CAB20_5_08.txt	CGRASP	5663.5	5	5901.6	6014.0	5982.3	6259.4	6061.9	5901.6	6043.9	4.799	20.041
/THLP/CAB20_8_02.txt	CGRASP	2057	5	2390.0	2855.5	2706.5	2671.5	2529.2	2390.0	2630.5	8.597	20.057
/THLP/CAB20_8_05.txt	CGRASP	3700.2	5	4436.6	4386.1	4126.2	4273.0	3832.2	3832.2	4210.8	7.892	20.172
/THLP/CAB20_8_08.txt	CGRASP	5283.1	5	5698.8	5394.1	5876.2	5491.7	6042.5	5394.1	5700.7	10.45	20.059
/THLP/CAB25_3_02.txt	CGRASP	6554.6	5	6694.0	6621.7	6614.2	6554.6	7385.6	6554.6	6774.0	2.058	20.157
/THLP/CAB25_3_05.txt	CGRASP	8274	5	8576.8	8896.9	8699.7	8523.1	8344.9	8344.9	8608.3	7.322	25.044
/THLP/CAB25_3_08.txt	CGRASP	9923.9	5	10570.7	10584.7	10858.3	10174.2	10024.7	10024.7	10442.5	4.177	25.053
/THLP/CAB25_5_02.txt	CGRASP	4791.1	5	5901.1	5335.3	6154.4	6075.6	5033.2	5033.2	5699.9	7.836	25.045

/THLP/CAB25_5_05.txt	CGRASP	7190.7	5	8356.9	7633.2	7866.3	7820.3	8062.2	7633.2	7947.8	10.588	25.074
/THLP/CAB25_5_08.txt	CGRASP	9173.4	5	9300.5	9813.0	9722.7	9920.3	9744.9	9300.5	9700.3	6.6	25.024
/THLP/CAB25_8_02.txt	CGRASP	3752.9	5	4683.4	5442.9	5102.2	4554.0	4465.0	4465.0	4849.5	11.561	25.142
/THLP/CAB25_8_05.txt	CGRASP	6272.9	5	7273.5	7155.0	7125.5	7000.0	7321.8	7000.0	7175.2	8.397	25.157
/THLP/CAB25_8_08.txt	CGRASP	8755	5	8933.3	9834.1	9386.3	9867.0	10057.7	8933.3	9615.7	13.228	25.176
/THLP/AP20_3_02.txt	CGRASP	58761.2	5	60366.5	61571.3	59871.9	58761.2	58761.2	58761.2	59866.4	4.5	12.531
/THLP/AP20_3_05.txt	CGRASP	69515.9	5	72418.9	70434.6	69562.9	69562.9	69516.0	69516.0	70299.0	3.713	16.218
/THLP/AP20_3_08.txt	CGRASP	78177.6	5	80208.1	79539.0	78177.6	80208.1	78177.6	78177.6	79262.1	3.613	13.785
/THLP/AP20_5_02.txt	CGRASP	46480.4	5	51369.8	49838.2	49150.6	51438.4	47777.8	47777.8	49914.9	5.996	20.049
/THLP/AP20_5_05.txt	CGRASP	61061.4	5	66148.7	63116.1	66826.2	64244.7	65081.0	63116.1	65083.3	3.121	20.028
/THLP/AP20_5_08.txt	CGRASP	73592.9	5	79048.9	77221.6	74308.5	76833.8	75141.3	74308.5	76510.8	8.898	20.045
/THLP/AP20_8_02.txt	CGRASP	35421	5	41387.6	41048.2	40476.4	40375.1	40311.0	40311.0	40719.7	6.165	20.13
/THLP/AP20_8_05.txt	CGRASP	52294.3	5	60951.2	62759.7	55256.8	59249.0	55691.5	55256.8	58781.6	6.336	20.061
/THLP/AP20_8_08.txt	CGRASP	68272.7	5	72363.5	74971.8	73781.1	72636.6	71668.5	71668.5	73084.3	8.63	20.1
/THLP/AP25_3_02.txt	CGRASP	60602.3	5	62693.6	65102.0	63785.0	62685.6	63491.2	62685.6	63551.5	7.456	25.037
/THLP/AP25_3_05.txt	CGRASP	70130.9	5	70130.9	72950.6	71807.0	72862.5	73255.3	70130.9	72201.3	1.519	20.774
/THLP/AP25_3_08.txt	CGRASP	79442.4	5	80175.0	82623.9	80175.0	79962.1	80175.0	79962.1	80622.2	10.827	25.04
/THLP/AP25_5_02.txt	CGRASP	47432.7	5	55182.5	48841.8	55270.8	53893.3	52895.4	48841.8	53216.8	4.026	25.068
/THLP/AP25_5_05.txt	CGRASP	61046.7	5	71175.3	68822.8	70416.5	66583.5	66598.0	66583.5	68719.2	10.464	25.055
