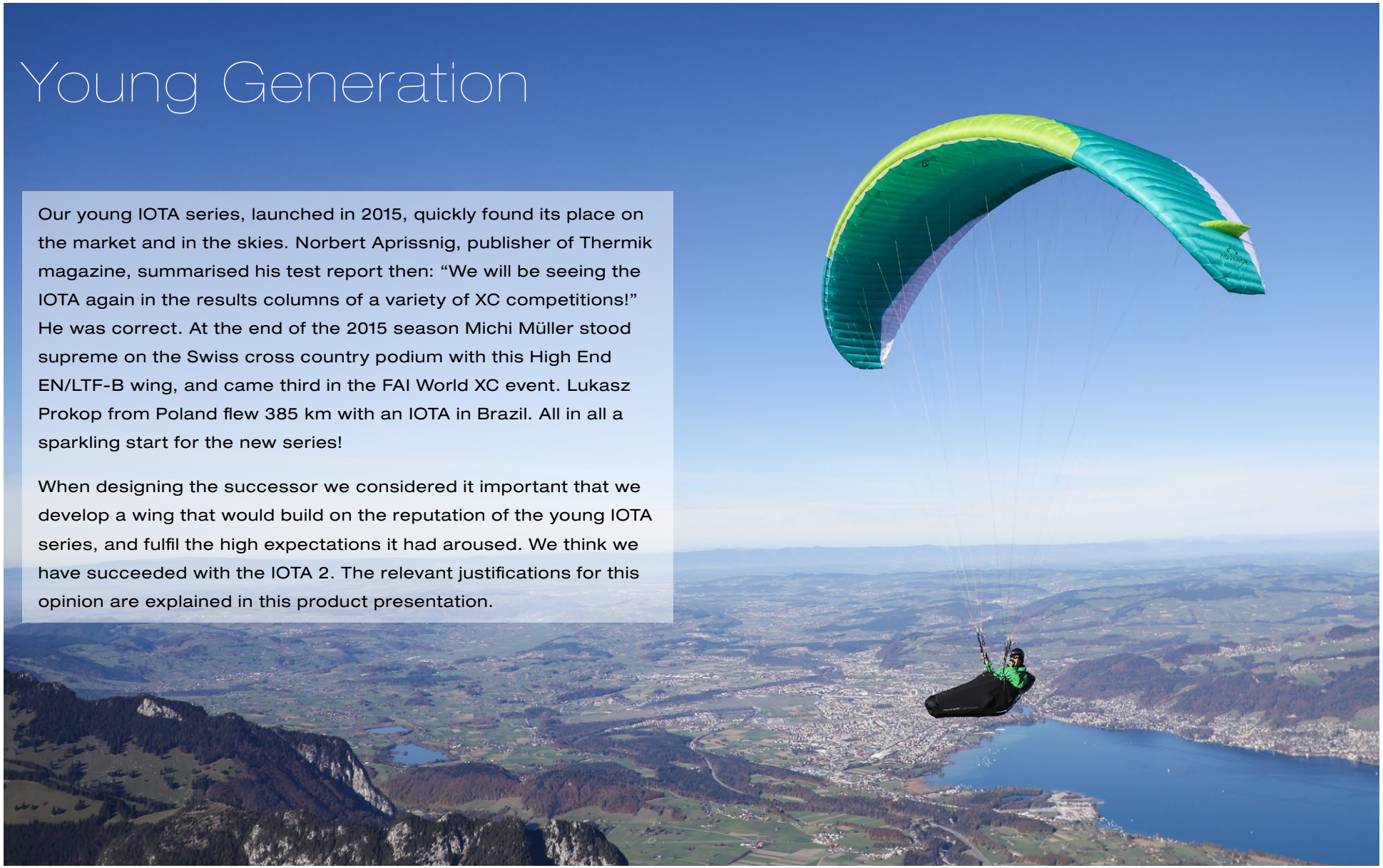
# ADVANCE IOTA 2

**Product presentation**

# Young Generation

Our young IOTA series, launched in 2015, quickly found its place on the market and in the skies. Norbert Aprissnig, publisher of Thermik magazine, summarised his test report then: “We will be seeing the IOTA again in the results columns of a variety of XC competitions!” He was correct. At the end of the 2015 season Michi Müller stood supreme on the Swiss cross country podium with this High End EN/LTF-B wing, and came third in the FAI World XC event. Lukasz Prokop from Poland flew 385 km with an IOTA in Brazil. All in all a sparkling start for the new series!

