ENZO 3

Pilots Manual


ENZO 3

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THANK YOU

Thank you for choosing to fly Ozone. As a team of free flying enthusiasts, competitors and adventurers, Ozone's mission is to build agile paragliders of the highest quality with cutting edge designs, performance and maximum security.

Confidence and belief in your paraglider is a far greater asset than any small gains in performance - ask any of the Ozone pilots on your local hills, or those who have taken our gliders on ground-breaking adventures or stood on podiums around the world. All our research and development is concentrated on creating the best handling/performance characteristics possible with optimum security. Our development team is based in the south of France. This area - which includes the sites of Gourdon, Monaco and Col de Bleyne - guarantees us more than 300 flyable days per year, this is a great asset in the development of the Ozone range.

As pilots we fully understand just how big an investment a new paraglider is. We know that quality and value for money are essential considerations when choosing a new wing, so to keep costs low and quality high we manufacture all of our products in our own production facility. During production our wings undergo numerous rigorous quality control checks that are fully traceable, this way we can guarantee that all of our paragliders meet the same high standards.

It is essential that you read this manual before flying your wing for the first time. The manual will help you get the most out of your new wing, it details information about the design, tips and advice on how best to use it and how to care for your wing to ensure it has a long life and retains a high resale value. For the latest updates, including all technical data please refer to the online version. This can be found on the product's page on at www.flyozone.com

If you need any further information about any of our products please check flyozone.com or contact your local dealer, school or any of us here at Ozone.

Safe Flying!
Team Ozone

WARNING

- Paragliding is a potentially dangerous sport that can cause serious injury including bodily harm, paralysis and death. Flying an Ozone paraglider is undertaken with the full knowledge that paragliding involves such risks.
- As the owner of an Ozone paraglider you take exclusive responsibility for all risks associated with its use. Inappropriate use and or abuse of your equipment will increase these risks.
- Any liability claims resulting from use of this product towards the manufacturer, distributor or dealers are excluded.
- Be prepared to practice as much as you can - especially ground handling, as this is a critical aspect of paragliding. Poor control while on the ground is one of the most common causes of accidents.
- Be ready to continue your learning by attending advanced courses to follow the evolution of our sport, as techniques and materials keep improving.
- Use only certified paragliders, harnesses with protector and reserve parachutes that are free from modification, and use them only within their certified weight ranges. Please remember that flying a glider outside its certified configuration may jeopardise any insurance (e.g. liability, life etc) you have. It is your responsibility as the pilot to verify your insurance cover.
- Make sure you complete a thorough daily and preflight inspection of all of your equipment. Never attempt flying with unsuitable or damaged equipment.
- Always wear a helmet, gloves and boots.
- All pilots should have the appropriate level of license for their respective country and third party insurance.
- Make sure that you are physically and mentally healthy before flying.
- Choose the correct wing, harness and conditions for your level of experience.
- Pay special attention to the terrain you will be flying and the weather conditions before you launch. If you are unsure do not fly, and always add a large safety margin to all your decisions.
- NEVER fly your glider in rain, snow, strong wind, turbulent weather conditions or clouds.
- If you use good, safe judgment you will enjoy many years of paragliding.

Remember, PLEASURE is the reason for our sport

TEAM OZONE

Everyone at Ozone continues to be driven by our passion for flying, our love of adventure and our quest to see Ozone's paraglider development create better, safer and more versatile paragliders.

The design team consists of David Dagault, Luc Armant, Fred Pieri, Russell Ogden, and Honorin Hamard.

Dav has a wealth of experience in competition flying, XC, XAlps and paraglider design. Luc, a dedicated XC and competition addict has a background in naval architecture. Fred, our resident geek is a mathematician, mechanical engineer and vol Biv specialist. Russ is a competition pilot and test pilot with 1000s of hours testing experience. Hono has been flying since he was 13, he is a naturally talented pilot that has already become world champion. Between them, they bring a wealth of knowledge, ideas and experience and work closely together in the design and testing process.

Mike Cavanagh is the boss and multiple winner of the UK XC league. When he's not out flying he generally keeps control of the mayhem. Promotion and team pilots are organised by BASE jumping legend and mini wing specialist Matt Gerdes. He works closely with graphic designer Loren Cox. Loren is a keen pilot from Salt Lake city, USA.

Back in the office Karine Marconi, Chloe Vila and Isabelle Martinez run the show. These wonderful ladies look after the ordering system, the dealers, the design team and the general day to day running of the company - without them it would be chaos.

Our manufacturing facility in Vietnam is headed up by Dr Dave Pilkington who works relentlessly manufacturing gliders and producing prototypes as well as researching materials and manufacturing processes for our future products. He is backed up by a superb team managed by Khanh and Phong with over 700 production staff.

YOUR ENZO 3

The latest edition of the most successful competition wing in the history of paragliding brings a new level of glide performance to the world's best pilots. The Enzo 3's next generation profile has evolved over two years of R&D. It offers improved solidity, spanwise cohesion, comfort, glide performance, and a significantly higher top speed compared to the Enzo 2.

The Enzo 3 retains many features of its predecessor, including the cell count, planform, and patented OZONE SharkNose concept but with an updated ultra-low-drag line plan. Most of all, our philosophy of True Performance remains a core tenet of this wing. Its performance in active air impressed the OZONE R&D Team during development; throughout the process of testing in the Southern Alps, and auditing competitions, the Enzo 3 has proven to be a significant step forward from the Enzo 2.

A blend of standard and light cloths optimise performance and durability. A 30D leading edge section is backed by the extensive use of Porcher 27g cloth. This combination now has several years of proven performance both in terms of longevity and sail characteristics.

The Enzo 3 is certified CCC and available in 6 sizes suitable for flying weights from 80kgs to 130kgs. It is a high performance wing designed for the world's best pilots and, like the Enzo 2, requires a high level of piloting skills. If you are unsure, then we recommend the Zeno.

Rucksack

Your wing is supplied with a specially designed bag that is light in weight and comfortable. It features a padded hip belt, adjustable ergonomic shoulder straps and extra pockets to store keys, accessories and all those extra bits. Its large volume allows you to store all of your equipment whilst distributing the weight for comfortable hiking.

Brake Lines

The brake line lengths have been set carefully during testing. We feel it is better to have slightly long brake lines and to fly with a wrap (one turn of line around the hand). However, if you do choose to adjust their length please keep in mind the following:

- Ensure both main brake lines are of equal length.
- If a brake handle has been removed, check that its line is routed through the pulley when it is replaced.
- When the brakes are fully released in flight, the brake lines should be slack. There must be a substantial bow in them to guarantee no deformation of the trailing edge when accelerated.
- There must be a minimum of 10cm of free play before the brakes begin to deform the trailing edge. This prevents the trailing edge from being deformed when using the speed system.

Risers

The Enzo 3 has been designed with 2 risers per side. The A riser is covered with coloured webbing, to allow for easy identification.

The A risers are split into two, the smaller riser - holding only the outermost A line - is the 'Baby A' and has been designed this way to make applying big ears simple.

They also feature ergonomic wooden handles for comfortable B riser control and A-B limiters set to 140mm as defined in CCC 2016 revision 1.

The risers do not feature trimmers.

IMPORTANT
In the unlikely event of a brake line snapping in flight, or a handle becoming detached, the glider can be flown by gently pulling the rear risers (B-risers) for directional control.

Total Weight in flight

Each size has been CCC certified with a defined maximum weight and a recommended minimum weight. We strongly recommend that you respect these weight ranges. If you want better speed, precise handling, and generally fly in mountains and/or in strong conditions, you should chose to fly in the middle to top part of the weight range. If you want a better sink rate, or if you generally fly in flat lands and/or in weak conditions, you should choose to fly nearer the middle part of the weight range. Remember, you can always add ballast when conditions are stronger.

For competition flying it is generally better to be in the upper part of the weight range.

Limitations

The Enzo 3 has been designed as a high performance solo XC/competition wing and is for experienced world class pilots only. It is not suitable for beginner or intermediate pilots, aerobatics, training or tandem flights. The Enzo 3 has the potential to for aggressive behaviour in demanding situations, to be flown safely it requires a very high level of piloting skills. Pilots are expected to have an in-depth knowledge of SIV with recent, direct experience of high aspect ratio wings. We also expect the pilot to have the necessary active flying skills and quick reaction times to keep a high aspect ratio wing open in turbulent air.

The Enzo 3 was certified with the use of collapse lines and therefore collapses should not be induced without them. We strongly recommend expert tuition over water with all the necessary safety precautions in place. Ensure that you fully understand the correct and safe use of this equipment before attempting SIV.

Towing

The Enzo 3 may be tow-launched. It is the pilot's responsibility to use suitable harness attachments and release mechanisms and to ensure that they are correctly trained on the equipment and system employed. All tow pilots should be qualified to tow, use a qualified tow operator with proper, certified equipment, and make sure all towing regulations are observed. When towing you must be certain that the paraglider is completely over your head before you start. In each case, the maximum tow force needs to correspond to the all up weight of the pilot.

Accelerator System

To set up the accelerator system, first route the lines supplied with the speed system through the harness. Make sure this is done correctly and that the lines pass through all of the pulleys (check your harness manual for instructions). Attach the speed system lines to the accelerator system on the risers with the Brummel hooks. A basic set-up can be performed on the ground: ask a friend to pull the risers tight into their in-flight position whilst you sit in the harness on the ground. Now adjust the lengths of the lines so that the main bar sits just beneath your seat. You should be able to hook your heel in to the lower loop of the accelerator. There must be enough slack in the speed bar to ensure the front risers are not pulled down in normal trim speed flight, but not so long that it is impossible to use the full speed range of the glider. Once set up, test the full range of the accelerator in calm flying conditions and ensure that both risers are pulled evenly during operation. Fine-tuning can be completed when you are back on the ground.

