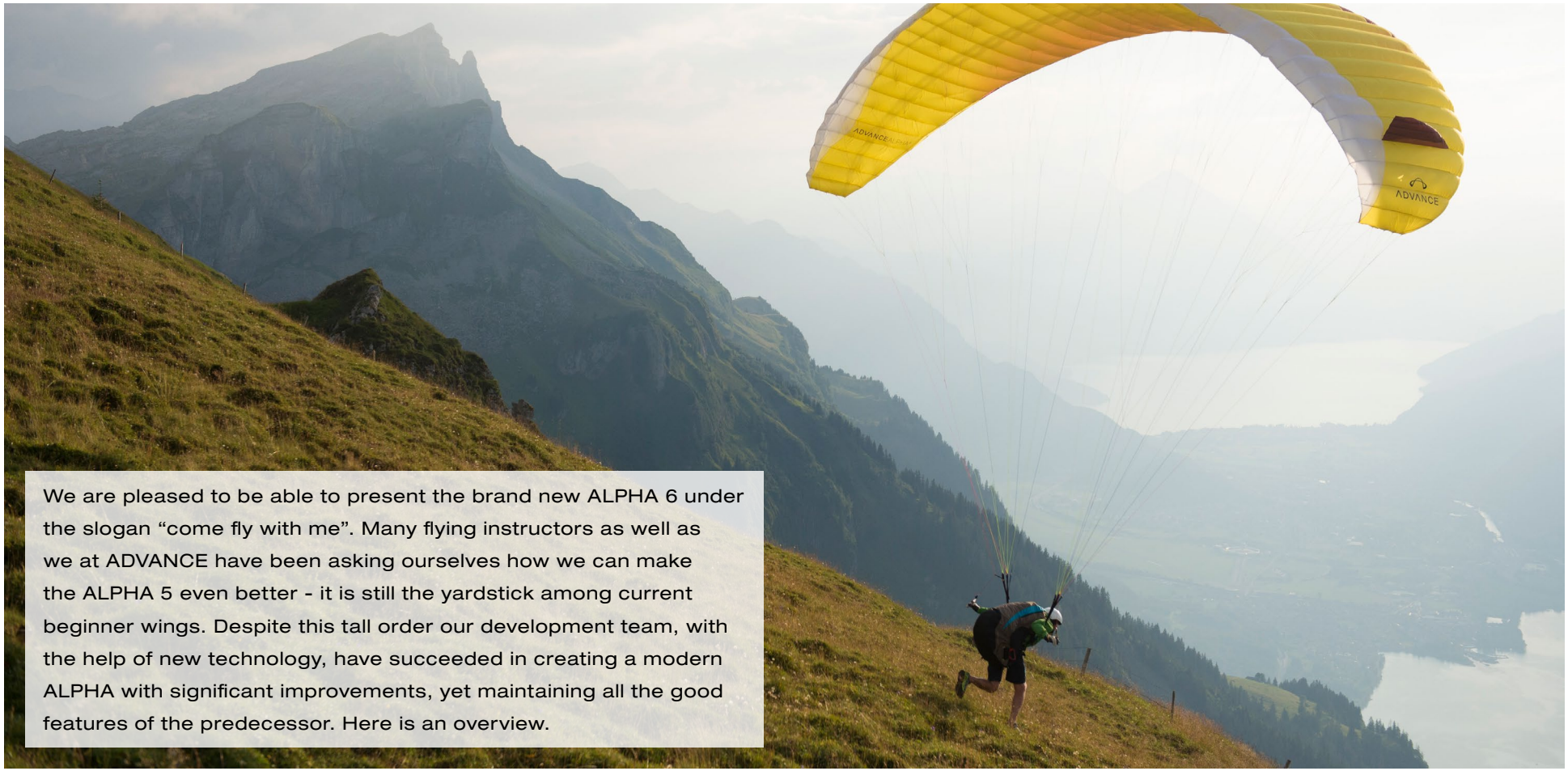
# ADVANCE ALPHA 6

**Product presentation**

# ALPHA 6 – come fly with me




We are pleased to be able to present the brand new ALPHA 6 under the slogan “come fly with me”. Many flying instructors as well as we at ADVANCE have been asking ourselves how we can make the ALPHA 5 even better - it is still the yardstick among current beginner wings. Despite this tall order our development team, with the help of new technology, have succeeded in creating a modern ALPHA with significant improvements, yet maintaining all the good features of the predecessor. Here is an overview.

# ALPHA 6 compared with the ALPHA 5

# Designer's Note by Hannes Papesh

After designing paragliders for 26 years it was an interesting challenge for me to modernise a wing which was originally developed by another designer. Thomas Ripplinger and his team did a great job with the ALPHA 5: it is one of the most successful wings in its class. The guidelines, both for me as a designer and the test pilots, were the following: "please make a careful update and keep all the good aspects of the predecessor".

So my first personal goal was to understand the secret of the ALPHA 5 success. I spent several hours under this wing in various conditions. The damping action in all axes was extraordinary, but the handling still very nice and direct. Especially the very careful energy retention is outstanding and very impressive.