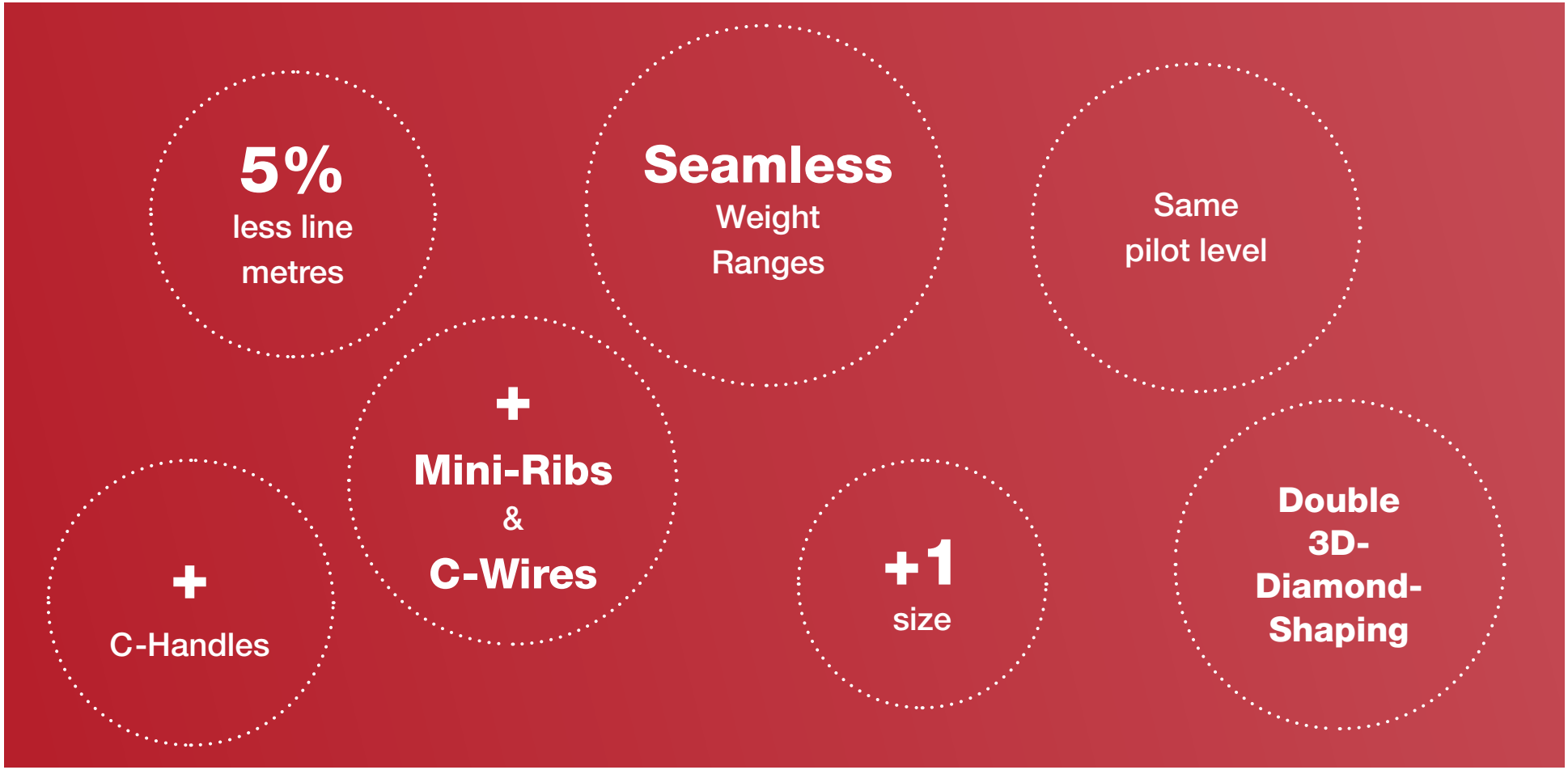
When designing the successor we considered it important that we develop a wing that would build on the reputation of the young IOTA series, and fulfil the high expectations it had aroused. We think we have succeeded with the IOTA 2. The relevant justifications for this opinion are explained in this product presentation.



