

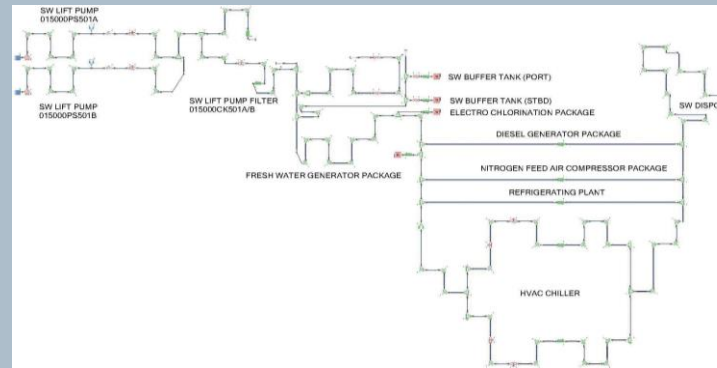
Hyundai Heavy Industries

Analyze forces due to pressure surge using Simcenter Flomaster

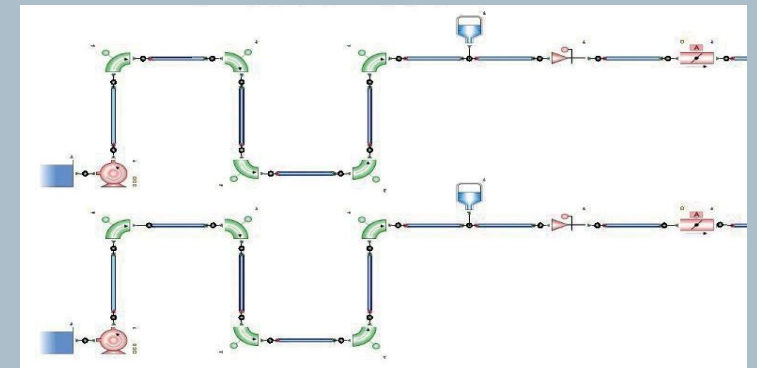


- Maximum pressures as a result of the pressure surges were recorded at the locations engineers deemed most susceptible to failure
- Determined the maximum occasional forces that the seawater system would experience under different operating conditions

HHI analyzes forces due to pressure surge using Simcenter Flomaster



Full Hyundai Heavy Industries seawater systems modeled in Simcenter Flomaster



Seawater lift pump, flow valves and relief valves used for simulation

- For each of these scenarios, a transient analysis was conducted using Simcenter Flomaster to calculate the pressures through the system

“All of the predicted occasional forces due to pressure surge were below the tolerance of the piping material so the design could be approved. The ability to accurately calculate the surge pressures as a result of operational scenarios in Simcenter Flomaster was key to early stage design.”

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