Random Start Population:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. of Sim | Best FV | Best FV from GA | Find the best FV? | diff | Overall Fitness Value | No. of Generation |
| **1** | **192.3** | **204,5** | **No** | **6%** | [-2712.6, -2165.3, -1966.4, -1919.0, -1890.8, -1788.3, -1751.1, -1720.5, -1686.3, -1643.4, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2, -1636.2] | 11 |
| **2** | **192.7** | **195,7** | **No** | **1,5%** | [-1983.5, -1878.8, -1679.0, -1622.6, -1601.6, -1583.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6, -1565.6] | 7 |
| **3** | **156.1** | **158,7** | **No** | **1,6%** | [-1581.8, -1548.8, -1536.8, -1536.8, -1509.8, -1422.8, -1289.3, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8, -1269.8] | 8 |
| **4** | **185.2** | **185.2** | **Yes** | 0 | [-2230.4, -2138.7, -2051.3, -1952.6, -1907.0, -1696.1, -1549.7, -1519.4, -1519.4, -1519.4, -1513.1, -1494.2, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6, -1481.6] | 13 |
| **5** | **185.5** | **185.5** | **Yes** | 0 | [-2645.3, -2426.6, -2164.1, -1799.6, -1557.8, -1552.0, -1528.0, -1522.4, -1522.4, -1522.4, -1517.6, -1498.4, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0, -1484.0] | 13 |
| Sum |  |  | 2/5, 40% |  |  |  |

Selected Start Population:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. of Sim | Best FV | Best FV from GA | Find the best FV? | diff | Overall Fitness Value | No. of Generation |
| **1** | **221.3** | **221.3** | **Yes** |  | [-2752.6, -2143.0, -1837.5, -1837.5, -1837.5, -1837.5, -1827.9, -1789.5, -1770.3, 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]** 1770.3,**]]** | 9 |
| **2** | **177,1** | **177,1** | **YES** |  | [-1831.0, -1747.5, -1672.8, -1605.5, -1579.5, -1542.3, -1542.3, -1542.3, -1542.3, -1463.8, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, -1416.7, **-1416.8]** | 11 |
| *3* | *182,1* | *184,725* | *No* | *1,4%* | [-1637.4, -1527.6, -1480.8, -1477.8, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7,  -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, -1477.7, **-1477.7]** |  |
| **4** | **184.2** | **184.2** | **Yes** | 0 | [-1583.0, -1524.5, -1520.0, -1502.1, -1497.6, -1491.6, -1476.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -1473.5, -**1473.5]** | 7 |
| **5** | **159.1** | **159,1** | **Yes** | 0 | [-1724.6, -1677.2, -1677.2, -1677.2, -1668.1, -1589.8, -1565.8, -1519.7, -1516.6, -1473.5, -1343.9, -1278.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, -1272.8, **-1272.8]** | 12 |
| Sum |  |  | 4/5, 80% |  |  |  |