# IOTA 2 – Efficient Performance

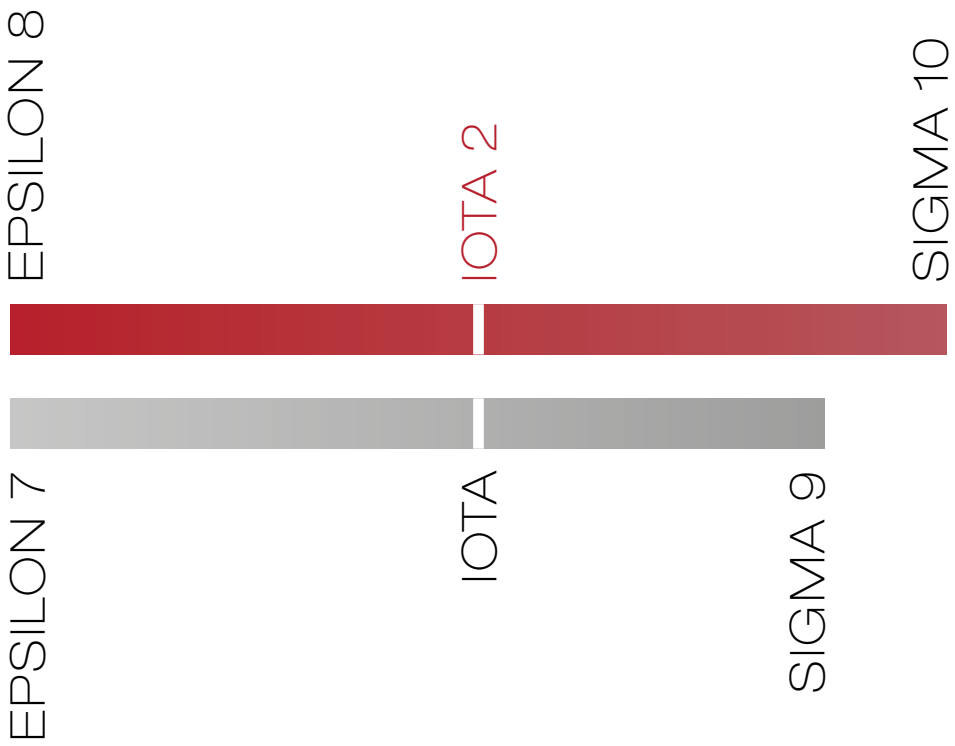

The IOTA 2 merges the performance-enhancing technologies of SIGMA 10 development with the safety requirements of the EN/LTF-B class. This new ADVANCE Performance-Intermediate stands out by its exceptional glide behaviour through bumpy air, demonstrating a high degree of turbulence absorption. 59 cells and a flat aspect ratio of 5.6 unmistakably define the IOTA 2 as an IOTA. For the pilot this means relaxed flying with top performance – available at all times.

# IOTA 2 compared with IOTA

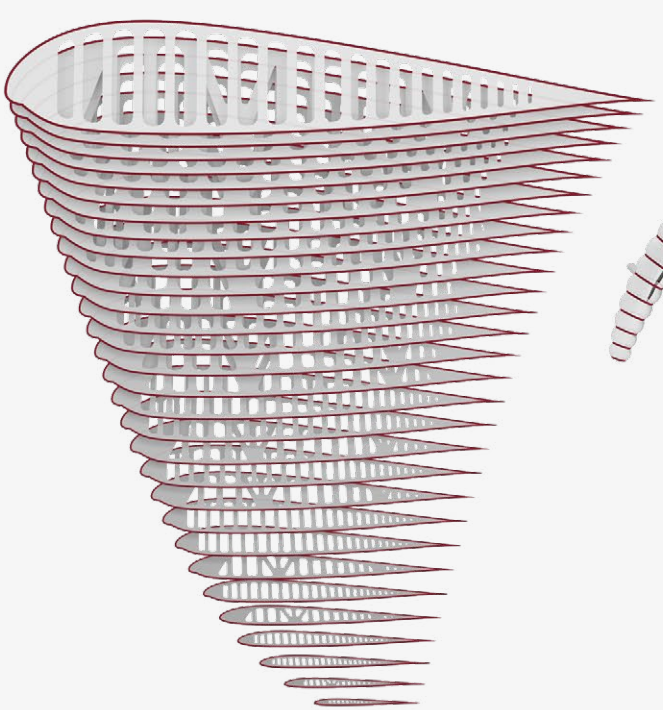


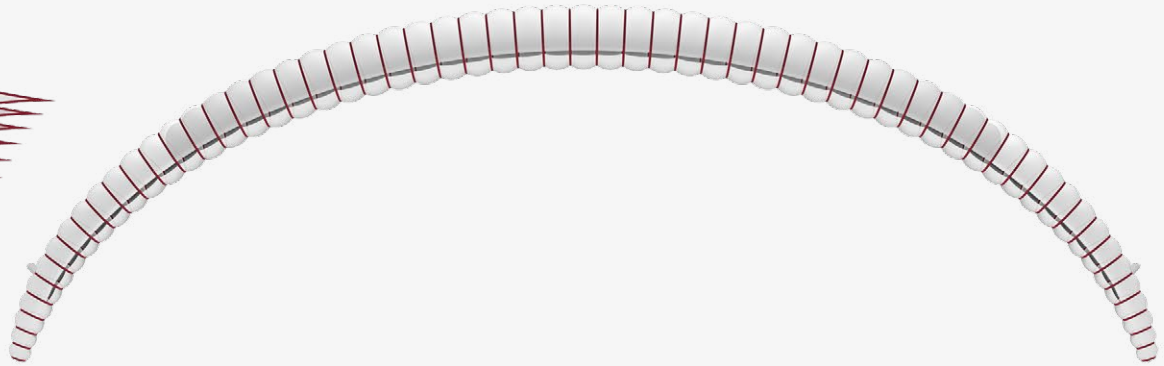
# Perfect Positioning

For pilot requirement the Performance-Intermediate IOTA 2 fits exactly between the Basic-Intermediate EPSILON 8 and the SIGMA 10 EN-C Sportster. The SIGMA 10 moves up to the true centre of the C class, leaving some more space for the IOTA 2 in the ADVANCE palette. The distribution of our different paraglider models is now more progressive and consistent; ideally spread across the skill levels asked of their pilots.