After this practical experience I studied the technical features (airfoil, basic shape, wing curve, trim, balooning) and mixed them carefully with some new technologies such as 3D shaping, air scoop intake and 3 liner setup. After a few protos we had a first version, which looked very satisfying.

Then I applied some more features of my typical reductionist philosophy. I reduced the line suspension points and cleared out the internal structure of the wing. Doing so reduced the weight significantly, and the line meters were dropping again.

The result is a glider with an even longer max brake travel and more direct but still extremely forgiving handling compared to the ALPHA 5. The stability is also higher and the damping action over all axes better. Of course the performance is a step forward (especially at speed) and even the legendary take off behaviour could be further improved.

Most of all the magic safety feeling is still there, and so is this extremely careful energy management, which makes it so easy and transparent to control this wing and get a perfect feeling about what is going on in the air. This politely "welcome to the 3rd dimension" is still the secret of the ALPHA's outstanding popularity.

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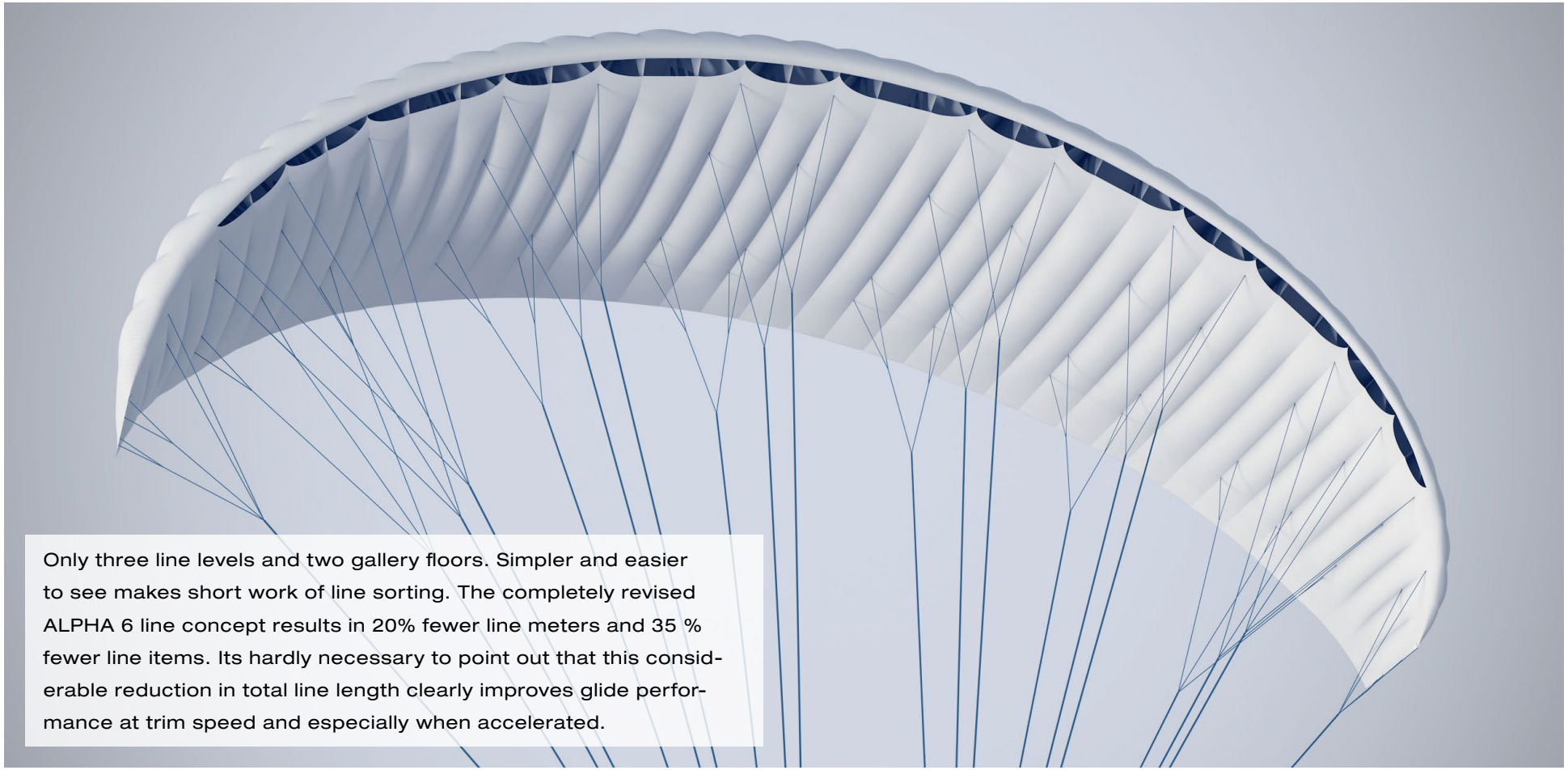
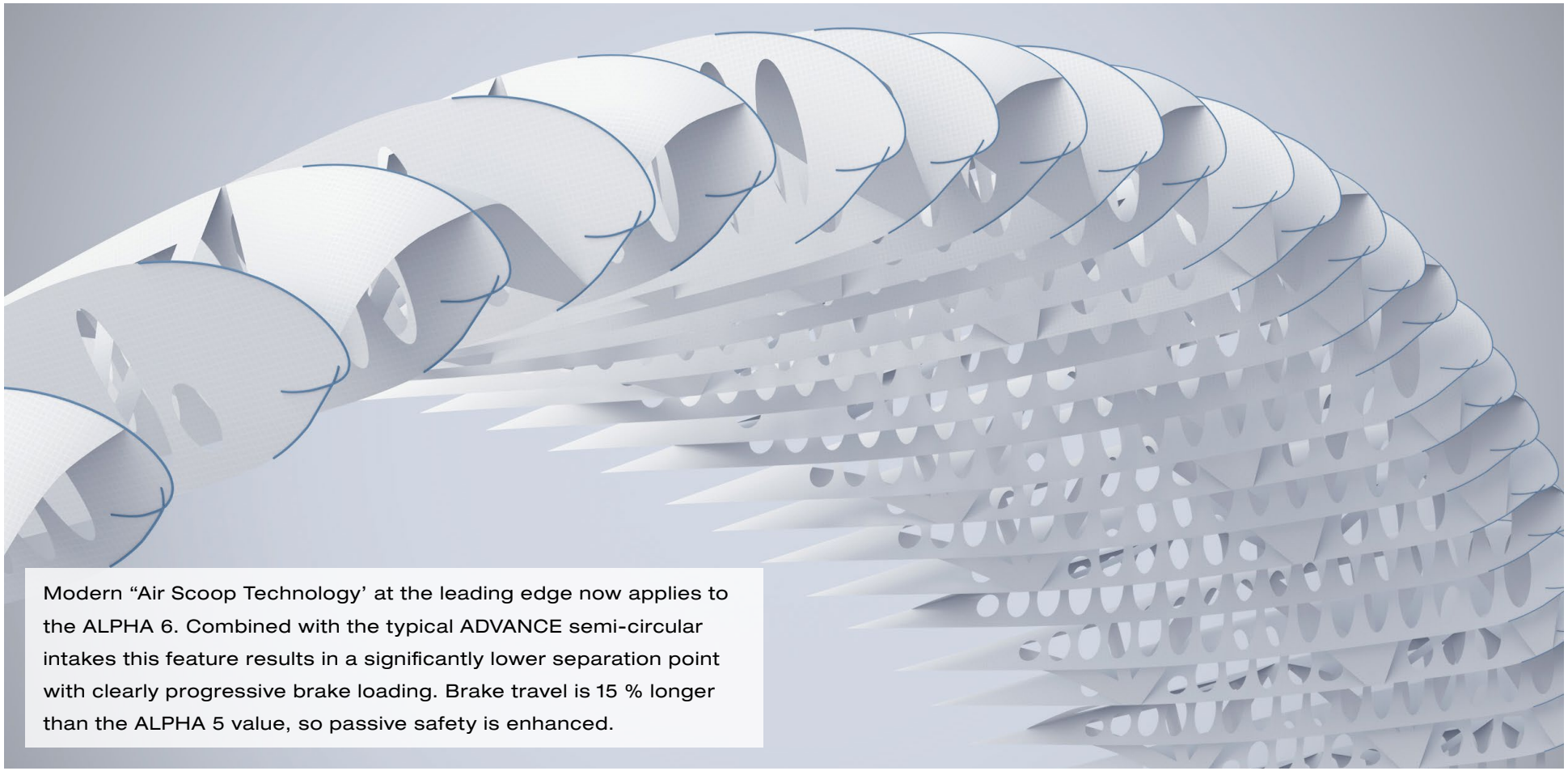
ADVANCE