The blue tag on the riser speed system line indicates 10cm of travel, this is the speed at which the wing has been certified. Only push beyond this position when the air is calm and it is safe to do so.

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Harness

It is important to set up your harness correctly before flying the wing. Make sure to spend time adjusting your harness's different settings until you are completely comfortable. Each size has been flight tested in a seated harness with a chest strap width of 45cm. The chest strap should be set between 44cm and 48cm (between the centre of the hang points) according to your taste.

Reserve Parachute

We recommend that you fly your Enzo 3 with two reserve parachutes suitable for your maximum all up flying weight. These parachutes should be accessible with both the left and right hands.

Wing

To prepare the wing, lay it out on the top surface and perform a thorough daily check. You should inspect the top and bottom surfaces for any rips and tears or any other obvious signs of damage. Lay out the lines one side at a time, hold up the risers and starting with the brake lines, pull all lines clear. Repeat with the C (uppers), B and A lines, laying the checked lines on top of the previous set, and making sure no lines are

tangled, knotted or snagged. Mirror the process on the other side and then inspect the lines for any visual damage. Then inspect the risers for any signs of obvious damage.

To familiarise yourself with the glider it is a good idea to perform practice inflations and small flights on a training hill. This will enable you to set up your equipment correctly.

Take-off checklist:

- Check reserve parachute - pin is in and handle secure
- Helmet on and fastened
- All harness buckles closed - double check the leg-loops again
- Karabiners and maillons done up tight
- Holding the A risers and your brake handles correctly without twists
- Leading edge open
- Aligned in the middle of the wing and directly into wind
- Airspace and visibility clear

Launching

Your Enzo 3 will launch with either the forward or reverse technique. The wing should be laid out in a pronounced arc, with the centre of the wing higher than the tips.

Forward Launch – Nil to Light winds

When the wind is favourable, whilst gently holding the central A risers (A1) or better still, just the central A1 line (blue sock) - there is no need to take the A2 risers - move forward positively, your lines should become tight within one or two steps and the Enzo 3 will immediately start to inflate. You should maintain a constant pressure on the risers until the wing is overhead. Do not pull down or push the risers forward excessively, or the leading edge will deform and possibly collapse making taking-off more difficult and potentially dangerous. Move smoothly throughout the entire launch, there is no need to rush or snatch at it. You should have plenty of time to look up and check your canopy before committing yourself. Once the wing comes overhead, it may require a brake input from stopping it overflying you. Once you are happy that the Enzo 3 is inflated correctly, accelerate smoothly off the launch.

IMPORTANT
Never take off with a glider that is not fully inflated or if you are not in control of the pitch/roll of your wing.

Reverse Launch – Light to Strong Winds

Lay out your wing as you would for the forward launch. However, this time turn to face it, passing one entire set of risers over your head as you turn. Now you can inflate the glider with your body weight and the central A1-risers. Once the wing is overhead, release the risers, brake if necessary, turn and launch. In stronger winds, be prepared to take a few steps towards the glider whilst braking as it inflates. This will take some of the energy out of the glider and it will be less likely to overfly you or inadvertently pull you off the ground. The reverse-launch technique can be used in surprisingly light winds too.

Turning

The Enzo 3 is very responsive to inputs. To familiarise yourself with the new wing your first turns should be gradual and progressive, application of too much brake will cause excessive roll and dive in the turn, or may cause a spin. To make efficient and coordinated turns, your first input for directional change should be weight-shift, followed by the smooth application of the brake until the desired bank angle is achieved. To regulate the speed and radius of the turn, coordinate your weight shift and use the outer brake or outer B riser.

IMPORTANT
Always check the airspace is clear before initiating a turn.

Speed System

For better penetration in headwinds and improved glide performance in sinking air, crosswinds or headwinds, you should fly faster than trim speed by using the accelerator system. Using up to half bar does not degrade the glide angle or stability significantly and will improve your flying performance. To accelerate, first make sure that you have no brake applied (remove any wraps from the brakes) and take hold of the B risers, we recommend to use the wooden handles. Apply the speed bar smoothly and progressively to avoid sudden changes of pitch/angle of attack (AofA) and to allow the wing to accelerate efficiently. Maintain pressure on the B risers and use active control with a combination of the speed system and the B risers through turbulent air. Only release pressure from the B risers when the air is smooth.

The blue tag on the riser speed system line indicates 10cm of travel, this is the speed at which the wing has been certified. At full speed the Enzo 3 is fast but has less inherent stability; only use maximum speed in very calm air conditions and always fly actively with the B risers/speed bar.

IMPORTANT
Regulate your speed depending on the local airmass. If it becomes turbulent, release the speed system and fly actively with your brakes or B risers.

Active Flying

To reduce the frequency of collapses in turbulent conditions, it is essential to use active flying. The aim of active flying is to control the pitch and internal pressure of the wing. This can be done with the brakes or the B risers (see below), but in very turbulent air, we recommend to always use the brakes.

In turbulent air, fly with the brakes applied (approx. 20cm), this will give you the necessary feedback which is vital to keep the wing open. It is also important to look at your wing as this gives a direct indication of its internal pressure and likelihood of collapse. Inputs can be symmetric or asymmetric; you may have to apply both brakes or just one to maintain equal pressure across the span/chord of the wing. Avoid flying with continuous amounts of deep brake in rough air as you could inadvertently stall the wing. Always consider your airspeed.

IMPORTANT
No pilot and no glider are immune to collapses, however active flying reduces the tendency to collapse. When the conditions are turbulent, be more active and anticipate the movements of the wing. Always be aware of your altitude and do not over-react.

Active B Riser Control

When gliding at trim speed or in accelerated flight, we recommend to pilot the wing with the B risers. This gives an improved feel and control over the wing enabling you to fly actively without using the brakes (which causes drag and pitch movements). The direct feel allows you to stop collapses before they happen and maintain higher speeds and higher levels of efficiency.

To fly with the B risers, keep hold of your brake handles (remove any wraps) and either rest your hands on or take hold of the wooden handles located on the B risers. Now you have direct control of the AofA; by pulling the B risers down or rearwards you increase the AofA, releasing pressure reduces AofA and returns the wing to trim speed. With B riser control you can fly actively through turbulence, collapses can be stopped or at least reduced with correct inputs due to the sudden increase in AofA. If you feel the nose of the wing lose internal pressure, or you see a crease appear between the A and B line attachment points on the sail you can quickly input the B risers to stop the collapse occurring. The amount of pressure and size of the input is dependent on the amount of turbulence, or loss of pressure, but always avoid long deep inputs to avoid inducing large pitch movements or inadvertent stalls.

IMPORTANT
Whilst accelerated DO NOT use your brakes to fly actively in turbulent air, doing so will actually make the wing more prone to collapse.

During accelerated flight, the added control of active B riser flying further increases the efficiency and stability of the wing. Whilst accelerated the act of pulling the B risers is exactly the same as releasing the speed bar. This translates to direct control of speed, AofA, and internal pressure in your hands. Coupled with active speed bar control, adjustments can be made with the B risers to optimise your speed and internal pressure through turbulence helping you to maintain a higher average speed whilst reducing the likelihood of unexpected collapses. When pushing the bar, if the air becomes slightly turbulent apply some pressure to the B risers, when the air becomes less turbulent again you can reduce (or release) pressure on the B risers for extra speed. Flying fast and efficiently in normal air requires constant attention to the wing, it is necessary to combine B riser inputs and speed bar adjustments to keep the wing open and pressured.

IMPORTANT
Always keep hold of your brakes. Do not fly in turbulent conditions

This control method is suitable for gliding in good ‘normal’ air without huge levels of turbulence, it does not replace proper active flying with the brakes in strong turbulent conditions. If you are unsure about the air return the glider to trim speed, release the B risers and fly the glider actively with the brakes.

Big Ears

To pull big ears, keep hold of your brake handles and take the outermost A-line (AR3) on each side, then pull out and down (preferably one at a time) until the wingtips fold under. The size of the big ears can be adjusted by pulling more line, or reaching higher up the line. Once the big ears are engaged you can further increase the sink rate by using the accelerator system. For directional control while using the Big Ears, use weight shift.

DO NOT perform spiral dives with the Big Ears engaged.

To reopen the ears, release both A lines at the same time. To aid reinflation, brake positively one side at a time until the tips open. Avoid deep symmetric applications of the brake as this could accidently induce a stall.

Whilst it is possible to enter a spiral dive whilst holding in Big Ears, the high forces applied to the lower lines could exceed the breaking strain of the lines leading to equipment failure! We strongly recommend against doing this.

B-Line Stall

Traditional B-line stalls are not possible with the Enzo 3. Pulling the B lines firmly will result in a full stall. Do not do it.

DO NOT perform B line stalls.

Spiral Dives

If you turn your glider in a series of tightening 360's it will enter a spiral dive. This will result in rapid height loss. To initiate a spiral, look and lean in to the direction you want to turn, then smoothly pull down on the inside brake. The Enzo 3 will first turn almost 360 degrees before it drops into the spiral. Once in the spiral you should re-centre your weight shift and apply a little outside brake to keep the outer wing tip pressured and inflated.