# Invisible essentials

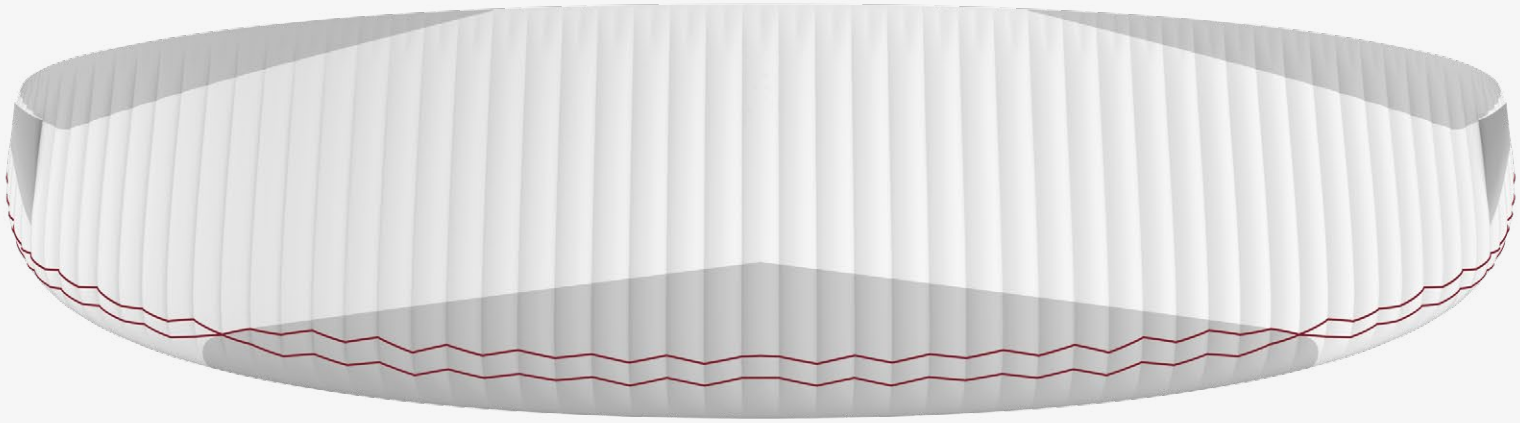




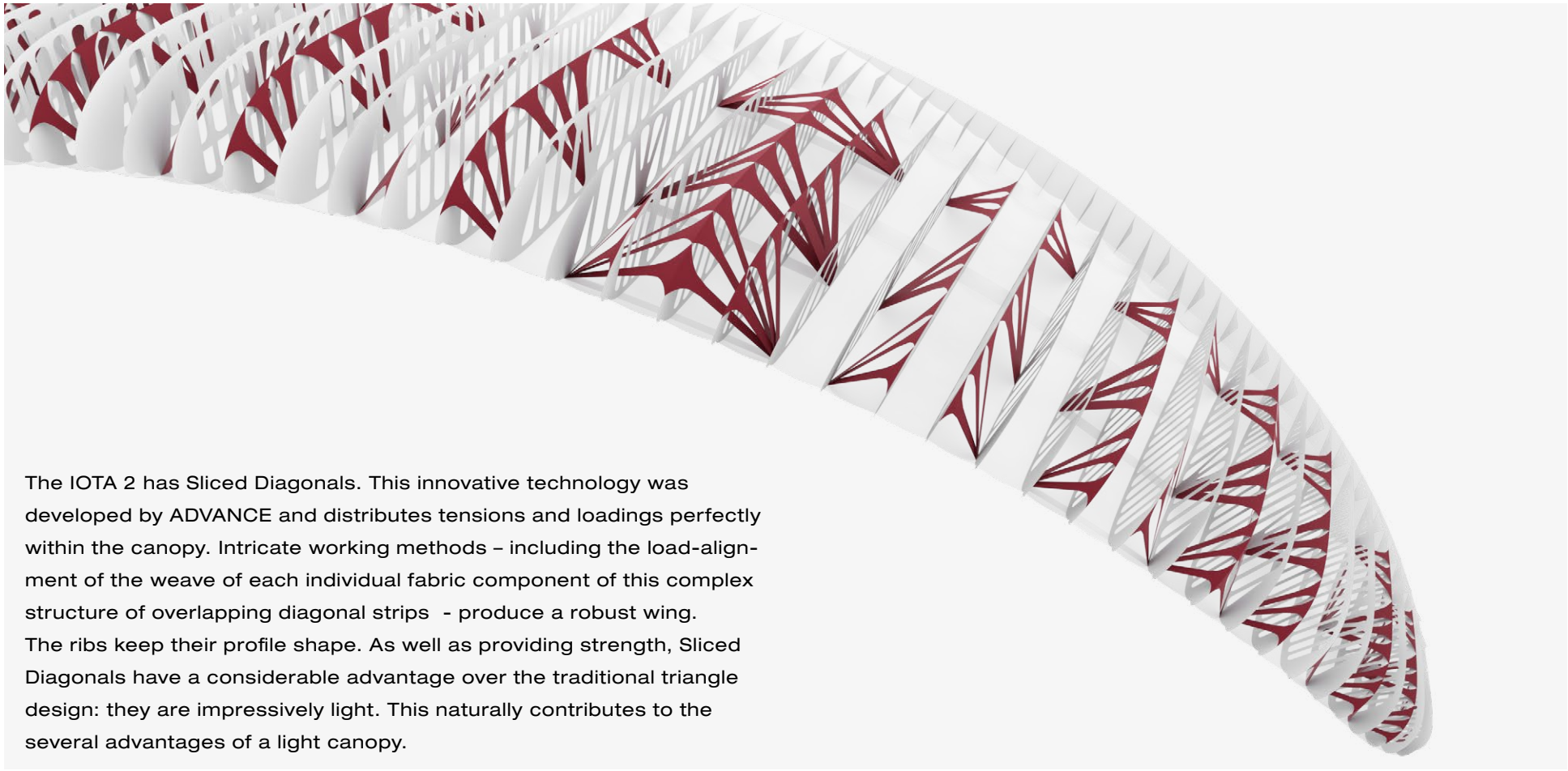
Even if you include the new curvature, the IOTA 2 hardly looks any different from the first IOTA. But the handling and performance are markedly better. How can this be? Primarily, some invisible properties, such as profile and wing tensioning, have been fundamentally reworked. Like the OMEGA XALPS 2, understandings and knowledge from SIGMA 10 profile development are included in the IOTA 2. This results in especially good pitch and directional stability, which makes the IOTA 2 very comfortable in turbulence, while retaining its high performance in these conditions.

