| | 15% CS | | | | | | | | | |
|-------------------------|---------|-----------|-----------|--------------|-------|---------|---------|-------|---------|---------------------|
| | PCCC | PCCC-N2-S | PCCC-N5-S | PCCC-N2-S-RD | COPKM | CSC | DILS | LCC | KMEANS | GT |
| Dataset | | | | | | | | | | |
| n500-k2 | 449.7 | 449.7 | 449.7 | 449.7 | 449.7 | 449.7 | 449.7 | 449.7 | 448.6 | 449.7 |
| n500-k5 | 34.1 | 34.1 | 34.1 | 34.1 | 34.1 | 377.7 | 122.7 | 36.8 | 30.9 | 34.4 |
| n500-k10 | 33.5 | 33.5 | 33.5 | 33.5 | _ | 947.0 | 464.1 | 34.8 | 31.6 | 33.6 |
| n500-k20 | 41.8 | 40.3 | 41.8 | 36.2 | 59.3 | 910.6 | 591.0 | 44.8 | 29.8 | 42.2 |
| n500-k50 | 16.8 | 17.2 | 16.8 | 16.0 | 20.3 | 831.7 | 582.7 | 20.4 | 13.3 | 27.7 |
| n500-k100 | 8.5 | 8.6 | 8.5 | 8.4 | 9.7 | 707.4 | 592.8 | 10.0 | 6.9 | 25.1 |
| n1000-k2 | 911.7 | 911.7 | 911.7 | 911.7 | 911.7 | 911.7 | 911.7 | _ | 910.7 | 911.7 |
| n1000-k5 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 87.4 | 538.5 | 71.1 | 62.8 | 69.6 |
| n1000-k10 | 66.9 | 66.9 | 66.9 | 66.9 | 66.9 | 1,663.9 | 1,438.1 | 104.4 | 71.2 | 67.0 |
| n1000-k20 | 77.2 | 77.0 | 77.2 | 77.2 | _ | 1,877.4 | 1,732.2 | 130.3 | 63.1 | 82.4 |
| n1000-k50 | 44.3 | 43.6 | 44.3 | 41.1 | 58.9 | 1,813.6 | 1,536.0 | 43.8 | 29.7 | 56.1 |
| n1000-k100 | 24.4 | 22.3 | 22.2 | 21.9 | 28.1 | 1,695.3 | 1,490.1 | 24.0 | 15.8 | 53.8 |
| n2000-k2 | 1,770.4 | 1,770.4 | 1,770.4 | 1,770.4 | _ | 1,770.4 | 1,770.4 | _ | 1,763.0 | 1,770.4 |
| n2000-k5 | 140.7 | 140.7 | 140.7 | 140.7 | 140.7 | 179.6 | 2,475.9 | 140.7 | 124.4 | 140.7 |
| n2000-k10 | 131.5 | 131.5 | 131.5 | 131.5 | 131.5 | 1,479.1 | 3,653.7 | _ | 123.2 | 131.5 |
| n2000-k20 | 160.8 | 163.9 | 160.8 | 160.8 | 166.4 | 3,684.0 | 3,814.1 | 275.5 | 126.4 | 162.9 |
| n2000-k50 | 152.1 | 105.3 | 109.8 | 102.8 | _ | 3,534.4 | 3,748.2 | 126.3 | 63.9 | 114.7 |
| n2000-k100 | 3,634.2 | 66.0 | 65.5 | 64.7 | 83.1 | 3,464.4 | 3,532.3 | 67.9 | 35.7 | 113.0 |
| n5000-k2 | 4,493.8 | 4,493.8 | 4,493.8 | 4,493.8 | _ | 4,493.8 | 7,691.9 | _ | 4,485.9 | 4,493.8 |
| n5000-k5 | 353.2 | 353.2 | 353.2 | 353.2 | _ | 454.4 | 9,796.3 | _ | 314.3 | 353.2 |
| n5000-k10 | 336.3 | 336.3 | 336.3 | 336.3 | _ | 1,298.8 | 9,888.7 | _ | 312.8 | 336.3 |
| n5000-k20 | 414.5 | 451.6 | 414.5 | 414.5 | 420.9 | 7,212.5 | 9,905.5 | _ | 303.4 | 414.5 |
| n5000-k50 | 285.0 | 282.8 | 284.6 | 287.9 | _ | 9,279.9 | 9,845.0 | _ | 163.3 | 291.9 |
| $\rm n5000\text{-}k100$ | 388.2 | 234.8 | 246.5 | 254.4 | _ | 8,950.1 | 9,689.8 | 313.8 | 95.0 | 294.7 |
| Mean | 585.0 | 429.4 | 428.5 | 428.2 | _ | 2,419.8 | 3,594.2 | _ | 401.1 | 436.3 |

Table W83: 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 15% 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.