



## **NYLON FILAMENT PROPERTIES**

- Excellent abrasion resistance
- Excellent flex fatigue resistance
- Excellent solvent resistance
- Excellent bend recovery
- High heat deflection temperature

High strength **Monahan Filaments WYTEX®** nylon offers a combination of excellent bend recovery, abrasion resistance; flex fatigue resistance and chemical resistance. All nylons absorb water in wet conditions, which will reduce their stiffness by 80% for WYTEX® 6 to 30% for WYTEX® 6.12. **Monahan Filaments** makes fibers from type 6, 6.6, 6.10 and 6.12 nylon. Nylon has the highest heat deflection temperature of all **Monahan Filaments** fibers, but it is prone to oxidation embrittlement when it experiences long exposures to high temperatures. WYTEX® 6.6H and PLYER® are less prone to oxidation.

**WYTEX® 6** is a low cost and durable nylon fiber that is very popular in household and less aggressive industrial applications.

**WYTEX® 6.6** is a high quality nylon fiber that has a little higher wet and dry stiffness than Wytex® 6 fibers. It has excellent bend recovery and abrasion resistance. It is a very popular fiber for industrial brush applications and is widely used as a hairbrush and vacuum cleaner brush fiber.

**WYTEX® 6.12** offers superior wet performance and better chemical resistance. This nylon offers excellent bend recovery and abrasion resistance. Its low moisture absorption makes it an excellent fiber for wet applications. Typical applications include toothbrush, paintbrush, cosmetic, hairbrush, and industrial applications.

**NYLEX 6.12** is an X-shaped Nylon 6.12 fiber offering substantial weight savings in conjunction with high performance and excellent wear characteristics. Typical applications include car, boat, and truck wash brushes.

**QUILL** is a hollow Nylon 6.12 filament designed especially for the manufacture of paint brushes. Since its inception, it has been used in a variety of applications.



### NYLON PRODUCTION CAPABILITIES

PRODUCT	SHAPE	AVAILABLE DIAMETERS	BUNDLE WRAP	BUNDLE DIAMETER	CUT LENGTH	HANK LENGTH
WYTEX® 6	●	.006-.080	PVC or Paper	2-2¼"	1" and up	46-52"
WYTEX® 6.6	●	.006-.080	PVC or Paper	2-2¼"	1" and up	46-52"
WYTEX® 6.12	●	.006-.080	PVC or Paper	2-2¼"	1" and up	46-52"
NYLEX® 6.12	✕	.008-.020	PVC or Paper	2-2¼"	1½" and up	46-52"
PPS	●	.010, .016, & .020	Paper	2-2¼"	1" and up	46-52"
FINELINE	●	.0027-.005	PVC or Paper	2-2¼"	1½" and up	48"
WYTEX® NYLON CONDUCTIVE	●	.006, .010, & .020	PVC or Paper	2-2¼"	1" and up	46-52"
WYTEX® UV STABILIZED	●	.006-.080	PVC or Paper	2-2¼"	1" and up	46-52"
WYTEX® HEAT STABILIZED	●	.006-.080	PVC or Paper	2-2¼"	1" and up	46-52"

#### Tolerances

Diameter Tolerance: Average diameter will be within  $\pm 7\%$  of the specified diameter

Cut Length Tolerance:  $\pm 1/32$ " of the specified length



### NYLON CRIMP & AMPLITUDES

for WYTEX® 6, WYTEX® 6.6, WYTEX® 6.12, and NYLEX 6.12

Diameter	3 Crimps Per Inch Amplitude (In.)			5 Crimps Per Inch Amplitude (In.)			6.5 Crimps Per Inch Amplitude (In.)		
	Heavy	Medium	Light	Heavy	Medium	Light	High	Medium	Light
0.006			*	*	*	*	0.016	0.013	0.010
0.008	*	*	*	*	*	0.012	0.018	0.015	0.012
0.010	0.024	0.021	0.018	0.022	0.019	0.016	0.020	0.017	0.014
0.012	0.026	0.023	0.020	0.024	0.021	0.018	0.022	0.019	0.016
0.014	0.032	0.028	0.024	0.026	0.023	0.020	0.024	0.021	0.018
0.016	0.034	0.030	0.026	0.028	0.025	0.022	0.026	0.023	0.020
0.018	0.036	0.032	0.028	0.030	0.027	0.024	0.028	0.025	0.022
0.020	0.040	0.036	0.032	0.032	0.029	0.026	0.030	0.027	0.024
0.022	0.042	0.038	0.034	0.034	0.031	0.028	0.032	0.029	0.026
0.024	0.044	0.040	0.036	0.036	0.033	0.030	0.036	0.032	0.028
0.026	0.046	0.042	0.038	0.038	0.035	0.032	0.038	0.035	0.032
0.028	0.048	0.044	0.040	0.040	0.037	0.034	0.040	0.038	0.034
0.030	0.050	0.046	0.042	0.042	0.039	0.036	*	*	*
0.032	0.052	0.048	0.044	0.044	0.041	0.038	*	*	*
0.034	0.054	0.050	0.046	0.046	0.043	0.040	*	*	*
0.036	0.056	0.052	0.048	0.048	0.045	0.042	*	*	*
0.038	0.058	0.054	0.050	0.050	0.047	0.044	*	*	*
0.040	0.060	0.056	0.052	0.052	0.049	0.046	*	*	*

**NOTES:**

Fine Gear Crimps (Embossed Surfaces) are available for PLYER®:

- 18 crimps per inch; 0.002" and 0.004" crimp depths for diameters of 0.010" and smaller
- 18 crimps per inch; 0.002", 0.004" and 0.006" crimp depths for diameters larger than 0.010"

\* These amplitudes may be available upon request. Contact your Monahan Filaments Sales Representative.