/THLP/AP25_5_08.txt	CGRASP	73569.9	5	78668.1	78478.1	78045.8	79345.5	79358.3	78045.8	78779.1	8.035	25.109
/THLP/AP25_8_02.txt	CGRASP	37295.6	5	44215.4	46249.8	43092.9	45609.7	45550.6	43092.9	44943.7	12.631	25.12
/THLP/AP25_8_05.txt	CGRASP	54043.7	5	65698.8	56354.0	63555.6	62747.6	63754.0	56354.0	62422.0	6.645	25.129
/THLP/AP25_8_08.txt	CGRASP	69890.6	5	75132.0	80254.1	77124.8	79539.4	76596.4	75132.0	77729.3	10.213	25.056
Instance	Method	BKS	#runs	run1	run2	run3	run4	run5	s*	s	t*	t
/STCP/data.81	CGRASP	61	5	61	61	61	61	61	61	61	0.105	0.105
/STCP/data.135	CGRASP	103	5	104	104	104	104	104	104	104	22.033	136.331
/STCP/data.243	CGRASP	198	5	198	198	198	198	198	198	198	87.715	87.716
/STCP/data.405	CGRASP	335	5	345	344	345	345	345	344	344.8	222.095	419.675
/STCP/data.729	CGRASP	617	5	650	649	648	650	650	648	649.4	332.842	845.806
Instance	Method	BKS	#runs	run1	run2	run3	run4	run5	s*	s	t*	t
/HMP/20_5_270001	CGRASP	540	5	540	540	540	540	540	540	540	0.067	0.067
/HMP/20_5_270002	CGRASP	54	5	54	54	54	54	54	54	54	0.003	0.003
/HMP/20_5_270003	CGRASP	816	5	816	816	816	816	816	816	816	0.002	0.002
/HMP/20_5_270004	CGRASP	126	5	126	126	126	126	126	126	126	0.005	0.005
/HMP/20_5_270005	CGRASP	372	5	372	372	372	372	372	372	372	0.003	0.003

/HMP/40_15_270001	CGRASP	8646	5	8646	8802	8646	8646	8646	8646	8677.2	2.344	10.35
/HMP/40_15_270002	CGRASP	4586	5	4638	4638	4638	4638	4638	4638	4638	5.346	40.076
/HMP/40_15_270003	CGRASP	5396	5	5396	5396	5412	5396	5396	5396	5399.2	9.062	16.769
/HMP/40_15_270004	CGRASP	4800	5	4800	4800	4800	4800	4800	4800	4800	1.111	1.111
/HMP/40_15_270005	CGRASP	6272	5	6272	6272	6272	6272	6272	6272	6272	1.274	1.274
/HMP/100_25_270001	CGRASP	36412	5	37260	37184	36528	36528	36608	36528	36821.6	34.012	100.408
/HMP/100_25_270002	CGRASP	38608	5	38848	39010	38896	38608	38768	38608	38826	49.186	98.327
/HMP/100_25_270003	CGRASP	32686	5	33142	32686	32970	32870	32956	32686	32924.8	47.196	86.4
/HMP/100_25_270004	CGRASP	35322	5	35920	35322	35542	35322	35772	35322	35575.6	58.211	85.634
/HMP/100_25_270005	CGRASP	36878	5	36826	37280	37372	37602	37012	36826	37218.4	36.85	92.386
/HMP/200_50_270001	CGRASP	221550	5	221410	220756	222988	220922	221326	220756	221480.4	102.826	106.358
/HMP/200_50_270002	CGRASP	218254	5	218836	217344	218120	217698	218232	217344	218046	107.185	119.664
/HMP/200_50_270003	CGRASP	221110	5	220892	221954	220888	220950	220868	220868	221110.4	99.116	105.122
/HMP/200_50_270004	CGRASP	212044	5	212802	211494	210278	215628	211462	210278	212332.8	110.734	123.307
/HMP/200_50_270005	CGRASP	231890	5	234980	236088	236366	236116	233708	233708	235451.6	178.794	203.805
Instance	Method	BKS	#runs	run1	run2	run3	run4	run5	s*	s	t*	t
/MTSP/Crama/s1n001.txt	CGRASP	7	5	7	7	7	7	7	7	7	0.064	0.064
/MTSP/Crama/s1n002.txt	CGRASP	12	5	12	12	12	12	12	12	12	0.009	0.009