Safe descent rates of more than 8m/s (1600 ft/min approx.) are possible in a spiral dive, but due to the long lines of the Enzo 3, very high decent spiral dives with high speeds and G-forces can be very disorientating and could lead to a loss of vision and even black out. Always pay particular attention to your altitude. To exit the spiral dive, move your weight shift to the outside whilst smoothly releasing the inside brake. As the Enzo 3 decelerates allow it to continue to turn until enough energy is lost to return to level flight without an excessive climb and surge.

IMPORTANT
Always be prepared to pilot the wing out of a spiral dive. Use opposite weight shift and apply enough outside brake to stop the wing from spiralling.

Under certain conditions the Enzo 3 may show a tendency to remain stable in a spiral dive, several parameters will influence its behaviour such as: a tight chest strap settings; total weight in flight outside of the certified weight range; or being in a very deep spiral with a very high sink rate >14m/s. You should always be prepared to pilot the wing out of a spiral dive with opposite weight shift and a smooth application of the outside brake, the rotational speed will start to reduce and the glider will start to pull out of the spiral. Recovering from a spiral with hard opposite input will result in an aggressive climb and surge.

Landing

- Always set up for your landing early, give yourself plenty of options and a safe margin for error.
- Once below 30 metres avoid turning tightly as the glider will have to dive to accelerate back to normal flight. If you are at low altitude, or if you hit sink, this could mean you hit the ground harder than necessary. Always land heading into wind!
- Lean forward out of your harness before the actual landing (especially if it's turbulent), with your weight leaning forward against the chest strap.
- Fly hands up trim speed for your final descent until you are around 1 metre above the ground (in windy or turbulent conditions you must fly the glider actively all the way). Apply the brakes slowly and progressively to slow the glider down until groundspeed has been reduced to a minimum and you are able to step onto the ground.
- In light winds/zero wind you need a strong, long and progressive flare to bleed off all your excess ground speed. In strong winds your forward speed is already low so you are flaring only to soften the landing. A strong flare may result in the glider climbing upwards and backwards quickly, leaving you in a vulnerable position.
- Choose the appropriate approach style in function of the landing area and the conditions.
- In strong winds you need to turn towards the glider the second your feet touch the ground. Once facing the wing pull smoothly and symmetrically down on the brakes to stall the wing. If the glider pulls you, run toward it.
- If the wind is very strong, and you feel you might be dragged, or lifted again, stall the glider with the B risers. This stalls the wing in a very quick and controllable way and will drag you less than if you use the brakes.

Deflations

Due to the flexible form of a paraglider, turbulence may cause a portion of the wing to collapse. This can be anything from a small 30% (asymmetric) collapse to a complete (symmetric) collapse.

If you have a collapse, the first thing to do is to control your direction. You should fly away from the ground or obstacles and other pilots. Asymmetric collapses should be controlled by weight shifting away from the collapsed side and applying enough brake to control your direction. This action alone will often be enough for a full recovery of the wing, however if the wing remains closed positive brake input is required on the deflated side to encourage reinflation.

Once a glider is deflated it is effectively a smaller wing, so the wing loading and stall speed are higher. This means the glider will spin or stall with less brake input than normal. In your efforts to stop the glider turning towards the collapsed side you must be very careful to not stall the flying side. If you are unable to stop the glider turning without exceeding the stall point then allow the glider to turn whilst you reinflate the collapse.

If you have a deflation which does not spontaneously reinflate, make deep hard inputs on the deflated side. This pumping action should take about 1-2 seconds per pump, pumping too short and fast will not reinflate the wing and pumping too slow might take the glider close to, or beyond, the stall point.

Symmetrical collapses normally reinflate without pilot input, however 15 to 20cm of brake applied quickly and symmetrically will reduce the size if the collapse and speed up the recovery process. After a symmetric collapse always consider your airspeed. Make sure the glider is not in parachutal stall before making any further inputs.

If the wing collapses in accelerated flight, immediately release the accelerator and manage the collapse using the same methods described above.

IMPORTANT

A bad preparation on launch, aerobatic flying, flying a wing of too high a level or in conditions too strong for your ability are the main causes of cravats.

Cravats

If the tip of your wing gets stuck in the lines, this is called a cravat. Due to the large amount of drag, cravats can turn your wing into a spiral dive very quickly, this can be disorientating and difficult to control if allowed to develop. To recover from a cravat immediately anticipate the movement of the wing, first stabilise the direction of your wing with outside brake and weight shift. Once you have control of the rotation and sink rate apply strong deep pumps of the brake on the cravated side whilst weight shifting away from the cravated side. It is important to lean away from the cravat otherwise you risk spinning or deepening the spiral. The aim is to empty the air out of the wing tip whilst it is unloaded. Correctly done, this action will clear the cravat. Smaller wing tip cravats can be cleared by pulling the stabilo line but it is normally more efficient to clear them with a deep hard input.

If it is a very large cravat and the above options have not worked then a stabilised parachutal or full stall are other options. This should not be attempted unless you know what you are doing and have a large amount of altitude. Remember if the rotation is accelerating and you are unable to stabilise the wing or control the decent rate, you should throw your reserve parachute whilst you still have enough altitude.

Deep Stall / Parachutal Stall

It is possible for gliders to enter a state of parachutal stall. This can be caused by several situations including; flying too slowly; too much B riser input; flying the glider when wet; or after a front/symmetric deflation. The glider often looks as though it has recovered properly but carries on descending vertically without full forward motion. This situation is called ‘deep stall’ or ‘parachutal stall’.

Your first reaction should be to fully raise both hands. This normally allows the glider to return to normal flight but If nothing happens after a few seconds, apply the speed bar to encourage the wing to regain normal flight. Ensure the glider has returned to normal flight (check your airspeed) before using the brakes again.

Do not fly in rain or when the wing is wet, doing so significantly increases the likelihood of parachutal stalls occurring. To reduce the chance of stalling in rain avoid using deep brake movements or Big Ears. Find a safe area to land and using the speed bar, maintain a good airspeed at all times.

IMPORTANT

Only a few cms of input from your brakes can maintain your wing in the stall. Always fully release your brakes to recover normal flight.

IMPORTANT

NEVER fly in the rain or with a wet glider.

SIV and Collapse lines

The Enzo 3 was tested and certified with the use of collapse lines, therefore if you wish to induce collapses during SIV training collapse lines must first be installed correctly. Ozone would like to remind you that this wing is not designed for learning SIV manoeuvres and should only be attempted under the supervision of an expert instructor, over water and with all the necessary safety precautions in place. If you want to learn how to do SIV then do so on a different wing. Only attempt it with this wing if you have previous SIV experience with a high aspect ratio wing, such as the M6. Ensure that you fully understand the correct and safe use of this equipment before attempting SIV.

Collapse lines must be obtained from a 3rd party service centre and the collapse tabs must be sewn in the correct position on the appropriate profiles. Contact the design team for details.

IMPORTANT

Only attempt SIV with this wing if you have previous SIV experience with a high aspect ratio wing, such as the M6.

CARE AND MAINTENANCE

Packing

To prolong the life of your wing and to keep the plastic reinforcements in the best possible condition it is very important to pack the wing carefully.

Ozone recommends to use the concertina packing method exactly as shown so that all of the cells rest alongside each other and the plastic reinforcements are not unnecessarily bent. It is also good practice to use the supplied foam Folding Pillow, this reduces the angle of the leading edge fold and helps preserve the plastic reinforcements. The folding pillow can be compressed with the strap and carried in your harness. Also, using the Ozone Saucisse pack will help preserve the life of the wing and aid with the speed and ease of packing.

Step 1. Lay the mushroomed wing on the ground or on the Saucisse pack if you are using one. It is best to start from the mushroomed position as this reduces the dragging of the leading edge across the ground.

Step 2. Group leading edge (LE) plastic reinforcements with the A tabs roughly aligned. Make sure the plastic reinforcements lay side by side. Note the glider is NOT folded in half; it is folded as a complete concertina from wing tip to wing tip.

Step 3. Group together the middle and the trailing edge (TE) of the wing by sorting the concertina folds near the B and C tabs.

Step 4. Once the LE and TE of the wing have been sorted, turn the whole wing on its side.

If using a Saucisse pack go to Step 7.

Step 5. Strap the Folding Pillow below the LE - at the point of the first fold. The pillow reduces the angle of the fold and helps preserve the plastics. Next fold the TE over the LE being careful to not fold with tight angles.

Step 6. Now place the folded wing into the stuff sack.

Step 7. If using a Saucisse, with the wing laid on its side carefully close the zip (or clips) without trapping any material.

Step 8. Turn the Saucisse on its side, lay the foam Folding Pillow in place and make the fold of the LE around it. Use 3 folds.

IMPORTANT: Do NOT lay the wing flat on the ground before packing the glider, this will cause abrasion damage to the top surface as you pull the glider towards the middle. ALWAYS pack from a mushroom or lift the wing off the ground when gathering the wing and grouping the leading edge.

IMPORTANT: Do not fold the glider in the centre, you will bend the plastics, instead pack the wing with a full concertina method from tip to tip before packing into the stuff sac.

