


```
81 Obj = 607.0
82
83 Solutions:
84   The total pi = 82.0
85   The total duration time in berth stage = 131.0
86   The total duration time in quay crane scheduling stage = 28.0
87   The total departure time in berth stage= 355.0
88   The total departure time in quay crane scheduling stage = 252.0
89   The total wasted crane work hour according QC0= 8.292451184172597
90   The last depature time in quay crane scheduling stage = 63.0
91
92 The specific solution are as follows:
93   Vessel i: 0:   li: 5,      pi: 9-14,      ai-di: 1-22,      taoi-deltai: 1-20,      periodi: 19,      taoPi_SP-deltaPi_SP: 1
94   -5,      periodPi: 4,      c_i: 4929520,      dowork: 5800168,      fa_i: 4
95   Vessel i: 1:   li: 4,      pi: 24-28,      ai-di: 36-66,      taoi-deltai: 36-64,      periodi: 28,      taoPi_SP-
96   deltaPi_SP: 36-44,      periodPi: 8,      c_i: 7260454,      dowork: 7382032,      fa_i: 2
97   Vessel i: 2:   li: 7,      pi: 17-24,      ai-di: 58-76,      taoi-deltai: 58-74,      periodi: 16,      taoPi_SP-
98   deltaPi_SP: 58-60,      periodPi: 2,      c_i: 4163291,      dowork: 4745592,      fa_i: 7
99   Vessel i: 3:   li: 6,      pi: 6-12,      ai-di: 40-68,      taoi-deltai: 40-66,      periodi: 26,      taoPi_SP-deltaPi_SP
100   : 40-45,      periodPi: 5,      c_i: 6657387,      dowork: 7250210,      fa_i: 5
101   Vessel i: 4:   li: 5,      pi: 12-17,      ai-di: 60-83,      taoi-deltai: 60-81,      periodi: 21,      taoPi_SP-
102   deltaPi_SP: 60-63,      periodPi: 3,      c_i: 5517711,      dowork: 5536524,      fa_i: 5
103   Vessel i: 5:   li: 6,      pi: 14-20,      ai-di: 29-54,      taoi-deltai: 29-50,      periodi: 21,      taoPi_SP-
104   deltaPi_SP: 29-35,      periodPi: 6,      c_i: 5404610,      dowork: 5404702,      fa_i: 2
105   TimeSolveModel: 60.000000
106
107 TimeAll: 63.000000
108
109
```