/MTSP/Crama/s1n003.txt	CGRASP	10	5	10	10	10	10	10	10	10	0.157	0.157
/MTSP/Crama/s1n004.txt	CGRASP	9	5	9	9	9	9	9	9	9	0.291	0.291
/MTSP/Crama/s1n005.txt	CGRASP	8	5	8	8	8	8	8	8	8	0.135	0.135
/MTSP/Crama/s1n006.txt	CGRASP	9	5	9	9	9	9	9	9	9	0.034	0.034
/MTSP/Crama/s1n007.txt	CGRASP	8	5	8	8	8	8	8	8	8	0.317	0.317
/MTSP/Crama/s1n008.txt	CGRASP	11	5	11	11	11	11	11	11	11	0.631	0.631
/MTSP/Crama/s1n009.txt	CGRASP	8	5	8	8	8	8	8	8	8	0.02	0.02
/MTSP/Crama/s1n010.txt	CGRASP	9	5	9	9	9	9	9	9	9	0.002	0.002
/MTSP/Crama/s2n001.txt	CGRASP	22	5	22	22	22	22	22	22	22	3.706	3.706
/MTSP/Crama/s2n002.txt	CGRASP	19	5	19	19	19	19	19	19	19	1.86	1.86
/MTSP/Crama/s2n003.txt	CGRASP	22	5	22	23	23	23	23	22	22.8	0.375	16.29
/MTSP/Crama/s2n004.txt	CGRASP	22	5	23	22	23	23	23	22	22.8	2.643	16.048
/MTSP/Crama/s2n005.txt	CGRASP	20	5	20	21	20	22	21	20	20.8	0.716	12.628
/MTSP/Crama/s2n006.txt	CGRASP	24	5	24	24	25	24	24	24	24.2	0.424	4.387
/MTSP/Crama/s2n007.txt	CGRASP	19	5	20	20	20	20	20	20	20	0.595	20.019
/MTSP/Crama/s2n008.txt	CGRASP	24	5	24	24	25	24	25	24	24.4	4.957	9.441
/MTSP/Crama/s2n009.txt	CGRASP	16	5	17	17	17	16	16	16	16.6	0.199	12.187

/MTSP/Crama/s2n010.txt	CGRASP	18	5	19	18	18	18	19	18	18.4	1.962	9.93
/MTSP/Crama/s3n001.txt	CGRASP	99	5	101	106	103	100	103	100	102.6	17.573	30.171
/MTSP/Crama/s3n002.txt	CGRASP	91	5	94	99	92	95	97	92	95.4	16.601	30.23
/MTSP/Crama/s3n003.txt	CGRASP	79	5	82	82	84	81	88	81	83.4	12.279	30.32
/MTSP/Crama/s3n004.txt	CGRASP	96	5	102	101	105	100	101	100	101.8	10.34	30.277
/MTSP/Crama/s3n005.txt	CGRASP	101	5	106	107	111	106	104	104	106.8	13.41	30.245
/MTSP/Crama/s3n006.txt	CGRASP	82	5	85	87	87	87	83	83	85.8	13.784	30.226
/MTSP/Crama/s3n007.txt	CGRASP	95	5	105	98	96	98	96	96	98.6	14.706	30.192
/MTSP/Crama/s3n008.txt	CGRASP	114	5	122	120	124	119	120	119	121	13.903	30.256
/MTSP/Crama/s3n009.txt	CGRASP	83	5	87	91	86	89	89	86	88.4	21.14	30.278
/MTSP/Crama/s3n010.txt	CGRASP	87	5	101	93	94	91	92	91	94.2	8.487	30.38
/MTSP/Crama/s4n001.txt	CGRASP	182	5	189	192	188	190	189	188	189.6	22.878	40.84
/MTSP/Crama/s4n002.txt	CGRASP	194	5	198	207	198	206	202	198	202.2	30.272	40.556
/MTSP/Crama/s4n003.txt	CGRASP	178	5	184	191	181	192	192	181	188	23.717	41.078
/MTSP/Crama/s4n004.txt	CGRASP	184	5	198	193	196	195	199	193	196.2	26.303	41.097
/MTSP/Crama/s4n005.txt	CGRASP	185	5	195	193	202	196	191	191	195.4	24.731	40.94
/MTSP/Crama/s4n006.txt	CGRASP	187	5	196	203	203	199	197	196	199.6	15.785	41.175
/MTSP/Crama/s4n007.txt	CGRASP	192	5	205	204	205	202	201	201	203.4	26.67	40.727
/MTSP/Crama/s4n008.txt	CGRASP	196	5	207	202	203	214	208	202	206.8	14.945	40.907
/MTSP/Crama/s4n009.txt	CGRASP	166	5	177	183	176	172	169	169	175.4	28.673	40.348
/MTSP/Crama/s4n010.txt	CGRASP	163	5	175	172	168	176	175	168	173.2	20.778	40.498