Caring Tips

- DO NOT drag your wing along the ground to another take-off position - this damages the sailcloth. Lift it up and carry it.
- DO NOT try to open your wing in strong winds without untangling the lines first - this puts unnecessary strain on the lines.
- DO NOT walk on the wing or lines.
- DO NOT repeatedly inflate the glider and then allow it to crash back down. Try to keep this movement as smooth as possible by moving towards the glider as it comes down.
- DO NOT slam your glider down on the ground leading edge first! This impact puts great strain on the wing and stitching and can even explode cells.
- FLYING in salty air, in areas with abrasive surfaces (sand, rocks etc.) and ground handling in strong winds will accelerate the aging process.
- DO NOT fly in the rain or expose the wing to moisture. We recommend that all pilots take measures to keep their equipment as dry as possible. We do not recommend intentional water landings or laying out wings on wet launches. Thoroughly wetting the glider fabric may cause colour change, dye transfer, a reduction in longevity, and possibly change the dimensions of the fabric.
- DO NOT expose the wing to unnecessary UV. Pack away once you have finished flying. Do not leave it sitting in the sun.
- If you fly with a wrap, you should regularly undo the twisting that appears on the main brake lines. By twisting the line become shorter and you can end up with a constant tension on the trailing edge (which can lead to problem on launch, stalling, glider not flying symmetrically, ...)
- Be careful when groundhandling to not saw the brake lines against the risers or main lines. The abrasion caused by a sawing motion can damage the main lines and lead to premature ageing of the risers. If you notice any signs of abrasion, especially to the lines, make sure you get the wing professionally serviced and importantly modify your groundhandling technique to stop any further damage.
- Your Ozone wing has an opening closed using Velcro on the trailing edge of the tip called the ‘Butt hole’. This has been designed to easily empty all the things which have been accumulating in your wing (sand, leaves, rocks, mobile phones etc).
- It is recommended that you regularly CHECK your wing, especially after a heavy period of use, after an incident or after a long period of storage.

Storage and Transport

Always store all your flying equipment in a cool, dry room protected from direct heat and sunlight. Your wing must be completely dry before being packed away, moisture, heat and humidity are the worst elements for damaging the materials and plastics. Never store a damp glider in the car under direct sunlight for example.

If you land in salt water, you must first rinse it thoroughly with clean fresh water. Dry the wing completely, out of the sun, in the wind. Never use a hair dryer or expose a wet wing to direct sunlight.

Take care that no insects get packed away with the wing. They may eat the cloth and make holes in a bid to escape. They can also leave acidic deposits if they die and decompose.

Transport the wing in the supplied bags and keep away from oils, paints, chemicals, detergents etc.

IMPORTANT
Never pack away or store your glider wet.

IMPORTANT
Never leave your glider in a hot place.

Cleaning

Any kind of wiping/scratching can damage the coating of the cloth. We recommend to not clean the wing, but if you do have to, use a soft cloth dampened with a small amount of water and use gentle movements little by little across the surface.

IMPORTANT
Never use detergent or chemical cleaners.

Wing Repairs

Always let a registered dealer, professional repair centre or the manufacturer carry out any major or complex repairs, especially those near seam margins.

If you damage the sail:
If the rip is small and in the middle of a panel however you can fix it yourself. You’ll find all the materials in the repair kit you need. The fabric can be simply mended with the sticky rip stop/spinnaker tape. When cutting out the patches allow ample overlap of the tear and make sure both sides are different sizes. Make sure to round off each corner of the patches.

You can find more information about repairing your wing on the Ozone website, including step by step instructions with pictures.

If you damage a line:
Any line that is visually damaged MUST be replaced immediately. Do not fly with damaged lines. Replacement lines can be ordered them from your local Ozone dealer or directly from our website http://www.flyozone.com/paragliders/en/shop/lines.php. Alternatively, use a reputable paragliding service centre to make the replacement lines.

It is important that replacement lines are made from the correct materials and diameters. You should check lengths against their counterpart on the other side of the wing to make ensure symmetry. In fact it is wise to always replace both sides to ensure symmetry. Once the lines have been replaced, inflate and carefully check the wing before flying.

Maintenance Checks

Your wing, like a car, should be technically checked to ensure proper airworthiness. Your wing should be checked by a qualified professional for the first time after 24 months, or after 100 hours. However, if you are a frequent flyer (more than 100 hrs per year), then we recommend, that you get your glider checked annually. The checker should inform you about the condition of your glider and if some parts will need to be checked or changed before the next normal service check period.

The sail and the lines do not age in the same way or at the same rate; it is possible that you may have to change part or all of the lines during the wing's life. For this reason it is important to do regular inspections so that you know the exact condition of all of the components of your glider. We recommend that inspections are carried out by a qualified professional.

You alone are responsible for your flying kit and your safety depends on it. Take care of your equipment and have it regularly inspected. Changes in inflation/groundhandling/flying behaviour indicates the gliders aging, if you notice any changes you should have the wing checked before flying again. These are the basic elements of the check up (full details and permissible figures can be found on our website):
Porosity is measured with a porosity meter, the time taken by a certain volume of air to go through a certain surface of the cloth. The time in seconds is the result. A measurement is done in a several places on the top surface along the span of the glider behind the leading edge.

IMPORTANT
Take care of your glider and make sure you have it checked and serviced according to the schedule.

The tearing resistance of the cloth - A non-destructive test following the TS-108 standard which specifies minimum tear strength for sky diving canopies should be made using a Bettsometer. (B.M.A.A. Approved Patent No. GB 2270768 Clive Betts Sails).

Strength of the lines - An upper, middle and lower A line, along with a lower B line should be tested for strength. Each line is tested to breaking point and the value recorded. The minimum value is 14 G for all A+B lines, calculated from the maximum certified flying weight of the glider. The added minimum strength for the middle lines and for the top lines should be the same. If the breaking strength is too close to the minimum value calculated, the professional should give a period after which you will have to test the strength of the lines again.

Lengths of the lines - The overall length (riser lines + mid lines + upper lines) has to be checked under 5Kgs of tension. The difference between the measured length and the original length should not exceed +/- 10mm. The changes that could appear are a slight shrink on the B's and/or a slight stretch on the A's. The consequences of these changes can include a slower trim speed, difficult inflation etc.

Risers - Visual inspection for signs of wear or abrasion. Differences to manual lengths should not exceed +/-5mm.

Canopy check - A full visual check should be carried out: All the components of the wing (stitching, ribs, diagonals, lines, tabs, ...) should be checked for signs of deterioration.

Finally, a **flight test** to confirm that the wing behaves normally should be carried out by a professional.

Modifications

Your Ozone Enzo 3 has been carefully designed and trimmed to give the optimum balance of performance, handling and safety. Any modification results in the glider losing its certification and will also make the wing more difficult and dangerous to fly. For these reasons, we strongly recommend that you do not modify your glider in any way.

OZONE QUALITY GUARANTEE

At Ozone we take the quality of our products very seriously, all our gliders are made to the highest standards in our own manufacturing facility. Every glider manufactured goes through a stringent series of quality control procedures and all the components used to build your glider are traceable. We always welcome customer feedback and are committed to customer service. Ozone guarantees all of its products against manufacturer's defects or faults. Ozone will repair or replace any defective product free of charge. Ozone and its distributors provide the highest quality service and repair, any damage to products due to wear and tear will be repaired at a reasonable charge.

If you are unable to contact your dealer then you can contact us directly at info@flyozone.com.

Summary

Safety is paramount in our sport. To be safe, we must be trained, practised and alert to the dangers around us. To achieve this we must fly as regularly as we can, ground handle as much as possible and take a continuous interest in the weather. If you are lacking in any of these areas you will be exposing yourself to more danger than is necessary.

Every year many pilots get hurt launching; don't be one of them. Launching is the time that you are most exposed to danger so practice it lots. Some launch sites are small and difficult and conditions aren't always perfect. If you're good at ground handling you'll be able to confidently and safely launch whilst others struggle...practice as much as you can. You'll be less likely to get hurt and more likely to have a great day's flying.

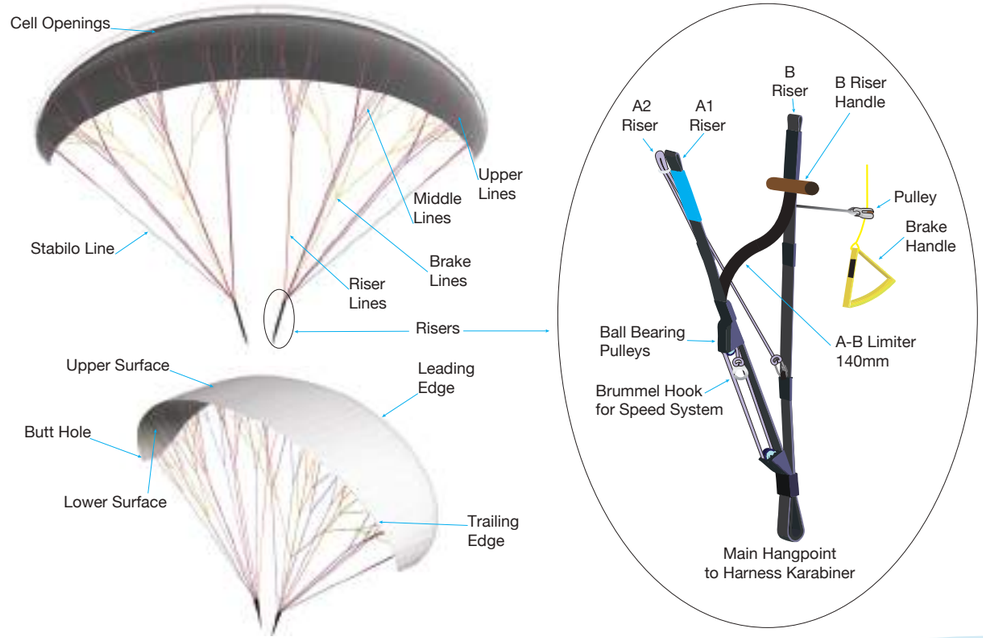
Respect the environment and look after your flying sites.