# Reduced line setup



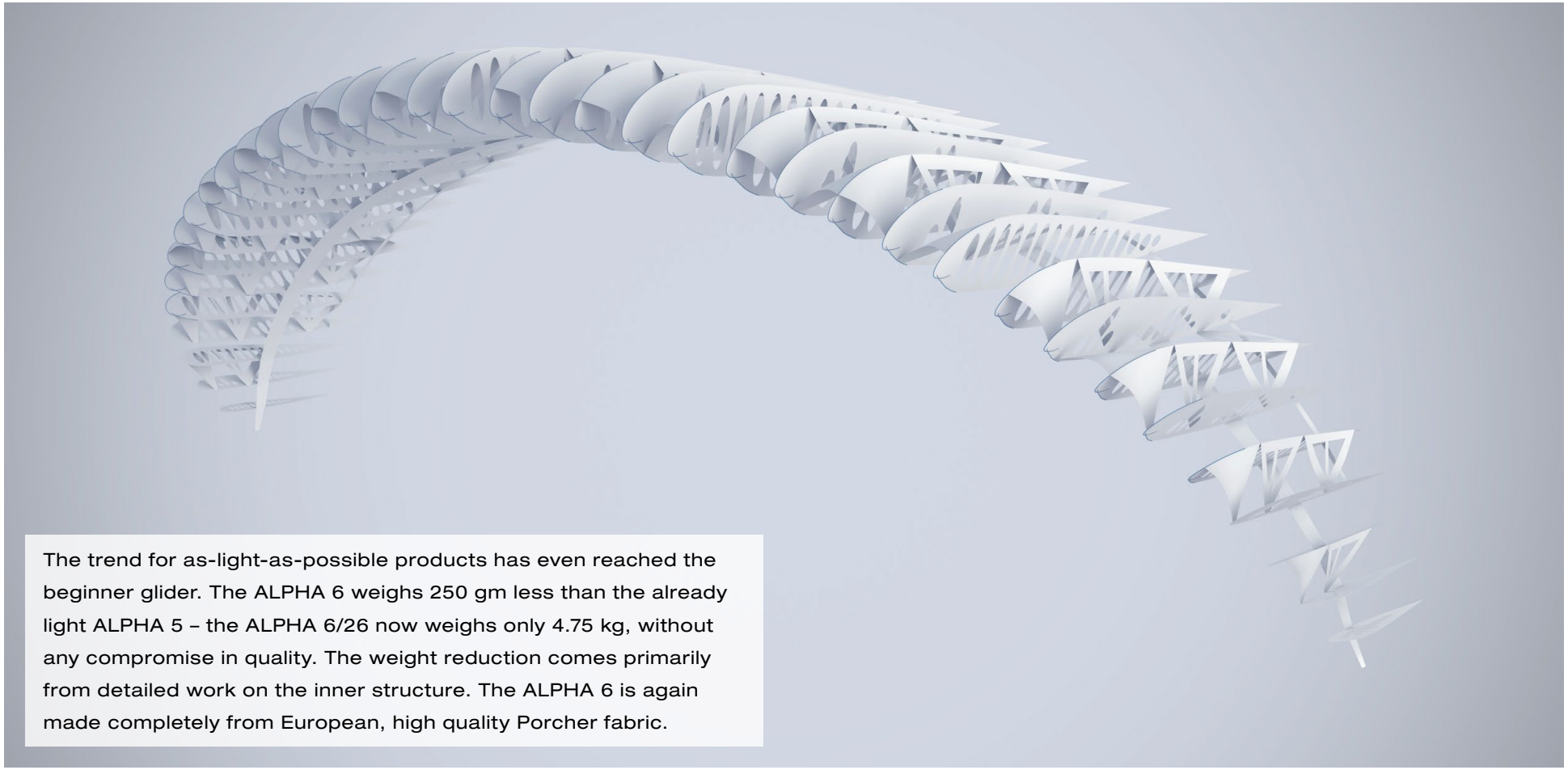
Only three line levels and two gallery floors. Simpler and easier to see makes short work of line sorting. The completely revised ALPHA 6 line concept results in 20% fewer line meters and 35 % fewer line items. Its hardly necessary to point out that this considerable reduction in total line length clearly improves glide performance at trim speed and especially when accelerated.

