| Times taken   | Square container |      |              |                |                  |                 | Circle container |              |      |                |                |                  |                  |                  |
|---|------------------|------|--------------|----------------|------------------|-----------------|------------------|--------------|------|----------------|----------------|------------------|------------------|------------------|
| Picking policy, CFR mode, Choose least CFR area                                   | SG1              | SG2  | SG3          | SG4            | SG5              | SG6             | SG7              | SG1          | SG2  | SG3            | SG4            | SG5              | SG6              | SG7              |
| Picking policy, CFK filode, Choose least CFK area                                 | 301              | 302  | 303          | 304            | 303              | 300             | 307              | 301          | 302  | 303            | 304            | 303              | 300              | 307              |
| My own old, 0, False  | 2.80             | 1.05 | 7.36         | 54.16          | 205.62           | 186.93          | 233.84           | 5.51         | 2.30 | 13.96          | 69.08          | 229.04           | 244.44           | 293.25           |
| My own old, 0, True   | 2.72             | 1.04 | 6.01         | 42.51          | 147.95           | 115.56          | 173.35           | 5.97         | 2.22 | 11.34          | 59.45          | 185.83           | 140.25           | 198.97           |
| My own old, 1, False  | 2.68             | 1.04 | 5.57         | 38.66          | 123.98           | 96.78           | 136.77           | 5.93         | 2.11 | 11.15          | 54.45          | 157.45           | 127.22           | 162.06           |
| My own old, 1, True   | 2.50             | 1.05 | 5.77         | 41.07          | 128.20           | 90.72           | 146.88           | 5.90         | 2.12 | 10.59          | 56.43          | 156.50           | 116.87           | 167.58           |
| My own old, 2, False  | 3.35             | 1.20 | 17.90        | 186.83         | 657.45           | 980.42          | 894.32           | 8.18         | 3.97 | 41.28          | 216.67         | 705.96           | 1160.08          | 1111.96          |
| My own old, 2, True   | 3.40             | 1.20 | 10.15        | 83.33          | 300.46           | 278.36          | 392.70           | 7.79         | 3.87 | 20.48          | 119.46         | 388.91           | 378.06           | 454.65           |
| ,,  | 21.12            |      |              |                |                  |                 |                  | 7.10         |      |                |                |                  |                  | 10 1100          |
| Bottom left, 0, False   | 1.75             | 1.02 | 4.97         | 41.03          | 114.58           | 86.21           | 134.88           | 6.11         | 2.02 | 9.91           | 55.63          | 153.80           | 113.41           | 161.28           |
| Bottom left, 0, True  | 1.75             | 1.03 | 5.15         | 39.33          | 117.58           | 86.90           | 141.02           | 5.50         | 1.99 | 10.01          | 54.17          | 151.66           | 108.61           | 164.70           |
| Bottom left, 1, False   | 1.74             | 1.04 | 5.01         | 39.73          | 113.13           | 87.04           | 135.64           | 5.34         | 2.03 | 9.87           | 53.96          | 152.12           | 110.79           | 160.38           |
| Bottom left, 1, True  | 1.74             | 1.07 | 5.06         | 39.18          | 117.99           | 85.83           | 138.53           | 5.36         | 2.02 | 9.87           | 53.85          | 154.44           | 109.73           | 165.01           |
| Bottom left, 2, False   | 1.94             | 1.08 | 6.09         | 44.97          | 123.38           | 99.08           | 153.71           | 6.18         | 2.45 | 13.33          | 66.78          | 190.52           | 139.80           | 192.91           |
| Bottom left, 2, True  | 1.91             | 1.08 | 6.16         | 44.77          | 132.65           | 99.03           | 154.22           | 6.23         | 2.48 | 13.11          | 66.25          | 188.99           | 136.14           | 195.04           |
|   |                  |      |              |                |                  |                 |                  |              |      |                |                |                  |                  |                  |