If you need to dispose the wing, do so in an environmentally responsible manner. Do not dispose of it with the normal household waste.

Finally, RESPECT the weather, it has more power than you can ever imagine. Understand what conditions are right for your level of flying and stay within that window.

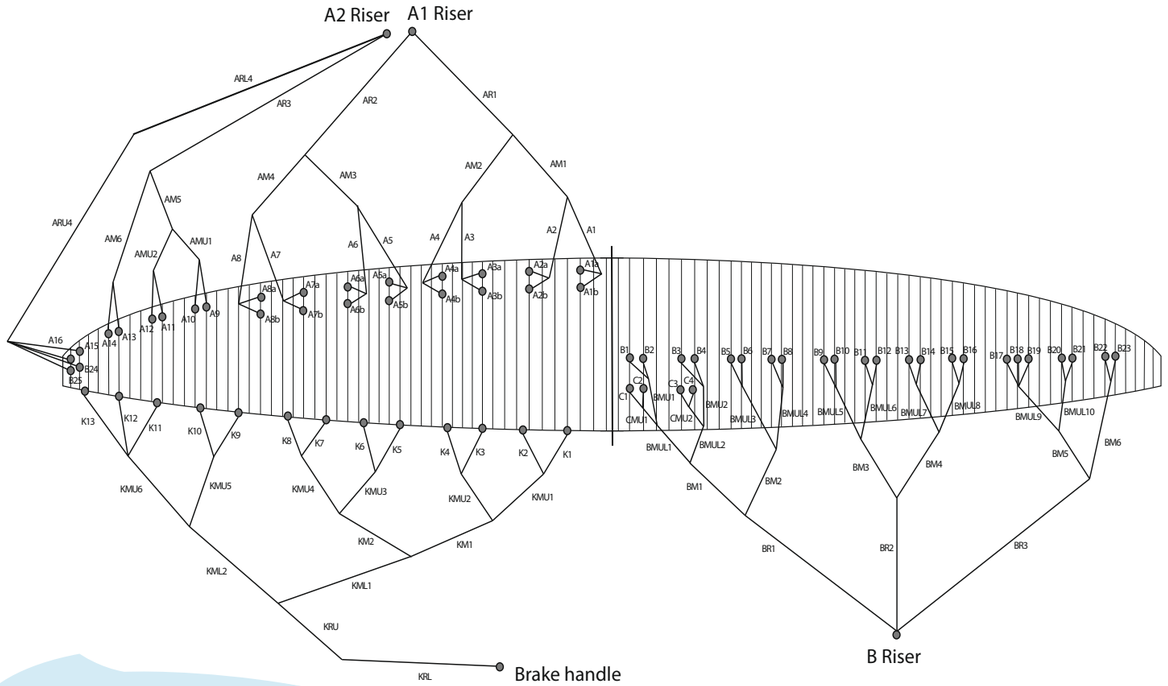
Happy flying & enjoy your Enzo 3.
Team Ozone

DESCRIPTIVE DRAWINGS



LINE DIAGRAM

Individual and linked line lengths can be found online.



MATERIALS

All Ozone gliders are made from the highest quality materials available.

Cloth

Upper Surface
Dominico DOKDO 30D MF / Porcher 7000 E71
Lower Surface
Porcher 7000 E71
Internal Ribs
Porcher 9017 E29 / Porcher 7000 E91
PLastic Reinforcements
2.5/1.8/1.4/1.0mm Plastic pipe

Main Line Set

Riser Lines
Edelrid 8000U 360/190/130/050kg - Liros DSL 140kg
Middle Lines
Edelrid 8000U 190/130/090/070/050/025kg
Upper Lines
Edelrid 8000U 130/090/070/050/025kg

Risers and hardware

Shackles
Maillon Rapide - Pegeut
Riser webbing
12mm zero stretch polyester webbing
Pulleys
Ronstan ball bearing

TECHNICAL SPECIFICATIONS

	XXS	XS	S	M	L	XL
No. of Cells	101	101	101	101	101	101
Projected Area (m2)	16.2	17.2	18.6	20.1	21.7	22.6
Flat Area (m2)	19.1	20.3	22	23.7	25.7	26.7
Projected Span (m)	9.4	9.7	10.1	10.5	10.9	11.1
Flat Span (m)	12	12.4	12.9	13.4	13.9	14.2
Projected Aspect Ratio	5.5	5.5	5.5	5.5	5.5	5.5
Flat Aspect Ratio	7.55	7.55	7.55	7.55	7.55	7.55
Root Chord (m)	2	2.05	2.14	2.22	2.31	2.36
Weight (Kg)	5.13	5.26	5.58	5.92	6.22	6.4
In-Flight Weight Range	80-90	85-95	90-105	95-115	105-125	115-130
Certification	CCC	CCC	CCC	CCC	CCC	CCC

CCC CERTIFICATION

The Enzo 3 has been certified to the CIVL Competition Class (CCC) 2016 revision 1 standard.

The XXS has been independently flight and load tested by Air Turquoise SA at the maximum weight of 90kgs. Subsequent sizes, which have been directly scaled from this XXS have been flight tested and self-certified by Ozone. Certification flight tests for all sizes have been carried out with the use of collapse lines and special risers with limiters set to 100mm, as defined by the norm. The publication of the following documents forms part of the certification.

para-test.com

FAI Category 1 Cross-Country events
2016 Edition | Revision 1 | 01 Febr 2016

ACKNOWLEDGMENT of CONFORMITY

Air Turquoise SA,

Having thoroughly tested in flight and strength following CCC regulations

Manufacturer: OZONE Gliders
Address: 2, Queens Drive
LA48LN
UK

Glider model: Enzo 3 XXS
Evaluation Date: 25.04.2017

S/N: PR3-R37B-032

Conformity number: CCC_018.2017
Place of test: Villeneuve
Classification: FAI CCC

