

## Technical Bulletin 55: Slings Submerged in Salt Water for Extended Time Period

Eight SPXCF500 x 15ft slings submerged in the Chesapeake Bay for five years were returned to Slingmax for an evaluation. Each sling was examined and were found to have a significant amount of dirt and sea growth on the outside of the slings. Aside from the dirt, the covers were in good condition with no noticeable wear or rips. When the cover was opened to examine the K-Spec core yarn, it was found to be in very good condition visually.

Each of the slings were pulled to destruction to determine if any strength was lost by the long-term exposure to saltwater. All but one of the slings met the minimum breaking force of 25,000 lb, with most far exceeding it. The single sling that did not meet the minimum still achieved 98.7% of the strength. The full results are listed below in Table 1. This testing proves that exposure to seawater does not deteriorate the strength of K-Spec core yarn.

*Table 1 - Break Test Results*

Sling Number	Breaking Force Achieved (lbf)	Design Factor
1	24,680	4.9
2	30,150	6.0
3	41,600	8.3
4	44,390	8.9
5	28,450	5.7
6	32,570	6.5
7	35,230	7.0
8	36,800	7.4