| Minimal convex hull, 0, False   | 2.07             | 1.23 | 8.17         | 82.74          | 295.35           | 240.59          | 320.29           | 5.81         | 2.18 | 14.02          | 98.96          | 352.87           | 209.44           | 360.72           |
| Minimal convex hull, 0, True  | 2.02             | 1.13 | 7.85         | 67.97          | 219.61           | 162.56          | 271.60           | 5.82         | 2.19 | 12.08          | 92.26          | 308.82           | 177.05           | 340.68           |
| Minimal convex hull, 1, False   | 1.93             | 1.11 | 6.15         | 47.29          | 147.58           | 105.37          | 175.73           | 5.82         | 2.09 | 11.27          | 79.55          | 225.05           | 156.39           | 257.59           |
| Minimal convex hull, 1, True  | 1.93             | 1.09 | 6.12         | 45.66          | 141.63           | 106.34          | 175.60           | 6.22         | 2.06 | 11.46          | 69.36          | 227.45           | 153.73           | 240.59           |
| Minimal convex hull, 2, False   | 2.23             | 1.18 | 14.82        | 194.74         | 1031.12          | 690.22          | 789.79           | 6.67         | 3.27 | 37.24          | 308.11         | 1353.30          | 832.33           | 1210.96          |
| Minimal convex hull, 2, True  | 2.25             | 1.16 | 12.30        | 120.32         | 395.14           | 282.15          | 564.74           | 6.34         | 3.01 | 22.11          | 257.62         | 783.63           | 627.54           | 972.27           |
| Market Market and Articles Articles   | 4.00             | 1.10 | 7.40         | 40.00          | 425.60           | 105.63          | 476.24           | 4.00         | 2.26 | 10.01          | C4 42          | 402.44           | 420.50           | 405.00           |
| Maximal bounding box overlap, 0, False Maximal bounding box overlap, 0, True      | 1.92<br>1.88     | 1.19 | 7.13<br>5.73 | 48.09<br>43.11 | 135.68<br>131.17 | 105.62<br>95.26 | 176.31<br>158.58 | 4.99<br>5.35 | 2.26 | 10.94<br>10.84 | 64.42<br>61.15 | 192.41<br>171.76 | 130.50<br>119.63 | 195.98<br>186.68 |
| Maximal bounding box overlap, 0, 11de  Maximal bounding box overlap, 1, False     | 2.30             | 1.12 | 5.83         | 41.23          | 116.34           | 89.92           | 147.85           |              | 2.08 | 10.12          | 60.38          | 165.19           | 114.80           | 181.75           |
| Maximal bounding box overlap, 1, Faise  | 2.16             | 1.15 | 6.54         | 43.41          | 126.36           | 88.75           | 147.00           | 5.34         | 2.08 | 10.12          | 60.55          | 163.19           | 117.49           | 185.49           |
| Maximal bounding box overlap, 1, 11de  Maximal bounding box overlap, 2, False     | 1.99             | 1.13 | 13.70        | 70.34          | 281.34           | 214.64          | 278.94           | 6.66         | 3.35 | 21.90          | 121.66         | 357.25           | 380.70           | 379.76           |
| Maximal bounding box overlap, 2, Faise  Maximal bounding box overlap, 2, True     | 1.99             | 1.21 | 9.62         | 63.21          | 170.25           | 125.30          | 209.37           | 7.00         | 3.13 | 18.44          | 95.81          | 284.85           | 209.15           | 300.57           |
| Maxima bounding box overlap, 2, True  | 1.37             | 1.23 | 3.02         | 03.21          | 170.23           | 123.30          | 203.37           | 7.00         | 3.13 | 10.44          | 93.61          | 204.03           | 209.13           | 300.57           |
| Min. conv. hull and min. surr. waste +, 0, False                                  | 2.84             | 1.18 | 8.83         | 78.51          | 288.95           | 194.60          | 344.88           | 5.82         | 2.22 | 14.68          | 108.34         | 336.12           | 247.10           | 425.02           |
| Min. conv. hull and min. surr. waste +, 0, True                                   | 2.34             | 1.16 | 7.97         | 70.45          | 238.67           | 175.14          | 281.53           | 5.74         | 2.18 | 12.01          | 92.11          | 291.46           | 194.02           | 338.85           |
| Min. conv. hull and min. surr. waste +, 1, False                                  | 2.67             | 1.09 | 6.15         | 48.02          | 152.57           | 108.54          | 184.11           | 5.73         | 2.04 | 11.88          | 80.39          | 238.70           | 146.43           | 273.07           |
