


```
81 Obj = 468.0
82
83 Solutions:
84   The total pi = 83.0
85   The total duration time in berth stage = 105.0
86   The total duration time in quay crane scheduling stage = 27.0
87   The total departure time in berth stage= 273.0
88   The total departure time in quay crane scheduling stage = 195.0
89   The total wasted crane work hour according QC0= 1.6437923867032818
90   The last depature time in quay crane scheduling stage = 62.0
91
92 The specific solution are as follows:
93   Vessel i: 0:   li: 5,      pi: 22-27,      ai-di: 17-39,      taoi-deltai: 17-37,      periodi: 20,      taoPi_SP-
deltaPi_SP: 17-23,      periodPi: 6,      c_i: 5186037,      dowork: 5272880,      fa_i: 2
94   Vessel i: 1:   li: 5,      pi: 21-26,      ai-di: 43-72,      taoi-deltai: 43-70,      periodi: 27,      taoPi_SP-
deltaPi_SP: 43-49,      periodPi: 6,      c_i: 7000335,      dowork: 7118388,      fa_i: 3
95   Vessel i: 2:   li: 4,      pi: 17-21,      ai-di: 58-80,      taoi-deltai: 58-78,      periodi: 20,      taoPi_SP-
deltaPi_SP: 58-62,      periodPi: 4,      c_i: 5011582,      dowork: 5141058,      fa_i: 4
96   Vessel i: 3:   li: 7,      pi: 14-21,      ai-di: 26-58,      taoi-deltai: 26-54,      periodi: 28,      taoPi_SP-
deltaPi_SP: 26-34,      periodPi: 8,      c_i: 7330053,      dowork: 7382032,      fa_i: 2
97   Vessel i: 4:   li: 5,      pi: 9-14,      ai-di: 24-41,      taoi-deltai: 24-34,      periodi: 10,      taoPi_SP-deltaPi_SP
: 24-27,      periodPi: 3,      c_i: 2457593,      dowork: 2504618,      fa_i: 2
98 TimeSolveModel: 33.000000
99
100 TimeAll: 36.000000
101
102
```