# Unconditionally safer with a deeper airflow breakaway point



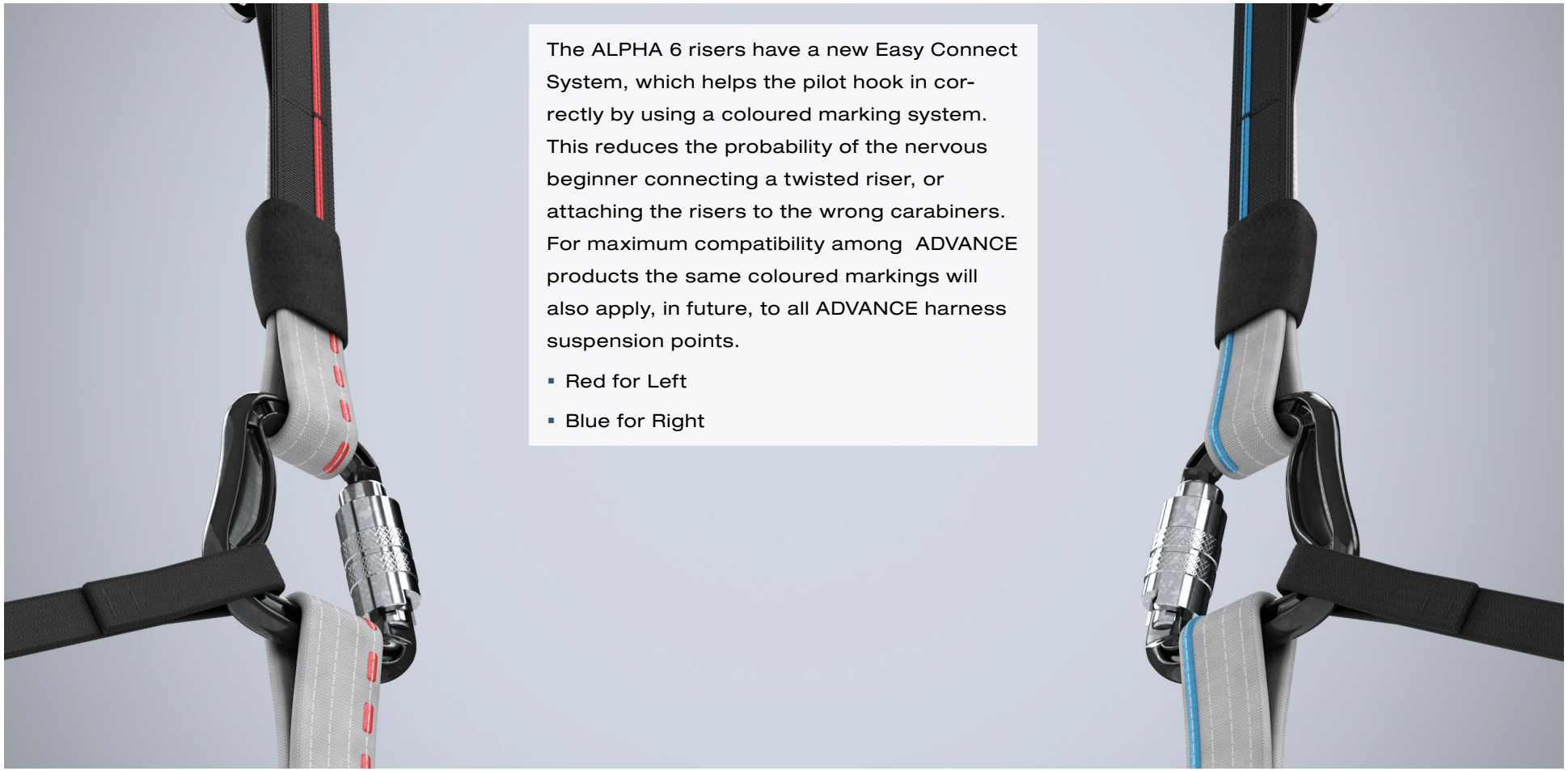
Modern “Air Scoop Technology’ at the leading edge now applies to the ALPHA 6. Combined with the typical ADVANCE semi-circular intakes this feature results in a significantly lower separation point with clearly progressive brake loading. Brake travel is 15 % longer than the ALPHA 5 value, so passive safety is enhanced.

# ADVANCE Quality Lightweight Construction



The trend for as-light-as-possible products has even reached the beginner glider. The ALPHA 6 weighs 250 gm less than the already light ALPHA 5 – the ALPHA 6/26 now weighs only 4.75 kg, without any compromise in quality. The weight reduction comes primarily from detailed work on the inner structure. The ALPHA 6 is again made completely from European, high quality Porcher fabric.

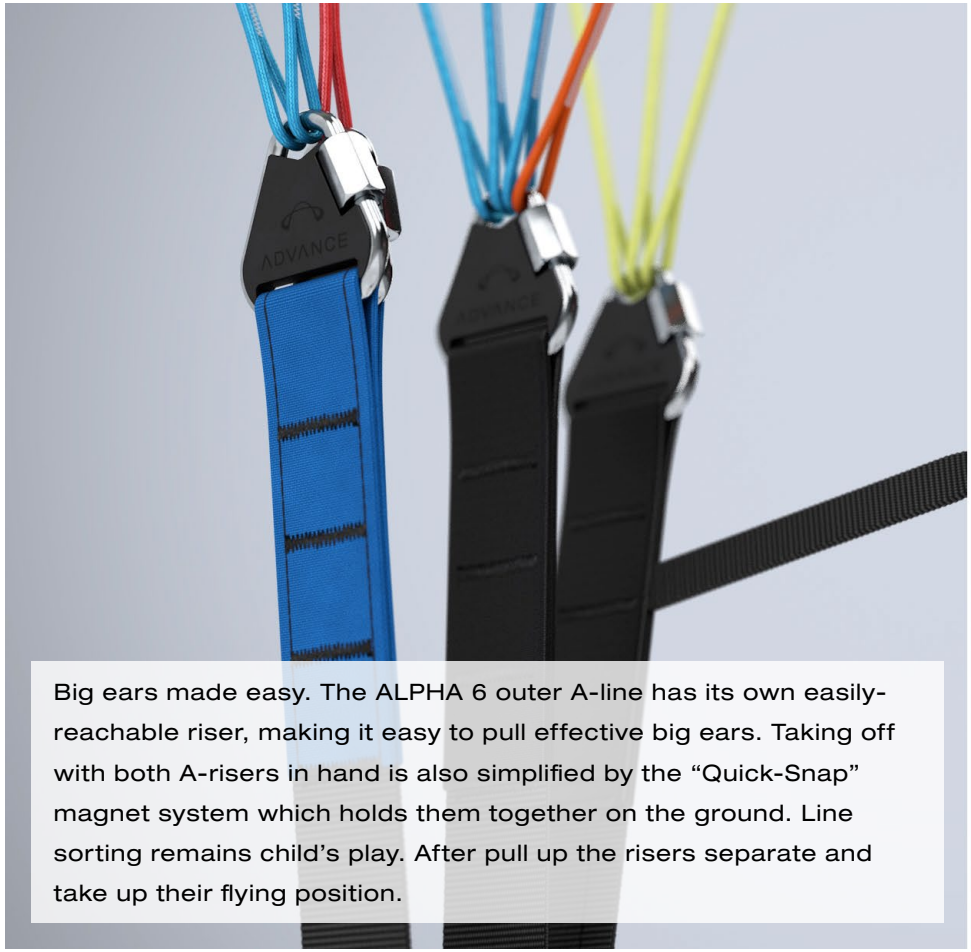
# “Easy Connect System” for safer hook in



