

MAXIMUM SAIL POWER

CHAPTER 2

IT STARTS WITH A YARN

A Look at all the Fibers used to Make Sails - Part 3 - Nylon



Have you ever wondered where the word Nylon came from?

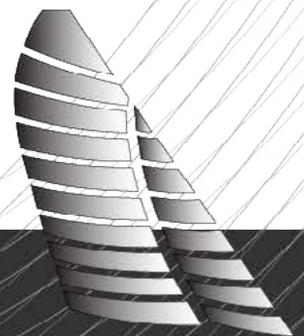
The word Nylon has become as ubiquitous as the word Coke in modern lexicon, but few people know where it came from. Before we look at nylon as a fabric for making sails let's find out the origin of the word. Nylon was actually named after the cities of New York and London, where Du Pont had offices at the time the fiber was being

developed. Du Pont did not register nylon as a trademark, choosing instead to allow the word to enter the American vernacular as a synonym for stockings.

Nylon was the world's first true synthetic textile fiber. In fact, because it initially showed more promise as a fiber than Dacron, Du Pont focused its energies on developing nylon and actually let a British company by the name of ICI patent what was to become polyester. Later Du Pont had to purchase the U.S. rights back before it could further develop the fiber into what we now know as Dacron. In the meantime, nylon became a tremendously popular fiber both in the fashion industry and later for making parachutes during the Second World War. Eventually its strength and durability were recognized by the sailmaking industry and the fiber was used to make light fabric for spinnakers.

Nylon is particularly suitable for this use because it has some give, and for spinnakers strength for weight is more important than stretch resistance. Spinnakers are used when sailing downwind when the loads on the sail are greatly reduced. Nylon has a high strength-to-weight ratio and fortunately can quickly recover from being overstretched. In fact, the elasticity of nylon is good for spinnakers since these sails often collapse and refill with a high shock load being placed on the fabric, so that a little give helps keep the fabric and seams intact. Another attribute of nylon is that it can be easily dyed, with the result that you often see colorful spinnakers, while Dacron working sails usually only come in white. There are, however, some drawbacks. For example, nylon is more susceptible to UV and chemical degradation than polyester and should never be washed with chlorine bleach or rinsed in a swimming pool.

Racing sailors, as is their wont, started demanding better nylons and one fabric maker - Bainbridge - answered with a terrific nylon they sell under the trade name AIRX. AIRX is definitely a step above standard nylon. The most obvious difference is how the fabric feels. Standard nylon has a fairly soft hand especially after a lot of use whereas AIRX comes out of the bag very crisp and clearly has a different feel. The crispness is a result of treating the fabric with a coating that provides a water repellent, zero porosity, stable and durable finish.



Not to be outdone Dimension Polyant developed their line of racing nylon fabrics which they trade under the RPN or Race Precision Nylon. The fabric has a similar feel to AIRX the main difference being that they only make it in white - no colors. If you are a competitive racer you need one of these better quality nylons to keep you at the front of the fleet.

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