THE RRD "RIGID THREAD LINES"

With the new launch of the 'Global Bar V7', RRD wanted to introduce substantial changes ranging from new and revolutionary ergonomics, favoring more grip in the most radical moves, greater traction control, better security systems to more functionality.

But what we definitely didn't want and/or need to change are the lines.

In addition to the new systems, the 'RRD Global Bar V7' is still equipped with special lines called **"RIGID THREAD LINES"**. These are used exclusively on the RRD bars with great success for over 6 years. A product that's now widely tested around the world, but there is little known about the details by kiteboarders.

All our lines are produced and developed in Italy, with a worldwide patent granted only to RRD.

The 'Rigid Thread Lines' are the result of the collaboration with an Italian manufacturing company that has more than fifty years of experience in the processing of textile fibers, using the most recent and innovative exotic fibers, combined with an intimate knowledge of the physical and mechanical properties of Dyneema.

WHY ARE THE 'RIGID THREAD LINES' DIFFERENT?

The differences with our lines is that conventional Dyneema kite line has excellent characteristics of load as well, but suffers from the high temperatures that the horizontal and vertical pull both create, which will make the lifespan of the lines significantly shorter because of wear and tear, while our lines don't have this problem and have a better resistance to friction. It is also much easier to get knots and/or 'spaghetti', in standard kite lines while the 'Rigid Thread Lines' are easier to untwist. Last, but not least: the 'Rigid Thread Lines' have a great structural memory after tension, so they won't stretch!

This all derives from its molecular structure as well as the gel spinning process, combined with the production process of the fiber.

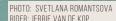
During the development of the 'Rigid Thread Lines' we have plotted a new path to take full advantage of the properties of this fiber. The result is a product composed of a soul parallel (unidirectional) and tensioned resin, covered with extremely compacted Dyneema braided fibers.

Imagine by comparison the 'Rigid Thread Lines' like a widely used electric cable. Core copper wires are covered with a plastic protection sock. In the 'Rigid Thread Lines' copper is replaced by unidirectional Dyneema tensioned fibers plus resin, and covered (the plastic part on

the electic cable) with a very thin braided sock with a super fine textured Dyneema. This allows to create an absolutely direct connection between the bar and the kite, since what connects them is uninterrupted, without having any braided structural fibers, which is a classic solution found on all other lines existing on the market.

The 'pop-effect' is drastically increased when you use 'Rigid Thread Lines', considerably improving the performance of the kite during

The 'Rigid Thread Lines' of RRD Kites will never be subject to adjustment, since they won't even stretch under stress-telated moves, for example by extreme loops or other radical manoeuvers, and consequently it is impossible to end up with stretched lines and/or of a different length and therefore the trim of the kite remains unchanged through the years.





Another weakness of the standard braided line that 'Rigid Thread Lines' have turned into a strength are unchanged compactness of the line.

Any new conventional line, has a rigid and compact character because of the resin (generally polyurethane-based) that

encompasses it. This resin has a very short life and after only a few sessions, the touch of the product is softer.

- This translates into a series of annoying consequences such as:

 The softened lines are more subject to unwanted knots.

 The protection of the line is reduced after each session.

 The braid tends to open and it becomes more fragile, allowing the entry of water which will create small salt crystals inside in case you kite in salt water, which can impair the bearing structure of the line.

WHY ARE RRD KITE LINES INNOVATIVE?

Unlike standard braided lines, the unidirectional structure of 'Rigid Thread Lines' provides a fiber memory that is significantly more efficient. A standard braided line under stress combines all 'dynamic elongation' of the fiber and flattening of the braid, whereas the core unidirectional structure uses exclusively the elastic modules of the fiber.