



# Hyfil 12

Regular Lay	Lang's Lay	Compacted	Rotary Swaged	PI
●	●	●	●	●

## • Benefits of Hyfil 12

- Hyfil 12 is suitable rope for high lifting height application with semi rotation resistance.
- Hyfil 12 has a plastic layer between the inner strands and outer strands and all strands are compacted.
- The steel-plastic combination increases structural stability.
- The rope is fully lubricated and made out of galvanized/ungalvanized wires.



## • Discard criteria

(The number of break in the load bearing wires in outer strands)

Length	Lang's Lay	
	6xd	30xd
discard	19	38

## • The basic designed data of hyfil 12

Size	8- 40
Total number of wire	361
Number of load-bearing wires in outer strands	228
The number of outer wire in outer strand	108
Average fill factor	0.64

Nominal rope diameter		Diameter tolerance		Approximate unit Wt.		Minimum breaking force (Fmin, MBF)							
						Metric unit				Imperial unit			
						1960 Grade		2160 Grade		1960 Grade		2160 Grade	
mm	inch	min. mm	max. mm	kg/m	lb/ft	kN	t(metric)	kN	t(metric)	klb	t(short)	klb	t(short)
8		8.0	8.3	0.312		53.3	5.4	58.4	6.0				
9		9.0	9.4	0.395		67.5	6.9	73.9	7.5				
(9.5)	3/8	9.5	9.9		0.655					16.9	8.4	18.5	9.3
10		10.0	10.4	0.488		86.3	8.8	94.6	9.6				
(11.1)	7/16	11.1	11.5		0.879					23.5	11.7	25.7	12.9
12		12.0	12.5	0.703		123.1	12.6	134.9	13.8				
(12.7)	1/2	12.7	13.2		1.17					31.1	15.5	34.0	17.0
13		13.0	13.5	0.825		147.7	15.1	161.7	16.5				
14		14.0	14.6	0.956		171.3	17.5	187.6	19.1				
(14.3)	9/16	14.3	14.9		1.48					40.2	20.1	44.0	22.0
15		15.0	15.6	1.10		196.6	20.0	215.3	22.0				
(15.9)	5/8	15.9	16.5		1.86					49.5	24.8	54.2	27.1
16		16.0	16.6	1.25		220.2	22.5	241.2	24.6				
18		18.0	18.7	1.58		276.5	28.2	302.8	30.9				
19		19.0	19.8	1.76		310.9	31.7	340.6	34.7				
(19.1)	3/4	19.1	19.9		2.62					69.9	34.9	76.6	38.3
20		20.0	20.8	1.95		346.9	35.4	379.9	38.7				
22		22.0	22.9	2.36		417.1	42.5	456.8	46.6				
(22.2)	7/8	22.2	23.1		3.58					95.5	47.7	104.6	52.3
24		24.0	25.0	2.81		499.1	50.9	546.7	55.7				
25		25.0	26.0	3.05		540.1	55.1	591.5	60.3				
(25.4)	1	25.4	26.4		4.68					125.9	63.0	137.9	69.0
26		26.0	27.0	3.30		589.0	60.1	645.2	65.8				
27		27.0	28.1	3.56		635.2	64.8	695.8	70.9				
28		28.0	29.1	3.83		679.6	69.3	744.3	75.9				
(28.6)	1-1/8	28.6	29.7		5.94					159.4	79.7	174.6	87.3
29		29.0	30.2	4.10		729.0	74.3	798.4	81.4				
30		30.0	31.2	4.39		777.2	79.2	851.3	86.8				
31		31.0	32.2	4.69		829.9	84.6	909.0	92.7				
(31.8)	1-1/4	31.8	33.1		7.44					198.9	99.4	217.8	108.9
32		32.0	33.3	5.00		884.8	90.2	969.1	98.8				
33		33.0	34.3	5.31		940.9	95.9	1,030.6	105.1				
34		34.0	35.4	5.64		998.2	101.8	1,093.3	111.5				
(34.9)	1-3/8	34.9	36.3		8.89					238.5	119.2	261.2	130.6
35		35.0	36.4	5.98		1,060.8	108.2	1,161.9	118.5				
36		36.0	37.4	6.32		1,125.3	114.7	1,232.6	125.7				
38		38.0	39.5	7.05		1,254.1	127.9	1,373.7	140.1				
(38.1)	1-1/2	38.1	39.6		10.48					281.9	141.0	308.8	154.4
40		40.0	41.6	7.81		1,363.6	139.0	1,493.6	152.3				

: Available upon request