| Min. conv. hull and min. surr. waste +, 1, True                                   | 2.70             | 1.08 | 6.31         | 51.33          | 145.51           | 105.72          | 170.21           | 5.71         | 2.04 | 11.11          | 69.06          | 241.26           | 160.09           | 258.76           |
| Min. conv. hull and min. surr. waste +, 2, False                                  | 2.58             | 1.18 | 15.64        | 188.59         | 874.03           | 439.73          | 1007.19          | 7.62         | 3.20 | 38.47          | 323.00         | 1287.24          | 829.85           | 1348.71          |
| Min. conv. hull and min. surr. waste +, 2, True                                   | 2.57             | 1.18 | 12.65        | 133.74         | 493.14           | 362.91          | 721.63           | 7.39         | 3.13 | 30.28          | 251.74         | 1171.42          | 594.89           | 1072.40          |
|   |                  |      |              |                |                  |                 |                  |              |      |                |                |                  |                  |                  |
| Minimal surrounding waste, 0, False   | 2.82             | 1.12 | 7.66         | 75.23          | 229.18           | 173.83          | 254.51           | 5.25         | 2.33 | 12.23          | 87.89          | 269.18           | 189.51           | 302.89           |
| Minimal surrounding waste, 0, True  | 2.70             | 1.12 | 7.51         | 68.77          | 201.28           | 142.76          | 223.77           | 5.57         | 2.26 | 11.33          | 78.94          | 224.12           | 162.69           | 251.48           |
| Minimal surrounding waste, 1, False   | 2.64             | 1.08 | 6.40         | 52.81          | 153.93           | 102.92          | 182.57           | 6.27         | 2.21 | 10.97          | 68.21          | 190.48           | 124.90           | 205.74           |
| Minimal surrounding waste, 1, True  | 2.79             | 1.07 | 6.06         | 51.60          | 149.66           | 100.77          | 173.58           | 6.00         | 2.16 | 10.39          | 66.98          | 186.89           | 125.70           | 202.33           |
| Minimal surrounding waste, 2, False   | 3.51             | 1.43 | 21.17        | 180.06         | 612.42           | 688.92          | 723.41           | 7.59         | 3.85 | 28.45          | 200.48         | 717.91           | 651.60           | 777.94           |
| Minimal surrounding waste, 2, True  | 3.48             | 1.48 | 15.13        | 148.13         | 415.43           | 341.74          | 459.58           | 7.76         | 3.58 | 22.74          | 165.68         | 495.06           | 414.25           | 566.67           |
| Minimal surrounding waste plus, 0, False  | 3.12             | 1.14 | 8.83         | 75.85          | 237.15           | 168.13          | 263.65           | 6.98         | 2.57 | 17.09          | 94.13          | 280.64           | 194.21           | 303.38           |
| Minimal surrounding waste plus, 0, Faise  | 2.92             | 1.12 | 7.84         | 72.21          | 208.84           | 153.61          | 236.43           | 6.94         | 2.50 | 13.16          | 90.93          | 246.88           | 173.78           | 273.35           |
| Minimal surrounding waste plus, 1, False  | 2.78             | 1.10 | 6.25         | 54.93          | 162.08           | 105.23          | 183.69           | 8.17         | 2.34 | 12.30          | 72.36          | 201.96           | 129.85           | 217.13           |
| Minimal surrounding waste plus, 1, raise  | 3.17             | 1.18 | 6.24         | 53.14          | 161.43           | 103.23          | 173.06           | 8.12         | 2.34 | 11.45          | 70.61          | 191.54           | 125.76           | 207.55           |
| Minimal surrounding waste plus, 1, True  Minimal surrounding waste plus, 2, False | 4.31             | 1.61 | 20.29        | 185.98         | 625.56           | 508.92          | 684.29           | 11.44        | 5.12 | 40.56          | 225.35         | 720.09           | 601.42           | 793.92           |
| Minimal surrounding waste plus, 2, True   | 4.23             | 1.61 | 18.79        | 174.89         | 492.41           | 374.61          | 548.95           | 11.26        | 4.71 | 26.55          | 203.56         | 582.82           | 474.89           | 647.37           |
|   |                  |      | 20.73        | 1,             | .,,,,,,          | 3701            | 5 .0.55          | 11.20        |      | 20.53          |                | 302.02           | .,               | 0.7.57           |