

The procedure for this experiment involves analyzing the corrosion effects over the course of an observation period beginning with no corrosion and ending with failure.

1. First, the control model was rendered using Visual Analysis (VA) [6], a structural engineering software, according to the design procedure elaborated in the paper
2. Following the construction of the pier, both dead and live gravity loads and wave loads were placed to simulate expected structural demand. Customized factored load combinations of the loads were produced in order to satisfy design checks
3. After rendering the control model, experimental model copies were created by iterations along the observation period from control (T-0) to failure.
4. Then, the diameter of the individual sections along the MSZ were reduced according to experimental data from [1] sequentially in experimental alterations.
5. The procedure was then repeated using columns of varying initial outside diameter with the same thickness (D14 and D18) in order to observe contrast in data trends
6. Next, the column stress data was derived from the member report for all iterations of D14-D18, compiled into Table 1, and plotted graphically in Fig. 4.