Total weight in flight: maxi 90 kg

Delivery date: 25/04/2017

Alain Zoller
Director
Air Turquoise SA

para-test.com

Enzo3 — CCC Canopy Measurements — 20/04/2017

	Canopy Mesurement on Specimen (mm)								CAD (mm)								Diff CAD vs mesures (mm)								Diff CAD vs mesures (%)
XXS	(Paratest measurements)																								
scale ratio	Span	12022							Span	12011							Span	-11							Span	-0.1%
1.00000	1/2 TE	6130							1/2 TE	6182							1/2 TE	52							1/2 TE	0.8%
chord A	Rib1	1999							Rib1	1995							Rib1	-4							Rib1	-0.2%
Chord B	Rib 22	1732							Rib 22	1727							Rib 22	-5							Rib 22	-0.3%
Aspect Ratio		7.60							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	1995	1913	1892	1712	1633	887	656	Rib 3	1991	1916	1896	1720	1631	886	653	Rib 3	-4	3	4	8	-2	-1	-3	Rib 3	-0.2%
1st fully lined G2	Rib 20	1785	1707	1691	1532	1460	768		Rib 20	1771	1705	1687	1530	1450	772		Rib 20	-14	-2	-4	-2	-10	4		Rib 20	-0.8%
Last lined G3	Rib 46	826	786	786	693		289		Rib 46	824	789	789	696		284		Rib 46	-2	3	3	3		-5		Rib 46	-0.2%
XS	(Ozone measurements)																								
scale ratio	Span	12260							Span	12314							Span	54							Span	0.4%
1.02522	1/2 TE	6302							1/2 TE	6338							1/2 TE	36							1/2 TE	0.6%
chord A	Rib1	2056							Rib1	2046							Rib1	-10							Rib1	-0.5%
Chord B	Rib 22	1779							Rib 22	1771							Rib 22	-8							Rib 22	-0.5%
Aspect Ratio		7.54							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	2048	1968	1950	1758	1668	911	677	Rib 3	2041	1964	1944	1763	1672	908	669	Rib 3	-7	-4	-6	5	4	-3	-8	Rib 3	-0.3%
1st fully lined G2	Rib 20	1825	1751	1739	1566	1479	799		Rib 20	1816	1748	1730	1569	1487	792		Rib 20	-9	-3	-9	3	8	-7		Rib 20	-0.5%
Last lined G3	Rib 46	841	808	808	720		296		Rib 46	845	810	810	714		292		Rib 46	4	2	2	-6		-4		Rib 46	0.5%
S	(Ozone measurements)																								
scale ratio	Span	12815							Span	12876							Span	61							Span	0.5%
1.07211	1/2 TE	6588							1/2 TE	6628							1/2 TE	40							1/2 TE	0.6%
chord A	Rib1	2151							Rib1	2139							Rib1	-12							Rib1	-0.6%
Chord B	Rib 22	1860							Rib 22	1852							Rib 22	-8							Rib 22	-0.4%
Aspect Ratio		7.54							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	2138	2057	2035	1835	1742	955	706	Rib 3	2135	2055	2034	1845	1749	950	700	Rib 3	-3	-2	-1	10	7	-5	-6	Rib 3	-0.1%
1st fully lined G2	Rib 20	1906	1832	1812	1632	1549	836		Rib 20	1899	1828	1809	1641	1555	828		Rib 20	-7	-4	-3	9	6	-8		Rib 20	-0.4%
Last lined G3	Rib 46	880	845	845	747		307		Rib 46	883	846	846	746		305		Rib 46	3	1	1	-1		-2		Rib 46	0.3%
M	(Ozone measurements)																								
scale ratio	Span	13322							Span	13373							Span	51							Span	0.4%
1.11344	1/2 TE	6840							1/2 TE	6884							1/2 TE	44							1/2 TE	0.6%
chord A	Rib1	2237							Rib1	2222							Rib1	-15							Rib1	-0.7%
Chord B	Rib 22	1930							Rib 22	1923							Rib 22	-7							Rib 22	-0.4%
Aspect Ratio		7.55							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	2226	2138	2115	1915	1808	992	734	Rib 3	2217	2134	2112	1915	1816	987	727	Rib 3	-9	-4	-3	0	8	-5	-7	Rib 3	-0.4%
1st fully lined G2	Rib 20	1982	1905	1885	1700	1610	867		Rib 20	1972	1898	1878	1704	1615	860		Rib 20	-10	-7	-7	4	5	-7		Rib 20	-0.5%
Last lined G3	Rib 46	921	882	882	782		321		Rib 46	918	879	879	776		317		Rib 46	-3	-3	-3	-6		-4		Rib 46	-0.3%
L	(Ozone measurements)																								
scale ratio	Span	13864							Span	13906							Span	42							Span	0.3%
1.15782	1/2 TE	7110							1/2 TE	7158							1/2 TE	48							1/2 TE	0.7%
chord A	Rib1	2324							Rib1	2310							Rib1	-14							Rib1	-0.6%
Chord B	Rib 22	2003							Rib 22	2000							Rib 22	-3							Rib 22	-0.2%
Aspect Ratio		7.56							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	2315	2223	2201	1986	1883	1035	764	Rib 3	2305	2219	2196	1992	1888	1026	756	Rib 3	-10	-4	-5	6	5	-9	-8	Rib 3	-0.4%
1st fully lined G2	Rib 20	2060	1984	1963	1769	1676	900		Rib 20	2051	1974	1954	1772	1680	894		Rib 20	-9	-10	-9	3	4	-6		Rib 20	-0.4%
Last lined G3	Rib 46	959	920	920	815		334		Rib 46	954	914	914	806		329		Rib 46	-5	-6	-6	-9		-5		Rib 46	-0.5%
XL	(Ozone measurements)																								
scale ratio	Span	14192							Span	14181							Span	-11							Span	-0.1%
1.18069	1/2 TE	7273							1/2 TE	7299							1/2 TE	26							1/2 TE	0.4%
chord A	Rib1	2373							Rib1	2356							Rib1	-17							Rib1	-0.7%
Chord B	Rib 22	2049							Rib 22	2039							Rib 22	-10							Rib 22	-0.5%
Aspect Ratio		7.57							AR	7.61															
		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		chord	t.inlet	b.inlet	tab Aa	tab Ab	Tab B	tab C		cho	t.inl	b.in	tab	tab	Tab	tab		chord
1st fully lined G1	Rib 3	2361	2270	2246	2033	1934	1057	780	Rib 3	2351	2263	2239	2031	1925	1046	771	Rib 3	-10	-7	-7	-2	-9	-11	-9	Rib 3	-0.4%
1st fully lined G2	Rib 20	2100	2024	2002	1813	1722	920		Rib 20	2091	2013	1992	1807	1713	912		Rib 20	-9	-11	-10	-6	-9	-8		Rib 20	-0.4%
Last lined G3	Rib 46	978	935	935	830		340		Rib 46	973	932	932	822		336		Rib 46	-5	-3	-3	-8		-4		Rib 46	-0.5%

ENZO 3 — CCC Line calculation — 20/04/2017

Enzo3 XXS, XS, S and M

Line	Material	Strength (new) [daN]	Level	Level 1 [daN]	Level 2 [daN]	Level 3 [daN]	Level 4 [daN]	Level 5 [daN]
A1	8000U-130	113.2	3			226.42		
A2	8000U-90	91.6	3			183.24		
A3	8000U-90	91.6	3			183.24		
A4	8000U-130	113.2	3			226.42		
A5	8000U-90	91.6	3			183.24		
A6	8000U-90	91.6	3			183.24		
A7	8000U-70	69.4	3			138.86		
A8	8000U-90	91.6	3			183.24		
A9	8000U-50	55.2	4				110.3	110.3
A10	8000U-50	55.2	4				110.3	110.3
A11	8000U-50	55.2	4				110.3	110.3
A12	8000U-25	24.2	4				48.4	48.4
A13	8000U-25	24.2	3			48.4	48.4	48.4
A14	8000U-25	24.2	3			48.4	48.4	48.4
A15	8000U-25	24.2	2		48.4	48.4	48.4	48.4
A16	8000U-25	24.2	2		48.4	48.4	48.4	48.4
A1a	8000U-90	91.6	4				183.24	183.24
A2a	8000U-70	69.4	4				138.86	138.86
A3a	8000U-70	69.4	4				138.86	138.86
A4a	8000U-90	91.6	4				183.24	183.24
A5a	8000U-90	91.6	4				183.24	183.24
A6a	8000U-70	69.4	4				138.86	138.86
A7a	8000U-50	55.2	4				110.3	110.3
A8a	8000U-50	55.2	4				110.3	110.3
A1b	8000U-90	91.6	4				183.24	183.24
A2b	8000U-70	69.4	4				138.86	138.86
A3b	8000U-70	69.4	4				138.86	138.86
A4b	8000U-90	91.6	4				183.24	183.24
A5b	8000U-70	69.4	4				138.86	138.86
A6b	8000U-70	69.4	4				138.86	138.86
A7b	8000U-50	55.2	4				110.3	110.3
A8b	8000U-50	55.2	4				110.3	110.3
AM1	8000U-190	194.7	2		389.46			
AM2	8000U-190	194.7	2		389.46			
AM3	8000U-190	194.7	2		389.46			
AM4	8000U-130	113.2	2		226.42			
AM5	8000U-130	113.2	2		226.42			
AM6	8000U-50	55.2	2		110.3			
AMU1	8000U-70	69.4	3			138.86		
AMU2	8000U-50	55.2	3			110.3		
AR1	8000U-360	315.5	1	630.94				
AR2	8000U-360	315.5	1	630.94				
AR3	8000U-190	194.7	1	389.46				
ARU4	8000U-50	55.2	1	110.3				
B1	8000U-50	55.2	5					110.3
B2	8000U-50	55.2	5					110.3
B3	8000U-50	55.2	5					110.3
B4	8000U-50	55.2	5					110.3
B5	8000U-50	55.2	4				110.3	110.3
B6	8000U-50	55.2	4				110.3	110.3
B7	8000U-50	55.2	4				110.3	110.3
B8	8000U-50	55.2	4				110.3	110.3
B9	8000U-50	55.2	4				110.3	110.3
B10	8000U-25	24.2	4				48.4	48.4
B11	8000U-25	24.2	4				48.4	48.4
B12	8000U-25	24.2	4				48.4	48.4
B13	8000U-25	24.2	4				48.4	48.4
B14	8000U-25	24.2	4				48.4	48.4
B15	8000U-25	24.2	4				48.4	48.4
B16	8000U-50	55.2	4				110.3	110.3
B17	8000U-25	24.2	4				48.4	48.4
B18	8000U-25	24.2	4				48.4	48.4
B19	8000U-25	24.2	4				48.4	48.4
B20	8000U-25	24.2	4				48.4	48.4
B21	8000U-25	24.2	4				48.4	48.4
B22	8000U-25	24.2	3			48.4	48.4	48.4
B23	8000U-25	24.2	3			48.4	48.4	48.4
B24	8000U-25	24.2	2		48.4	48.4	48.4	48.4
B25	8000U-25	24.2	2		48.4	48.4	48.4	48.4
BM1	8000U-90	91.6	2		183.24			
BM2	8000U-90	91.6	2		183.24			
BM3	8000U-90	91.6	2		183.24			
BM4	8000U-90	91.6	2		183.24			
BM5	8000U-50	55.2	2		110.3			
BM6	8000U-25	24.2	2		48.4			
BMUL1	8000U-50	55.2	3			110.3		
BMU1	8000U-50	55.2	4				110.3	
BMUL2	8000U-50	55.2	3			110.3		
BMU2	8000U-50	55.2	4				110.3	
BMUL3	8000U-50	55.2	3			110.3		
BMUL4	8000U-50	55.2	3			110.3		
BMUL5	8000U-50	55.2	3			110.3		
BMUL6	8000U-50	55.2	3			110.3		
BMUL7	8000U-50	55.2	3			110.3		
BMUL8	8000U-50	55.2	3			110.3		
BMUL9	8000U-50	55.2	3			110.3		
BMUL10	8000U-25	24.2	3			48.4		
BR1	8000U-190	194.7	1	389.46				
BR2	8000U-190	194.7	1	389.46				
BR3	8000U-50	55.2	1	110.3				
C1	8000U-25	24.2	5					48.4
C2	8000U-25	24.2	5					48.4
C3	8000U-25	24.2	5					48.4
C4	8000U-25	24.2	5					48.4
CMU1	8000U-25	24.2	4				48.4	
CMU2	8000U-25	24.2	4				48.4	
			Levels	L1	L2	L3	L4	L5
			Sum contrib. [daN]	2651	2817	3185	4608	4925
			Norm limit [G]	23	> Level1	> Level2	> Level3	> Level 4
			Max weight per level [kg]	117.5	124.8	141.2	204.2	218.3
Enzo3 XXS, XS, S and M				**117.5**	**[kg] Max allowed weight**			