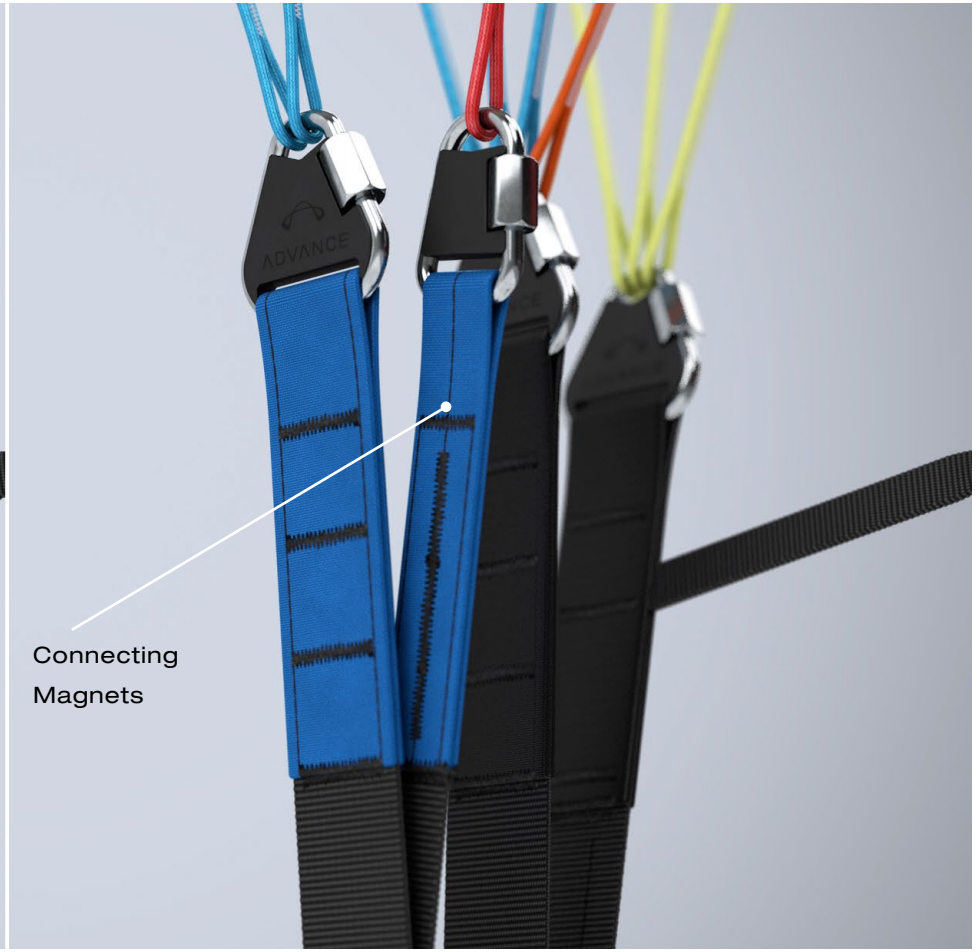
The ALPHA 6 risers have a new Easy Connect System, which helps the pilot hook in correctly by using a coloured marking system. This reduces the probability of the nervous beginner connecting a twisted riser, or attaching the risers to the wrong carabiners. For maximum compatibility among ADVANCE products the same coloured markings will also apply, in future, to all ADVANCE harness suspension points.

