



# ROPE SELECTION GUIDE

## INDUSTRY AT WORK



### MANILA

Manila was once the preferred choice in cordage before synthetic fibers were developed. Manila rope still maintains some advantages to synthetic fiber rope; it's not affected by heat and has excellent resistance to UV (ultraviolet) rays.



### SISAL

Sisal fibers come from the agave and sisalana plants indigenous to the tropics. Sisal fibers share many characteristics with manila, but only 80% of its tensile strength. It is less expensive than manila and makes a good general-purpose rope.



### JUTE

Jute is mainly used as a tying twine. It knots well, but due to its short fibers, does not have the strength of manila or sisal.



### COTTON

Cotton is a natural fiber, typically white in color. Cotton cordage is soft, making it pleasant to handle. Excellent for making knots.



### POLYPROPYLENE

Polypropylene rope is flexible and lightweight. It is rot-proof and floats in water; it resists oil, water, gasoline and most chemicals. Available twisted or braided, polypropylene rope is an economical general-purpose rope.



### POLYDAC

Polydac has the same qualities as polypropylene rope with the added features of resistance to abrasion and UV ray, as well as a softer feel.



### POLYESTER

Polyester is very strong and has excellent resistance to abrasion. It stretches less than nylon but does not absorb shock like nylon. Great for marine or industrial applications, Resistant to UV rays, rot, petroleum products and most chemicals.



### NYLON

Nylon is known for its elasticity and tremendous shock absorbing qualities. It has good abrasion resistance, is rot proof and resists UV, petroleum products and most chemicals. Lasts 4-5 times longer than ropes made of natural fibers.



## CHARACTERISTIC COMPARISON TABLE

Fiber Type	Nylon	Polyester	Polypro	Polydac	Manila	Cotton
STRENGTH	1	2	3	4	5	6
WET STRENGTH VS DRY STRENGTH	85%	100%	100%	100%	115%	115%
SHOCK LOAD ABILITY	1	3	2	4	5	6
FLOATS OR SINKS IN WATER	SINKS	SINKS	FLOATS	*FLOATS*	SINKS	SINKS
ELONGATION AT BREAK	20-34%	15%-20%	15%-20%	10%-15%	10%-15%	5%-10%
WATER ABSORPTION	6%	ZERO	ZERO	ZERO	100%	100%
MELTING POINT	480° F	500° F	330° F	275° F	*DOESN'T MELT	*DOESN'T MELT
ABRASION RESISTANCE	2	1	4	5	3	3
RESISTANCE TO SUNLIGHT	GOOD	EXCELLENT	POOR	FAIR	GOOD	GOOD
RESISTANCE TO ROT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	POOR	POOR
RESISTANCE TO ACIDS	POOR	GOOD	GOOD	GOOD	POOR	POOR
RESISTANCE TO ALKALIS	GOOD	POOR	GOOD	GOOD	POOR	POOR
RESISTANCE TO OIL AND GAS	GOOD	GOOD	GOOD	GOOD	POOR	POOR
ELECTRICAL CONDUCTIVITY RESISTANCE	POOR	GOOD	GOOD	GOOD	POOR	POOR
FLEXING ENDURANCE	1	2	3	6	4	5
SPECIFIC GRAVITY	1.14	1.38	.90	.95	1.38	1.54
STORAGE REQUIREMENTS	WET OR DRY	WET OR DRY	WET OR DRY	WET OR DRY	DRY ONLY	DRY ONLY

\*CHARS AT 350° F

\*2" DIAMETER OR GREATER\*

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