

Dataset	5% CS								KMEANS	GT
	PCCC	PCCC-N2-S	PCCC-N5-S	PCCC-N2-S-RD	COPKM	CSC	DILS	LCC		
n500-k2	449.7	449.7	449.7	449.7	–	993.9	474.4	449.7	448.6	449.7
n500-k5	32.3	32.3	32.3	32.3	48.4	983.6	220.0	32.9	30.9	34.4
n500-k10	31.9	31.9	31.9	31.9	59.9	972.8	402.0	31.9	31.6	33.6
n500-k20	29.6	29.6	29.6	29.6	34.3	927.5	488.5	29.5	29.8	42.2
n500-k50	13.7	13.7	13.7	13.4	14.5	869.6	573.5	15.3	13.3	27.7
n500-k100	7.1	7.1	7.1	7.0	7.9	618.5	576.4	8.4	6.9	25.1
n1000-k2	911.7	911.7	911.7	911.7	911.7	911.7	911.7	911.7	910.7	911.7
n1000-k5	66.2	66.2	66.2	66.2	–	1,968.5	869.1	73.1	62.8	69.6
n1000-k10	64.5	64.5	64.5	64.5	67.6	1,969.9	1,193.4	95.4	71.2	67.0
n1000-k20	66.0	66.0	66.0	63.9	70.0	1,945.3	1,370.4	74.7	63.1	82.4
n1000-k50	32.0	32.0	32.0	31.0	35.1	1,877.3	1,444.0	32.4	29.7	56.1
n1000-k100	16.3	16.3	16.3	15.6	17.7	1,735.1	1,424.7	–	15.8	53.8
n2000-k2	1,770.4	1,770.4	1,770.4	1,770.4	1,770.4	1,770.4	1,770.4	2,767.4	1,763.0	1,770.4
n2000-k5	136.1	136.1	136.1	136.1	142.5	3,914.8	3,206.2	165.4	124.4	140.7
n2000-k10	127.2	127.2	127.2	127.2	184.7	3,958.0	3,378.7	130.1	123.2	131.5
n2000-k20	135.1	135.2	135.1	135.1	160.6	3,914.8	3,390.1	141.2	126.4	162.9
n2000-k50	70.0	69.4	70.0	69.3	76.5	3,835.4	3,482.6	70.6	63.9	114.7
n2000-k100	40.6	40.6	40.6	40.2	44.2	3,720.4	3,476.2	46.5	35.7	113.0
n5000-k2	4,493.8	4,493.8	4,493.8	4,493.8	–	4,493.8	7,110.1	4,849.9	4,485.9	4,493.8
n5000-k5	352.6	352.6	352.6	352.6	367.2	4,656.5	9,889.6	412.5	314.3	353.2
n5000-k10	332.2	332.2	332.2	332.2	–	9,929.9	9,896.1	748.4	312.8	336.3
n5000-k20	416.4	390.6	419.9	370.2	–	9,753.9	9,813.8	475.4	303.4	414.5
n5000-k50	9,868.7	202.9	201.1	199.4	242.3	9,721.1	9,703.7	207.9	163.3	291.9
n5000-k100	9,751.1	117.5	117.4	115.9	135.2	9,667.5	9,586.7	119.6	95.0	294.7
Mean	1,217.3	412.1	413.2	410.8	–	3,546.3	3,527.2	–	401.1	436.3

Table W81: Minimum Inertia values of the versions of the PCCC algorithm and the four state-of-the-art algorithms (COPKM, CSC, DILS, LCC) for the constraint sets of size 5% CS. Lower values indicate more coherent clusters. The lowest values are stated in bold. The column KMEANS reports the minimum inertia value obtained with the k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 3,600 seconds.