SHOP WINDOW TEST

Triathlon for braided lines

Braided lines are two a penny, but many anglers wonder which of them is really any good.The BLINKER team put a dozen braided lines from well-known manufacturers under the microscope. After three different tests, it was clear that all of them are good, but one of them is best.

The choice of braided lines is huge and it is often difficult to decide. 12 quality lines competed In the BLINKER test.

Whether you are spinning or fishing with a feeder, sea fishing or out for catfish, braided lines will be on your reel for most of the time. The advantages are clear: in contrast to monofil line, the absence of stretch makes bites easier to detect, and contact to the fish is very direct. The breaking strain of Braid is significantly greater than that of a monofil line of the same diameter, consequently the smaller diameter of braided lines produces much less drag in the water.

There are so many different braided lines available that one could be forgiven for thinking that there are as many manufacturers as anglers. Some lines are impregnated, others are sealed or even thermo-fused. They vie with each other for being the strongest, the roundest or for having the smallest diameter. Such a deluge of braided lines can be perplexing at the tackle shop counter. That is why we have tested 12 lines from venerable manufacturers for you, all of them among the best-known and best quality braided lines that exist.

We intended to compare lines of the same diameter, but because not all manufacturers offer lines of the same thickness, we chose lines between 0.10 and 0.18 mm. Each line was put through three different tests. First, a “blind test” was performed, with seven experienced anglers from the BLINKER staff checking each line for its braiding, suppleness, surface finish and thickness – without knowing which brands they were looking at. Then the focus shifted to the practical qualities of the lines in the water. Key criteria were ease of casting, line lay on the spool, and its resistance to wear and tear. Thirdly, we tested the lines to breaking point, in order to answer the tantalis question: do the lines really live up the promises they make on the spool?

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1. The blind test

In the blind test for suppleness, rigidity, surface structure and braiding, one thing became clear to us very quickly; it is not always obvious from looking at and feeling the lines how the manufacturers arrive at their respective diameters. Some lines felt much thicker than advertised. This is because there is no uniform method of determining the diameter of braided lines. Many lines are not round but flat, so no correct diameter can be given. We found the manufacturers' specifications equally unreliable; one of the lines with the smallest indicated diameter was in our judgment quite clearly the thickest and a 0.18 mm line seemed more like a 0.08 or 0.10 mm.

In the blind test, the surface, suppleness and braiding were examined and compared – with surprising results: lines with similar manufacturers' details exhibited significant differences.

The surface structure of the various lines also exhibited substantial differences. Some felt very rough, while others were so smooth that they could almost have been taken for monofil. This is because some brands are sealed or waxed to increase their suppleness.

All manufacturers try to produce the roundest possible lines, which are easy to cast and absorb little water. However, only a few of the lines that we tested can be described as anything like round. At first sight, in fact, some of them look distinctly flat.

In terms of suppleness or rigidity, our assessments ranged from very stiff to very supple.

The choice of line always depends on personal preference. Some anglers like smaller diameter lines to be a bit stiffer, so that the line doesn't get caught around the rings when casting or twist itself into tangles when limp. Others prefer a more flexible line that runs quickly off the reel allowing one to place baits and fish lures with accuracy. Despite these different preferences, three lines emerged as the winners of the "dry test" in the office.

Stroft GTP from Waku, type 2; 0.18 mm, tensile strength 4.0 kg:

Despite its large indicated diameter (type 2 = 0.18 mm), this line was judged extremely thin, and the majority of the testers liked its suppleness. It also received best marks for having a very round cross section.

Jigmaster Super Braid from Roze meijer; 0.10mm, tensile strength 6.1 kg:

For the Jigmaster, the indicated diameter tallied with the testers' estimates. The line felt very thin, and its round braiding and smooth surface also scored highly.

Berkley Fireline; 0.12 mm, tensile strength 6.8 kg:

The Fireline scores with its smooth surface and is rated practically round. It is a front runner for lovers of stiffer lines.

2. The practical test

Kitted out with rods, reels and braided lines, we went down to the water for the practical test, where we compared the casting qualities and behaviour of the lines on the reel. First, we looked at the reels, to assess the way the lines lay. Most of the lines tested lay relatively smoothly on the reel, so we were able to award good marks across the board in this category. Two lines stood out especially, receiving an unanimous "very good". Then we moved on to test the casting qualities of the lines. At first we were not sure whether we would find any differences at all between the various lines; but in practice, it only took a few casts to remove our doubts: although no line came out as "unsatisfactory", small but subtle differences could be seen. Some lines shot off the reel like greased lightning, and even a casual underarm cast threw them astonishing distances. Other lines, on the other hand, felt slightly wiry and were not so easy to cast.