# Double 3D-Diamond-Shaping

In the IOTA 2 we've used Double 3D Diamond Shaping. By including a diagonal term (= "Diamond") in the 3D Shaping process, seam-bunching (ruching) is not only countered by horizontal aerodynamic forces, but is also minimised by vertical loads across the profiles. The result is an even smoother wing surface in the aerodynamically sensitive leading edge region.

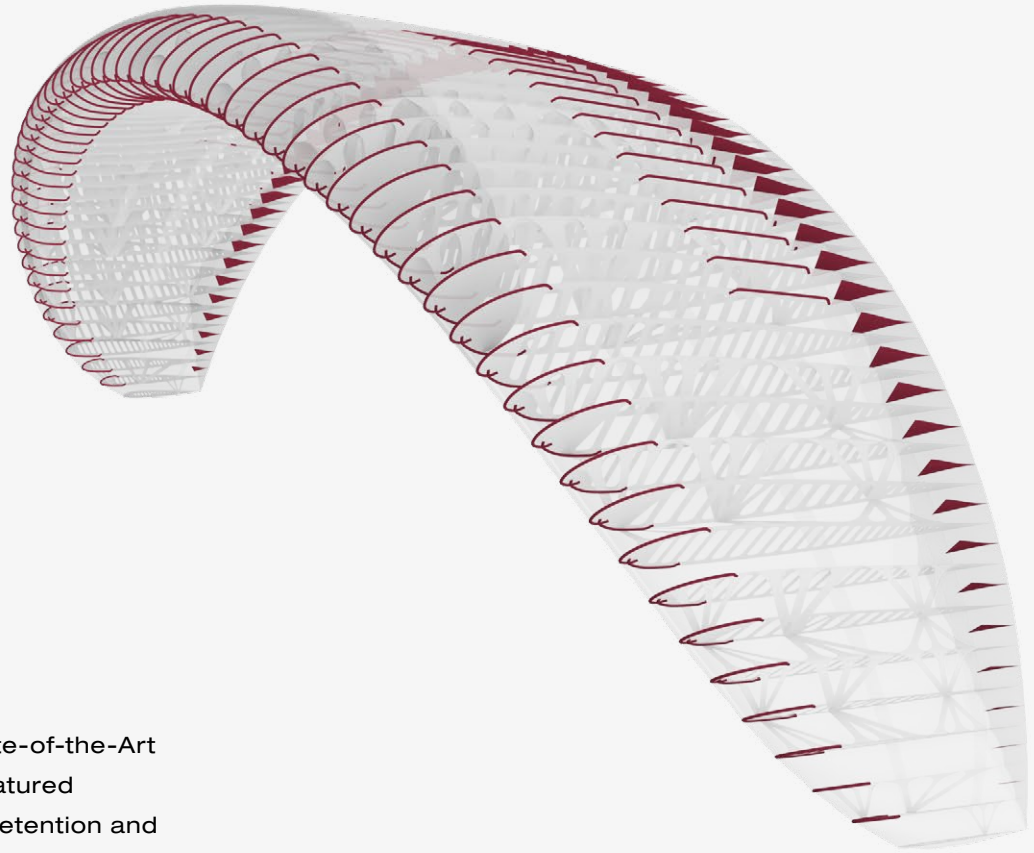


# Complex Sliced Diagonal Structure



The IOTA 2 has Sliced Diagonals. This innovative technology was developed by ADVANCE and distributes tensions and loadings perfectly within the canopy. Intricate working methods – including the load-alignment of the weave of each individual fabric component of this complex structure of overlapping diagonal strips  - produce a robust wing.
The ribs keep their profile shape. As well as providing strength, Sliced Diagonals have a considerable advantage over the traditional triangle design: they are impressively light. This naturally contributes to the several advantages of a light canopy.

# State-of-the-Art Technology



The IOTA 2 contains the latest performance-boosting State-of-the-Art technologies such as the Advanced Air Scoop for good natured stall characteristics, C-Wires for maximum profile shape retention and Miniribs for a smooth training edge.

# Pitch Control Handles (C-Handles)

The IOTA 2 was designed with a modern Pitch-Control-System in mind, which is usually found on higher classification paragliders. These C-Handles not only pull down the C level, but partially the Bs as well. This provides steering control without deforming the canopy – especially in accelerated flight – so that performance is not degraded by this control activity.