Enzo3 L and XL

Line	Material	Strength (new) [daN]	Level	Level 1 [daN]	Level 2 [daN]	Level 3 [daN]	Level 4 [daN]	Level 5 [daN]
A1	8000U-130	113.2	3			226.42		
A2	8000U-130	113.2	3			226.42		
A3	8000U-130	113.2	3			226.42		
A4	8000U-130	113.2	3			226.42		
A5	8000U-90	91.6	3			183.24		
A6	8000U-90	91.6	3			183.24		
A7	8000U-90	91.6	3			183.24		
A8	8000U-90	91.6	3			183.24		
A9	8000U-50	55.2	4				110.3	110.3
A10	8000U-50	55.2	4				110.3	110.3
A11	8000U-50	55.2	4				110.3	110.3
A12	8000U-25	24.2	4				48.4	48.4
A13	8000U-25	24.2	3			48.4	48.4	48.4
A14	8000U-25	24.2	3			48.4	48.4	48.4
A15	8000U-25	24.2	3		48.4	48.4	48.4	48.4
A16	8000U-25	24.2	3		48.4	48.4	48.4	48.4
A1a	8000U-90	91.6	4				183.24	183.24
A2a	8000U-70	69.4	4				138.86	138.86
A3a	8000U-70	69.4	4				138.86	138.86
A4a	8000U-90	91.6	4				183.24	183.24
A5a	8000U-90	91.6	4				183.24	183.24
A6a	8000U-70	69.4	4				138.86	138.86
A7a	8000U-50	55.2	4				110.3	110.3
A8a	8000U-50	55.2	4				110.3	110.3
A1b	8000U-90	91.6	4				183.24	183.24
A2b	8000U-70	69.4	4				138.86	138.86
A3b	8000U-70	69.4	4				138.86	138.86
A4b	8000U-90	91.6	4				183.24	183.24
A5b	8000U-70	69.4	4				138.86	138.86
A6b	8000U-70	69.4	4				138.86	138.86
A7b	8000U-50	55.2	4				110.3	110.3
A8b	8000U-50	55.2	4				110.3	110.3
AM1	8000U-230	237.8	2		475.62			
AM2	8000U-230	237.8	2		475.62			
AM3	8000U-190	194.7	2		389.46			
AM4	8000U-190	194.7	2		389.46			
AM5	8000U-130	113.2	2		226.42			
AM6	8000U-50	55.2	2		110.3			
AMU1	8000U-70	69.4	3			138.86		
AMU2	8000U-50	55.2	3			110.3		
AR1	8000U-470	499.7	1	999.36				
AR2	8000U-360	315.5	1	630.94				
AR3	8000U-190	194.7	1	389.46				
ARU4	8000U-50	55.2	1	110.3				
B1	8000U-50	55.2	5					110.3
B2	8000U-50	55.2	5					110.3
B3	8000U-50	55.2	5					110.3
B4	8000U-50	55.2	5					110.3
B5	8000U-50	55.2	4				110.3	110.3
B6	8000U-50	55.2	4				110.3	110.3
B7	8000U-50	55.2	4				110.3	110.3
B8	8000U-50	55.2	4				110.3	110.3
B9	8000U-50	55.2	4				110.3	110.3
B10	8000U-25	24.2	4				48.4	48.4
B11	8000U-25	24.2	4				48.4	48.4
B12	8000U-25	24.2	4				48.4	48.4
B13	8000U-25	24.2	4				48.4	48.4
B14	8000U-25	24.2	4				48.4	48.4
B15	8000U-25	24.2	4				48.4	48.4
B16	8000U-50	55.2	4				110.3	110.3
B17	8000U-25	24.2	4				48.4	48.4
B18	8000U-25	24.2	4				48.4	48.4
B19	8000U-25	24.2	4				48.4	48.4
B20	8000U-25	24.2	4				48.4	48.4
B21	8000U-25	24.2	4				48.4	48.4
B22	8000U-25	24.2	3			48.4	48.4	48.4
B23	8000U-25	24.2	3			48.4	48.4	48.4
B24	8000U-25	24.2	2		48.4	48.4	48.4	48.4
B25	8000U-25	24.2	2		48.4	48.4	48.4	48.4
BM1	8000U-90	91.6	2		183.24			
BM2	8000U-90	91.6	2		183.24			
BM3	8000U-90	91.6	2		183.24			
BM4	8000U-90	91.6	2		183.24			
BM5	8000U-50	55.2	2		110.3			
BM6	8000U-25	24.2	2		48.4			
BMUL1	8000U-50	55.2	3			110.3		
BMU1	8000U-50	55.2	4				110.3	
BMUL2	8000U-50	55.2	3			110.3		
BMU2	8000U-50	55.2	4				110.3	
BMUL3	8000U-50	55.2	3			110.3		
BMUL4	8000U-50	55.2	3			110.3		
BMUL5	8000U-50	55.2	3			110.3		
BMUL6	8000U-50	55.2	3			110.3		
BMUL7	8000U-50	55.2	3			110.3		
BMUL8	8000U-50	55.2	3			110.3		
BMUL9	8000U-50	55.2	3			110.3		
BMUL10	8000U-25	24.2	3			48.4		
BR1	8000U-190	194.7	1	389.46				
BR2	8000U-190	194.7	1	389.46				
BR3	8000U-50	55.2	1	110.3				
C1	8000U-25	24.2	5					48.4
C2	8000U-25	24.2	5					48.4
C3	8000U-25	24.2	5					48.4
C4	8000U-25	24.2	5					48.4
CMU1	8000U-25	24.2	4				48.4	
CMU2	8000U-25	24.2	4				48.4	
			Levels	L1	L2	L3	L4	L5
			Sum contrib. [daN]	3019	3152	3316	4608	4925
			Norm limit [G]	23	> Level1	> Level2	> Level3	> Level 4
			Max weight per level [kg]	133.8	139.7	147.0	204.2	218.3
Enzo3 L and XL				**133.8**	**[kg] Max allowed weight**			

Line strength summary

Line reference	Strength* [daN]	Paratest Test Date
8000U-025	**24.2**	04/04/2017
8000U-050	**55.15**	10/08/2016
8000U-070	**69.43**	10/08/2016
8000U-090	**91.62**	10/08/2016
8000U-130	**113.21**	10/08/2016
8000U-190	**194.73**	10/08/2016
8000U-230	**237.81**	10/08/2016
8000U-280	**276.39**	10/08/2016
8000U-360	**315.47**	10/08/2016
8000U-470	**499.68**	10/08/2016

* average strength of 10 sample lines

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Enzo3 — CCC Table of Line Quality — 20/04/2017

Enzo3 XXS, XS, S and M

Edelrid 10-200	Liros DSL-140
KRL	ARU4

Edelrid 8000U-25			
A12	B18	C3	K5
A13	B19	C4	K6
A14	B20	CMU1	K7
A15	B21	CMU2	K8
A16	B22	K1	K9
B10	B23	K10	KMU1
B11	B24	K11	KMU2
B12	B25	K12	KMU3
B13	BM6	K13	KMU4
B14	BMU10	K2	KMU5
B15	C1	K3	KMU6
B17	C2	K4	

Edelrid 8000U-50			
A10	B2	BMU9	BMUL5
A11	B3	BMUL7	BMUL6
A7a	B4	BMUL8	KM1
A7b	B5	AM6	KM2
A8a	B6	AMU2	KML1
A8b	B7	BM5	KML2
A9	B8	BMUL1	BR3
ARL4	B9	BMUL2	
B1	BMU1	BMUL3	
B16	BMU2	BMUL4	

Edelrid 8000U-70		
A2a	A3b	A6b
A2b	A5b	A7
A3a	A6a	AMU1

Edelrid 8000U-90			
A1a	A4a	A6	BM3
A1b	A4b	A8	BM4
A2	A5	BM1	KRU
A3	A5a	BM2	

Edelrid 8000U-130			
A1	A4	AM4	AM5

Edelrid 8000U-190		
AM1	AM3	BR1
AM2	AR3	BR2

Edelrid 8000U-360	
AR1	AR2

Enzo3 L and XL

Edelrid 10-200	Liros DSL-140
KRL	ARU4

Edelrid 8000U-25			
A12	B18	C3	K5
A13	B19	C4	K6
A14	B20	CMU1	K7
A15	B21	CMU2	K8
A16	B22	K1	K9
B10	B23	K10	KMU1
B11	B24	K11	KMU2
B12	B25	K12	KMU3
B13	BM6	K13	KMU4
B14	BMU10	K2	KMU5
B15	C1	K3	KMU6
B17	C2	K4	

Edelrid 8000U-50			
A10	B2	BMU9	BMUL5
A11	B3	BMUL7	BMUL6
A7a	B4	BMUL8	KM1
A7b	B5	AM6	KM2
A8a	B6	AMU2	KML1
A8b	B7	BM5	KML2
A9	B8	BMUL1	BR3
ARL4	B9	BMUL2	
B1	BMU1	BMUL3	
B16	BMU2	BMUL4	