Finally, we tested their resistance to abrasion. Particularly where there are a lot of stones, mussel beds or sunken pieces of wood in the water, the line needs to be as abrasion resistant as possible. A good fish on a damaged line is usually a lost fish. In order to simulate these conditions, the lines were drawn across a rusty and sharp-edged surface. The differences in the resistance to abrasion were amazing; two lines snapped after just a few rubs, while others proved much more hard-wearing. The top performer actually turned out to be ten times stronger than the weakest line. However, this result needs to be treated with caution: thicker lines have more individual strands and a significantly larger surface area. This makes them much less susceptible to wear.

On the water, the different properties of the braided lines became clear: when casting, some lines ran off the reel very easily, while others felt rather stiff and slowed the bait on the cast.

The practical test also produced three clear winners:

Matrix Pro from Sufix;0.12 mm, indicated tensile strength 4.5 kg:

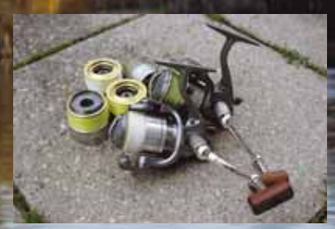
The Matrix Pro stands out; it lies well on the spool and casts outstandingly. With this line, you can hit distant spots accurately. As with all three winners of the practical test marks only had to be deducted for resistance to wear.

Jigmaster Super Braid from Rozemeijer; 0.10 mm, tensile strength 6.1 kg:

Its way it lies on the spool is first-rate, with no crooked winds to spoil the extremely good overall picture. In casting too, the Jigmaster makes an excellent impression.

Stroft GTP from Waku, type 2; 0.18 mm, tensile strength 4.0 kg:

As in the blind test, the Stroft GTP emerged from the practical test as one of the best lines. It winds in smoothly and lies very evenly on the reel. Its suppleness allows it to be cast great distances.



Differences could be seen in the way the lines lay on the reels. Even on the same reel, not all lines lay equally well.

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Engineer and angler Tomek Nimiero from the German Fisheries Research Institute in Hamburg ran the tensile test. The manufacturers' claims were tested on a tensile testing machine (in the background), which is normally used to test the tensile strength of fishing nets.

For the breakage test, the braided lines were not knotted but tied on with knot-free connectors (right). This is the only reliable way to measure linear tensile strength.

3. The breakage test

The breaking strain test was the chance for the braided lines to show whether their tensile strength really matched the manufacturers' claims. After all, the very worst scenario would be losing a good fish because the line is weaker than stated. We wanted to know the exact breaking strains, so we made an appointment with the German Fisheries Research Institute in Hamburg. Under the expert guidance of Tomek Nimiero, an engineer at the Institute, the lines were checked for their tensile strength on a tried and tested tensile testing machine. As a knot results in a weak point, we did not tie the lines,but attached them to the machine with knot-free connectors. To rule out any random result, each line was stretched to breaking point three times. This test found that only a few lines actually achieve their indicated tensile strength. Particularly shocking were the test results for one line which failed all three trials at 50% strain.But there is also good news to report: three lines held up significantly better than stated on the spool.

And these are the three strongest lines:

Tortue Nacrylan Soleil; 0.12 mm, indicated tensile strength 5.0 kg (supplied via VMC):

With an indicated tensile strength of 5.0 kg, the Nacrylan ranks a little below the middle of the range when compared with other braided lines of the same diameter. However, this proved to be an underestimate, as it only broke under a load of 7.2 kg (average), a full 2.2 kg more than advertised.

Matrix Pro from Sufix; 0.12 mm, indicated tensile strength 4.5 kg:

The Matrix Pro also proved to be more resistant to breakage than advertised, holding not just the indicated 4.5 kg, but breaking at 5.7 kg (average) – a bonus of 1.2 kg.

Stroft GTP from Waku, type 2; 0.18 mm, indicated tensile strength 4.0 kg:

For the third time, the Stroft GTP comes out in the top group. It easily handled a load of 4.0 kg, and only gave out at 4.7 kg (average). Still 700 g more than it says on the spool.

Highly magnified

A glance through the microscope makes clear what you can already feel with your fingers. The lines have very different structures and surfaces. Here are three examples:

With this line, the individual strands and their braiding can be very clearly seen.

Here one sees how the thickness of a line can vary over a very short section.

This coated line shows residue on the upper edge.

The winners:

After our three tests, there is a clear winner, and it is the Stroft GTP from Waku. Compared to its indicated diameter, it was judged extremely thin, round and supple. On the water, it scored with its very good performance on the reel and good casting qualities. In the tensile test, it withstood a greater load then advertised on the spool.

1st place: **Stroft GTP from Waku, type 2; 0.18 mm, indicated tensile strength 4.0 kg**

We will not keep the 2nd and 3rd places from you either. The Matrix Pro from Sufix did not do so well in the blind test, but was always in the top group otherwise.

2nd place:

Matrix Pro from Sufix; 0.12 mm, indicated tensile strength 4.5 kg

Because of its much better tensile strength, it beat the Jigmaster from Rozemeijer into second place by a nose.

3rd place:

Jigmaster Super Braid from Rozemeijer; 0.10 mm, tensile strength 6.1 kg