# Easy-going speed system

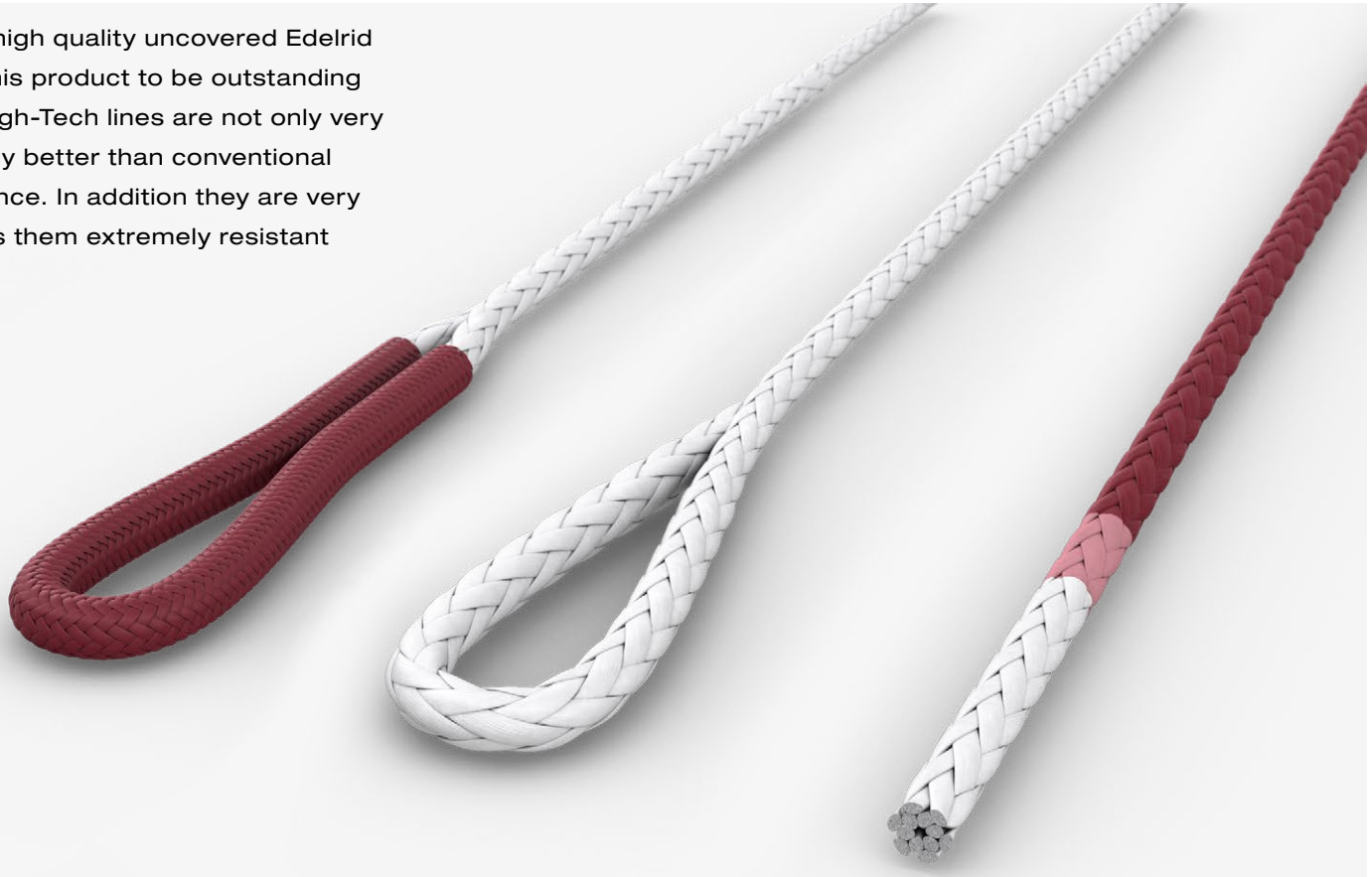
The two ratio speed system allows IOTA 2 pilots to adjust speed system travel and load to suit their own requirements. The changeover point of the easy-to-push 3:1 gear ratio to a more direct 2:1 result can be ideally set for personal leg length and extension angle. In combination with high quality Ronstan ball bearing and Harken pulleys long sessions of accelerated transits are possible without inconvenient effort.

