

## Equipment Report

total\_equipment: 15

avg\_flowrate: 119.8

avg\_pressure: 6.11

avg\_temperature: 117.47

type\_distribution: {'Pump': 4, 'Valve': 3, 'Compressor': 2, 'HeatExchanger': 2, 'Reactor': 2, 'Condenser': 2}

equipment\_list: [{  
'equipment\_name': 'Pump-1', 'type': 'Pump', 'flowrate': 120, 'pressure': 5.2, 'temperature': 118.5}, {  
'equipment\_name': 'Valve-1', 'type': 'Valve', 'flowrate': 100, 'pressure': 4.5, 'temperature': 115.2}, {  
'equipment\_name': 'Compressor-1', 'type': 'Compressor', 'flowrate': 80, 'pressure': 6.5, 'temperature': 120.1}, {  
'equipment\_name': 'HeatExchanger-1', 'type': 'HeatExchanger', 'flowrate': 60, 'pressure': 5.8, 'temperature': 117.5}, {  
'equipment\_name': 'Reactor-1', 'type': 'Reactor', 'flowrate': 40, 'pressure': 7.2, 'temperature': 122.3}, {  
'equipment\_name': 'Condenser-1', 'type': 'Condenser', 'flowrate': 30, 'pressure': 6.0, 'temperature': 119.8}, {  
'equipment\_name': 'Pump-2', 'type': 'Pump', 'flowrate': 110, 'pressure': 5.5, 'temperature': 119.0}, {  
'equipment\_name': 'Valve-2', 'type': 'Valve', 'flowrate': 90, 'pressure': 4.8, 'temperature': 116.5}, {  
'equipment\_name': 'Compressor-2', 'type': 'Compressor', 'flowrate': 70, 'pressure': 6.2, 'temperature': 121.2}, {  
'equipment\_name': 'HeatExchanger-2', 'type': 'HeatExchanger', 'flowrate': 50, 'pressure': 5.7, 'temperature': 118.8}, {  
'equipment\_name': 'Reactor-2', 'type': 'Reactor', 'flowrate': 30, 'pressure': 7.0, 'temperature': 123.5}, {  
'equipment\_name': 'Condenser-2', 'type': 'Condenser', 'flowrate': 20, 'pressure': 5.9, 'temperature': 120.5}, {  
'equipment\_name': 'Pump-3', 'type': 'Pump', 'flowrate': 100, 'pressure': 5.3, 'temperature': 117.8}, {  
'equipment\_name': 'Valve-3', 'type': 'Valve', 'flowrate': 85, 'pressure': 4.6, 'temperature': 115.8}, {  
'equipment\_name': 'Compressor-3', 'type': 'Compressor', 'flowrate': 65, 'pressure': 6.4, 'temperature': 120.8}, {  
'equipment\_name': 'HeatExchanger-3', 'type': 'HeatExchanger', 'flowrate': 45, 'pressure': 5.9, 'temperature': 118.2}, {  
'equipment\_name': 'Reactor-3', 'type': 'Reactor', 'flowrate': 25, 'pressure': 7.1, 'temperature': 124.2}, {  
'equipment\_name': 'Condenser-3', 'type': 'Condenser', 'flowrate': 15, 'pressure': 5.6, 'temperature': 121.1}, {  
'equipment\_name': 'Pump-4', 'type': 'Pump', 'flowrate': 90, 'pressure': 5.1, 'temperature': 116.5}, {  
'equipment\_name': 'Valve-4', 'type': 'Valve', 'flowrate': 75, 'pressure': 4.4, 'temperature': 115.0}, {  
'equipment\_name': 'Compressor-4', 'type': 'Compressor', 'flowrate': 60, 'pressure': 6.1, 'temperature': 120.5}, {  
'equipment\_name': 'HeatExchanger-4', 'type': 'HeatExchanger', 'flowrate': 40, 'pressure': 5.6, 'temperature': 117.5}, {  
'equipment\_name': 'Reactor-4', 'type': 'Reactor', 'flowrate': 20, 'pressure': 6.9, 'temperature': 124.8}, {  
'equipment\_name': 'Condenser-4', 'type': 'Condenser', 'flowrate': 10, 'pressure': 5.4, 'temperature': 121.8}]}]