

Test data

#	Test Type	Peak kN	Average kN	Break % 22.15kN	Failure	Comments
1	Control Fig8 knots	15.05			Broke at fig-8 knot	NA
2		15.56				NA
3		15.18	15.27	0.69		NA
1	Flat Overhand	7.85			Did not break	Kept rolling
2		7.72				Kept rolling
3		7.66	7.74	0.35		Kept rolling
1	Stacked Overhand	9.89			Broke at bend	Rolled 1 time
2		9.27				Rolled 3 times
3		11.27	10.14	0.46		Rolled 1 time
1	1.5 Overhand	10.82			Broke at bend	Rolled 1 time
2		10.06				Rolled 2 times
3		9.40	10.09	0.46		Rolled 2 times
1	Double Overhand	11.63			Broke at bend	Did not roll
2		11.53				Did not roll
3		13.25	12.14	0.55		Did not roll
1	T-Fishermans	12.69			Broke at bend	Did not roll
2		13.08				Did not roll
3		12.92	12.90	0.58		Did not roll

Analysis

An overview of the testing.

- 1. Flat Overhand:** easy to tie, strength is below 40% and failed with the bend rolling.
- 2. Stacked Overhand:** a little harder to tie (compared to the flat overhand), strength is between 40-50%, rolled 1-3 times and then failed by breaking the rope at the bend.
- 3. Overhand 1.5:** much more difficult to tie, strength is between 40-50%, rolled 1-2 times and then failed by breaking the rope at the bend.
- 4. Double Overhand:** a little harder to tie, strength is between 50-60%, did not roll and failed by breaking the rope at the bend.
- 5. T-Fisherman's:** strength is between 50-60%, did not roll and failed by breaking the rope at the bend