# Speed Performance Indicator (SPI)

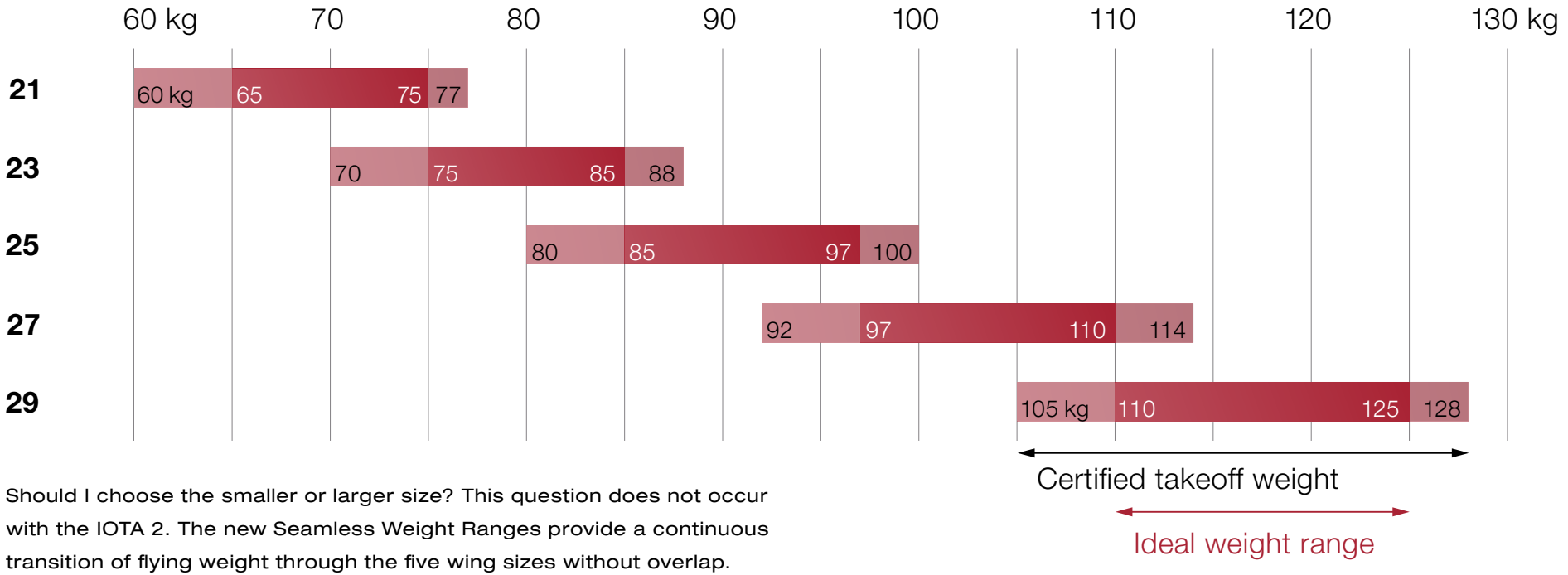
During flight the SPI provides a broad brush indication of the speed system position relative to the wing's polar curve. Above all it makes it easier to choose the best accelerated speed-to-fly relative to headwind and sinking air. It also helps the pilot in an initial setting up of his harness speed lines with the IOTA 2.

# Edelrid Magix-Pro Lines

Like its predecessor the IOTA 2 also has high quality uncovered Edelrid Magix-Pro lines. Our experience shows this product to be outstanding in terms of handling and longevity. The High-Tech lines are not only very resistant to stretching, but are significantly better than conventional covered lines for strength and kink tolerance. In addition they are very easy care and their double coating makes them extremely resistant to external degradation.