- Red for Left
- Blue for Right

# Big Ear system with “Quick Snap”

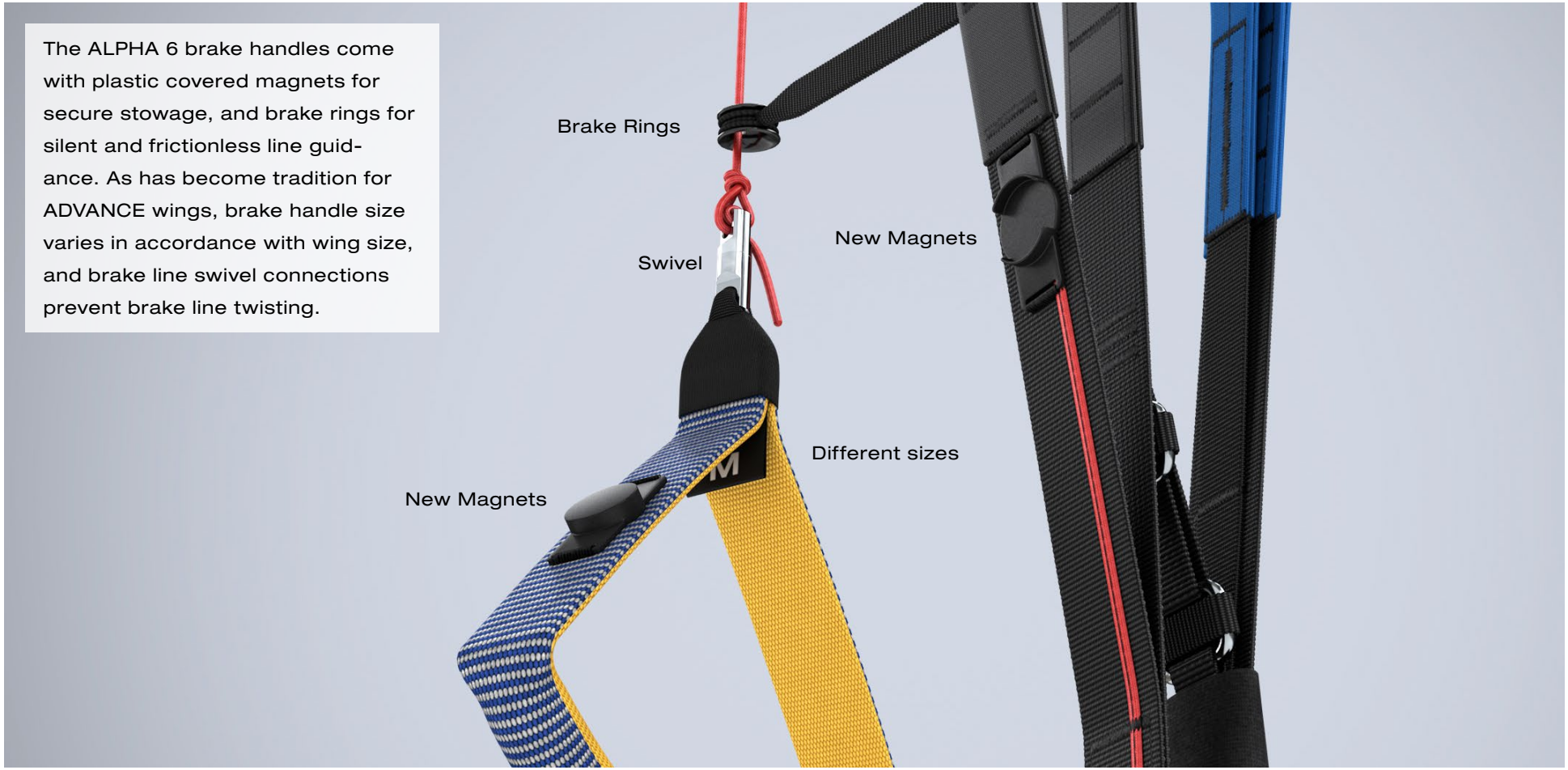


Big ears made easy. The ALPHA 6 outer A-line has its own easily-reachable riser, making it easy to pull effective big ears. Taking off with both A-risers in hand is also simplified by the “Quick-Snap” magnet system which holds them together on the ground. Line sorting remains child’s play. After pull up the risers separate and take up their flying position.



