**O'Quinn Enterprises, LTD.** 1922 East Main Street New Iberia, La. 70560 Phone: (337) 365-2089 Website: <u>store.oeltd.com</u>



## Wire Rope Selections for Winches

## Lifting vs. Pulling

Wire Rope Selection				
Rope Size (in)	Breaking Strength (in)		Recommended Safe Working Load (Ibs)	
	2000 lb. Tons	Wt./Ft. (lbs)	Pulling 3.5:1	Lifting/Lowering 5.0:1
1/4 (0.25)	2.94	0.11	1,680	1,176
5/16 (0.31)	4.58	0.18	2,616	1,832
3/8 (0.38)	6.56	0.26	3,748	2,624
7/16 (0.44)	8.89	0.35	5,080	3,556
1/2 (0.50)	11.50	0.46	6,570	4,600
5/8 (0.63)	17.90	0.72	10,228	7,160
3/4 (0/75)	25.60	1.04	14,628	10,240
7/8 (0.88)	34.60	1.42	19,771	13,840
1 (1.00)	44.90	1.85	25,657	17,960
1 1/8 (1.125)	56.60	2.34	32,286	22,600

- Nominal capacity rating complies with ANSI 830.7 for Base Mounted Drum Hoists. Provides 5:1 design factor based on the rated line pull.
- Based on improved plow steel wire rope with independent wire core, except HSU models which require extra improved plow steel.
- Regarding ropes, ANSI 830. requires a minimum of 3:5:1 origin factor with 15:1 rope pitch diameter to drum diameter for most winching applications (e.g. pulling/hauling and anchor handling). For lifting and lowering a 5:1 design factor with an 18:1 rope pitch diameter to drum diameter is required.
- Extra improved plow steel IWRC wire rope.