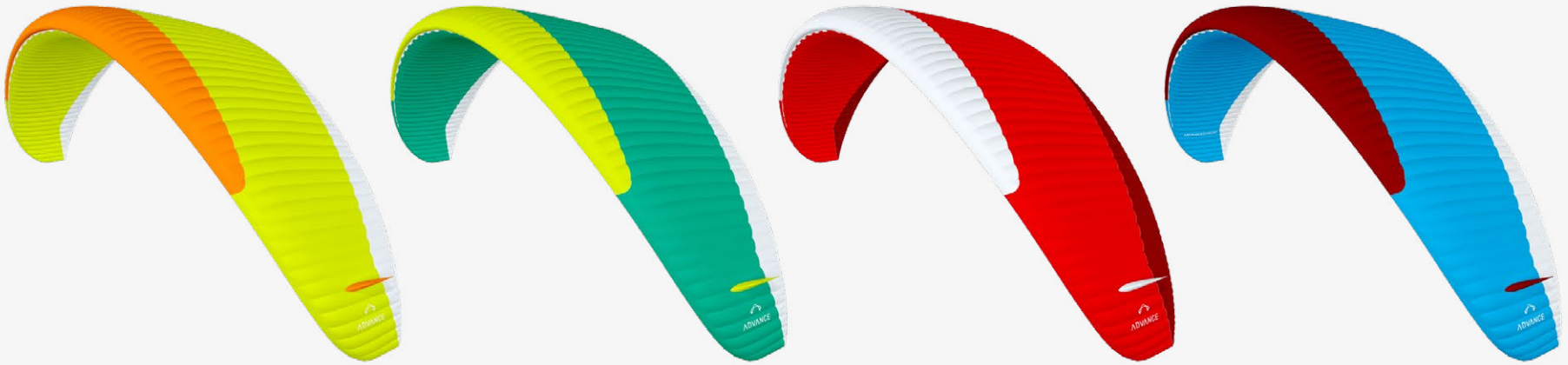


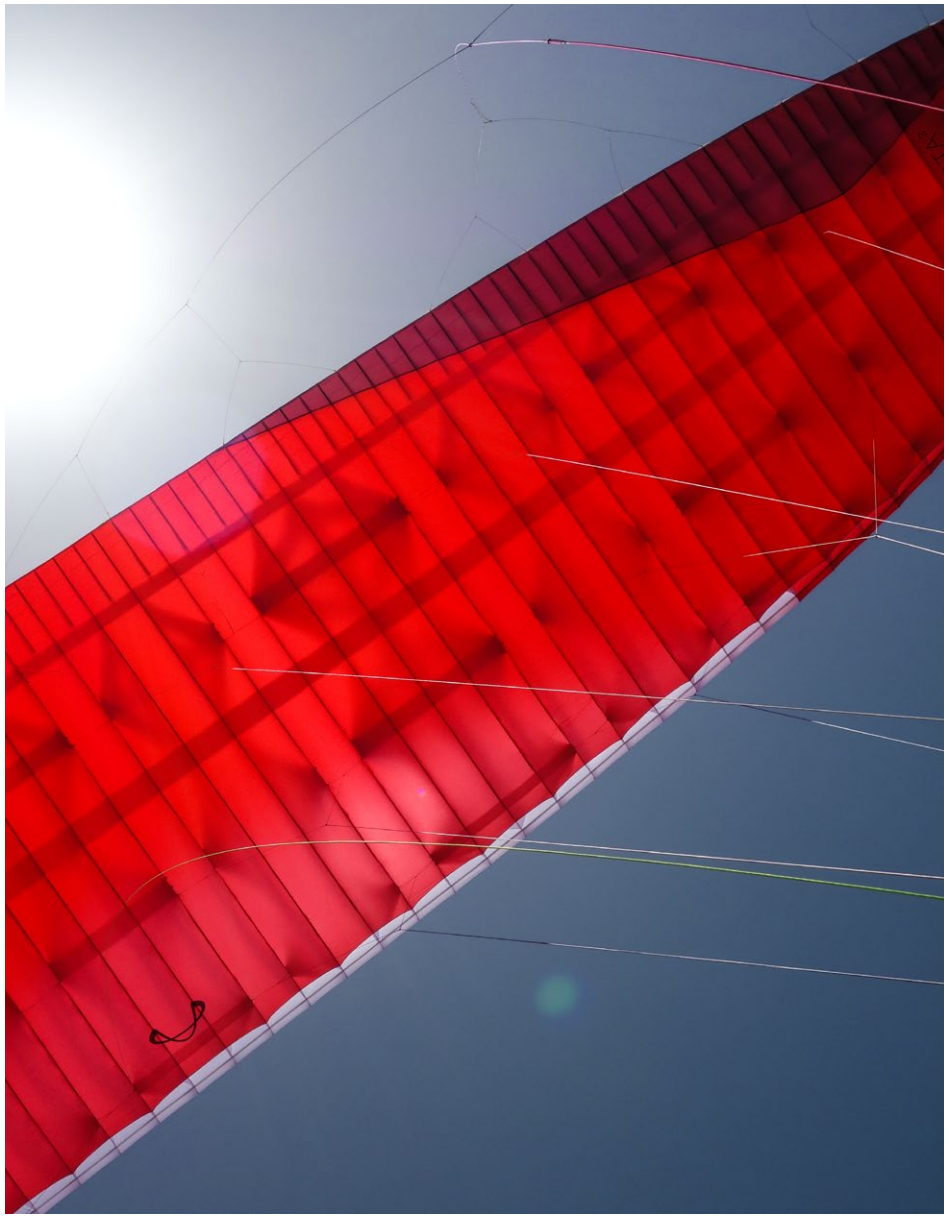
# 5 sizes with Seamless Weight Ranges




Should I choose the smaller or larger size? This question does not occur with the IOTA 2. The new Seamless Weight Ranges provide a continuous transition of flying weight through the five wing sizes without overlap. Within these ideal all-up weight ranges the IOTA 2 will provide an optimal balance of climb performance and flying speed for all typical flying conditions.

# Colours



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# Technical details

| IOTA 2 | | 21 | 23 | 25 | 27 | 29 |
|---|---|---|---|---|---|---|
| **Flat surface** | $m^2$ | 21.8 | 23.7 | 25.7 | 27.7 | 29.7 |
| **Projected surface** | $m^2$ | 18.8 | 20.4 | 22.2 | 23.9 | 25.6 |
| **Certified takeoff weight** | kg | 60–77 | 70–88 | 80–100 | 92–114 | 105–128 |
| **Ideal weight range** | | 65–75 | 75–85 | 85–97 | 97–110 | 110–125 |
| **Glider weight** | kg | 4.40 | 4.65 | 4.85 | 5.15 | 5.40 |
| **Aspect ratio** | | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 |
| **Number of cells** | | 59 | 59 | 59 | 59 | 59 |
| **Number of risers** | | 3+1 | 3+1 | 3+1 | 3+1 | 3+1 |
| **Certification** | | EN/LTF B | EN/LTF B | EN/LTF B | EN/LTF B | EN/LTF B |

# Materials

## Fabric

**Leading edge**
Skytex 38, 9017 E25

**Upper surface**
Skytex 32 Universal 70032 E3W

**Lower surface**
Skytex 32 Universal 70032 E3W

**Supported ribs**
Skytex 40 hard finish 9017 E29

**Unsupported ribs**
Skytex 40 hard finish 9017 E29

## Lines: Edelrid / Liros

**Main lines**
A-8000U-230 / 190 / 130 / 090: uncovered

**Suspension lines**
A-8000U-130 / 090 / 070 / 050: uncovered

**Steering lines**
A-7850-240: covered
A-8000U-190: uncovered

**Brake lines**
A-8000U-070 / 050: uncovered


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# Efficient Performance

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