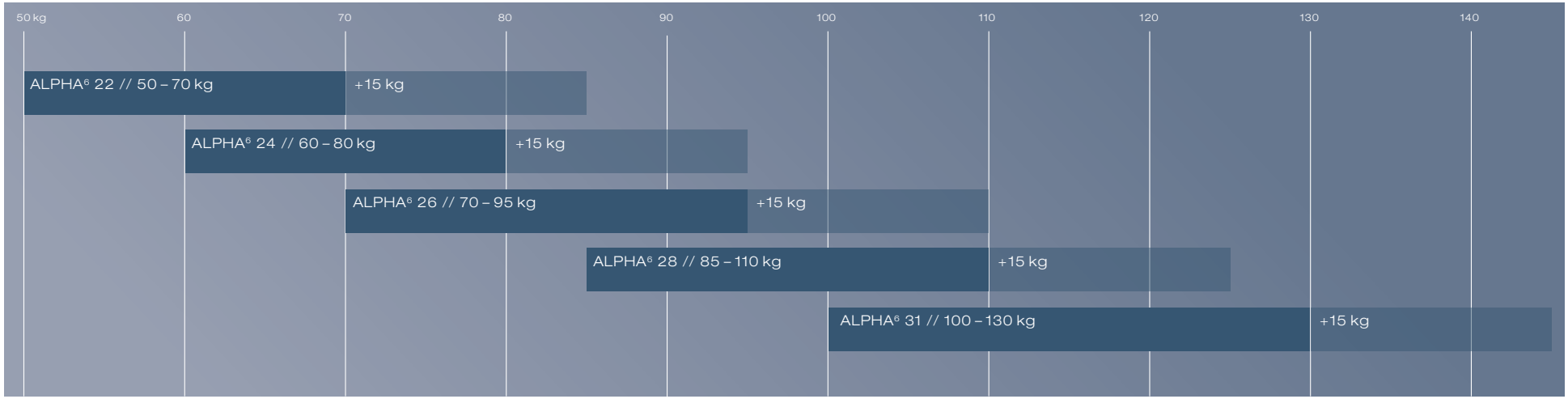
# Improved brakes in detail

The ALPHA 6 brake handles come with plastic covered magnets for secure stowage, and brake rings for silent and frictionless line guidance. As has become tradition for ADVANCE wings, brake handle size varies in accordance with wing size, and brake line swivel connections prevent brake line twisting.



# New 22 size

The ALPHA 6 now comes in five sizes 22, 24, 26, 28 and 31. This gives a better choice of the correct glider for the customer, especially taking light pilots into account. Like the predecessor the ALPHA 6 has an extra 15 kg added at the top of its weight range. This widens the range of usefulness within the school environment. Within this more dynamic area the wing keeps it's LTF/EN A category, e.g. for budding acro enthusiasts; they can get a feel for the basic figures early on – within a safe and supervised arena.




Empfohlenes Startgewicht
Recommended takeoff weight
Plage de poids conseillée total volant

Erweiterter Gewichtsbereich
Increased takeoff weight
Plage de poids étendue

# Colours

lime

azur

bordeaux

yellow

# Paramotor certified in four sizes

Because of its exceptional takeoff qualities and marked damping in all axes the ALPHA 6 is well suited to paramotoring. DGAC Paramotor Approval is currently under consideration for all ALPHA 6 sizes, except size 22. Optional paramotor risers with trimmers are available, these can be secured in the suspension carabiners for unpowered free flight.

# Materials

**Leading edge**
Skytex 38, 9017 E25

**Upper surface**
Skytex 38, 9017 E25

**Lower surface**
Skytex 38, 9017 E25

**Supported ribs**
Skytex 40, 9017 E29

**Unsupported ribs**
Skytex 40, 9017 E29

**Suspension lines**
Edelrid Technora (Aramid) 6843, 340/240/200/160, sheathed, 2.4 mm / 2.1 mm / 1.9 mm / 1.5 mm (main lines)

Edelrid Technora (Aramid), 6843, 120, sheathed, 1.4 mm (2nd level)

Liros Dynema, DSL 70, sheathed, 0.95 mm (1st level)

Liros Dynema, DSL 70 / DFL 115, sheathed, 0.95 / 1.3 mm (brake lines)

Liros Dynema, DFL 115, sheathed, 1.3 mm (stearing line up)

Edelrid Dyneema, 7850, 240, sheathed 1,9 mm (stearing line low)

# Technical details

| ALPHA 6 | | 22 | 24 | 26 | 28 | 31 |
|---|---|---|---|---|---|---|
| Area flat | $m^2$ | 22.1 | 24 | 26.1 | 28.5 | 31.9 |
| Area projected | $m^2$ | 18.9 | 20.6 | 22.3 | 24.4 | 27.3 |
| Recommended Takeoff weight [2] | kg | 50-70 | 60-80 | 70-95 | 85-110 | 100-130 |
| Increased takeoff weight [2] | kg | 70-85 | 80-95 | 95-110 | 110-125 | 130-145 |
| Glider weight | | 4.3 | 4.55 | 4.75 | 5.25 | 5.75 |
| Aspect ratio flat | | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| Aspect ratio projected | | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| Span flat | m | 10.3 | 10.8 | 11.2 | 11.7 | 12.4 |
| Span projected | m | 8.2 | 8.6 | 8.9 | 9.3 | 9.9 |
| Trim speed [1] | km/h | 38 +/-1 | 38 +/-1 | 38 +/-1 | 38 +/-1 | 38 +/-1 |
| Max. speed [1] | km/h | 48+/-1 | 48+/-1 | 48+/-1 | 48+/-1 | 48+/-1 |
| Certification | | EN/LTF A | EN/LTF A | EN/LTF A | EN/LTF A | EN/LTF A |
| Number of cells | | 39 | 39 | 39 | 39 | 39 |
| Number of risers | | 3+1 | 3+1 | 3+1 | 3+1 | 3+1 |
| Maximum chord | m | 2.65 | 2.77 | 2.88 | 3.01 | 3.19 |
| Riser lengths | cm | 47.5 | 47.5 | 50.0 | 51.5 | 53.0 |
| Max. accelerate travel | cm | 15 | 15 | 16 | 17 | 18 |
| Max. line lengths incl. risers | m | 6.61 | 6.88 | 7.18 | 7.50 | 7.91 |
| Trims | | none | none | none | none | none |
| Other adjustable / removable / variable devices | | none | none | none | none | none |

1 Values depending on wing loading, harness/pilot and glider size
2 Pilot, wing, equipment