Edelrid 8000U-70		
A2a	A3b	A6b
A2b	A5b	AMU1
A3a	A6a	

Edelrid 8000U-90			
A1a	A5	A8	BM4
A1b	A5a	BM1	KRU
A4a	A6	BM2	
A4b	A7	BM3	

Edelrid 8000U-130		
A1	A3	AM5
A2	A4	

Edelrid 8000U-190		
AM3	AR3	BR2
AM4	BR1	

Edelrid 8000U-230	
AM1	AM2

Edelrid 8000U-360
AR2

Edelrid 8000U-470
AR1

Enzo3 XXS — CCC Lines and Risers Length — 20/04/2017

scale ratio : 1.00000

Lines	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	6995	6997	2	6979	6982	3	6995	6990	-5	7100	7100	0	7895	7903	8
2	6887	6887	0	6870	6873	3	6949	6947	-2	7057	7059	2	7638	7647	9
3	6858	6859	1	6842	6844	2	6864	6861	-3	6975	6976	1	7453	7459	6
4	6909	6909	0	6894	6899	5	6861	6855	-6	6970	6969	-1	7380	7387	7
5	6794	6797	3	6781	6787	6	6836	6833	-3				7192	7195	3
6	6662	6660	-2	6649	6649	0	6829	6826	-3				7080	7077	-3
7	6599	6597	-2	6587	6590	3	6864	6858	-6				7047	7041	-6
8	6624	6623	-1	6614	6615	1	6889	6882	-7				7122	7130	8
9	6401	6401	0				6810	6808	-2				6919	6915	-4
10	6358	6361	3				6762	6758	-4				6840	6838	-2
11	6278	6282	4				6665	6659	-6				6794	6788	-6
12	6277	6283	6				6659	6657	-2				6750	6741	-9
13	6222	6225	3				6612	6614	2				6853	6844	-9
14	6228	6228	0				6598	6601	3						
(stabilo) 15	6119	6127	8				6618	6619	1						
(stabilo) 16	6097	6105	8				6641	6645	4						
							6450	6452	2						
							6393	6396	3						
							6377	6384	7						
							6310	6312	2						
							6313	6314	1						
							6272	6270	-2						
							6280	6276	-4						
(stabilo) 24							6123	6121	-2						
(stabilo) 25							6123	6121	-2						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	531	1
A2	524	516	-8
B	518	515	-3
Δtrim (A1-B)	12		
Δaccel (B-A1)	128		
Spd Range (Δa+Δt)	140	102	(4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures by ParaTest are originally including risers. Values here include substraction of riser and maillons length

(3) Measures by ParaTest are originally including sliding tab. Values here include substraction of 60mm for sliding tab and substraction of 33mm for higher brake pulley

(4) XXS Specimen tested by ParaTest is equiped with a 100-105mm speed system riser, as required by CCC rules. Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	7525	7509	7513	7618	7895
2	7417	7400	7467	7575	7638
3	7388	7372	7382	7493	7453
4	7439	7424	7379	7488	7380
5	7324	7311	7354		7192
6	7192	7179	7347		7080
7	7129	7117	7382		7047
8	7154	7144	7407		7122
9	6925		7328		6919
10	6882		7280		6840
11	6802		7183		6794
12	6801		7177		6750
13	6746		7130		6853
14	6752		7116		
15	6643		7136		
16	6621		7159		
17			6968		
18			6911		
19			6895		
20			6828		
21			6831		
22			6790		
23			6798		
24			6647		
25			6647		

Enzo3 XS — CCC Lines and Risers Length — 20/04/2017

scale ratio : **1.02522**

Lines	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	7168	7169	1	7152	7152	0	7169	7173	4	7278	7278	0	8095	8094	-1
2	7058	7059	1	7040	7045	5	7122	7127	5	7233	7234	1	7831	7838	7
3	7028	7028	0	7012	7016	4	7034	7039	5	7148	7144	-4	7641	7647	6
4	7080	7078	-2	7065	7066	1	7031	7034	3	7143	7142	-1	7567	7573	6
5	6964	6964	0	6950	6952	2	7007	7011	4				7374	7382	8
6	6829	6831	2	6815	6817	2	6999	7002	3				7260	7258	-2
7	6763	6763	0	6751	6753	2	7035	7036	1				7227	7228	1
8	6789	6789	0	6779	6782	3	7061	7065	4				7303	7311	8
9	6561	6560	-1				6982	6982	0				7095	7107	12
10	6518	6521	3				6933	6935	2				7014	7024	10
11	6435	6441	6				6832	6834	2				6968	6974	6
12	6433	6436	3				6826	6826	0				6922	6929	7
13	6378	6385	7				6779	6782	3				7026	7028	2
14	6384	6385	1				6764	6767	3						
(stabilo) 15	6265	6255	-10				6786	6791	5						
(stabilo) 16	6242	6233	-9				6809	6811	2						
							6610	6620	10						
							6551	6559	8						
							6534	6542	8						
							6465	6472	7						
							6469	6477	8						
							6426	6430	4						
							6434	6435	1						
							6271	6265	-6						
							6270	6264	-6						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	531	1
A2	524	520	-4
B	518	516	-2

Δtrim (A1-B) 12

Δaccel (B-A1) 128

Spd Range (Δa+Δt) **140** 101 (4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures of self-certified specimen.

(3) Measures not including the 60mm sliding tab.

(4) tested Specimen equiped with a 100-105mm speed system riser, as required by CCC rules.

Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	7698	7682	7687	7796	8095
2	7588	7570	7640	7751	7831
3	7558	7542	7552	7666	7641
4	7610	7595	7549	7661	7567
5	7494	7480	7525		7374
6	7359	7345	7517		7260
7	7293	7281	7553		7227
8	7319	7309	7579		7303
9	7085		7500		7095
10	7042		7451		7014
11	6959		7350		6968
12	6957		7344		6922
13	6902		7297		7026
14	6908		7282		
15	6789		7304		
16	6766		7327		
			7128		
			7069		
			7052		
			6983		
			6987		
			6944		
			6952		
			6795		
			6794		

Enzo3 S — CCC Lines and Risers Length — 20/04/2017

scale ratio : **1.07211**

Lines	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	7500	7501	1	7481	7488	7	7503	7507	4	7616	7613	-3	8466	8462	-4
2	7385	7387	2	7365	7369	4	7454	7460	6	7570	7570	0	8190	8189	-1
3	7355	7358	3	7335	7338	3	7364	7368	4	7480	7480	0	7991	7984	-7
4	7409	7411	2	7391	7397	6	7360	7366	6	7475	7471	-4	7915	7909	-6
5	7287	7282	-5	7271	7272	1	7335	7335	0				7713	7715	2
6	7145	7146	1	7129	7134	5	7326	7329	3				7592	7588	-4
7	7077	7077	0	7063	7067	4	7364	7365	1				7558	7552	-6
8	7104	7105	1	7092	7091	-1	7391	7392	1				7638	7638	0
9	6863	6864	1				7307	7308	1				7421	7431	10
10	6817	6823	6				7255	7256	1				7337	7344	7
11	6732	6741	9				7150	7152	2				7288	7293	5
12	6730	6737	7				7144	7144	0				7239	7245	6
13	6671	6673	2				7095	7097	2				7351	7349	-2
14	6678	6681	3				7079	7082	3						
(stabilo) 15	6559	6549	-10				7103	7110	7						
(stabilo) 16	6535	6525	-10				7126	7132	6						
							6915	6921	6						
							6854	6862	8						
							6836	6845	9						
							6765	6769	4						
							6768	6774	6						
							6725	6730	5						
							6733	6737	4						
							6565	6559	-6						
							6564	6556	-8						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	531	1
A2	524	520	-4
B	518	515	-3

Δtrim (A1-B) 12

Δaccel (B-A1) 128

Spd Range (Δa+Δt) **140** 101 (4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures of self-certified specimen.

(3) Measures not including the 60mm sliding tab.

(4) tested Specimen equiped with a 100-105mm speed system riser, as required by CCC rules.

Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	8030	8011	8021	8134	8466
2	7915	7895	7972	8088	8190
3	7885	7865	7882	7998	7991
4	7939	7921	7878	7993	7915
5	7817	7801	7853		7713
6	7675	7659	7844		7592
7	7607	7593	7882		7558
8	7634	7622	7909		7638
9	7387		7825		7421
10	7341		7773		7337
11	7256		7668		7288
12	7254		7662		7239
13	7195		7613		7351
14	7202		7597		
15	7083		7621		
16	7059		7644		
			7433		
			7372		
			7354		
			7283		
			7286		
			7243		
			7251		
			7089		
			7088		

Enzo3 M

scale ratio : **1.11344**

CCC Lines and Risers Length 20/04/2017

Lines	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	7789	7791	2	7769	7776	7	7793	7795	2	7912	7917	5	8793	8784	-9
2	7670	7672	2	7649	7653	4	7743	7746	3	7864	7863	-1	8507	8504	-3
3	7638	7640	2	7618	7623	5	7648	7650	2	7772	7773	1	8300	8300	0
4	7695	7695	0	7677	7682	5	7644	7647	3	7766	7766	0	8220	8221	1
5	7569	7568	-1	7552	7555	3	7619	7622	3				8011	8012	1
6	7422	7422	0	7406	7409	3	7610	7614	4				7887	7880	-7
7	7351	7349	-2	7336	7338	2	7650	7653	3				7851	7844	-7
8	7379	7375	-4	7367	7366	-1	7677	7678	1				7934	7934	0
9	7129	7127	-2				7590	7593	3				7709	7711	2
10	7083	7084	1				7537	7543	6				7621	7622	1
11	6993	6998	5				7428	7431	3				7571	7573	2
12	6991	6993	2				7422	7424	2				7522	7525	3
13	6930	6931	1				7370	7374	4				7636	7629	-7
14	6937	6937	0				7354	7358	4						
(stabilo) 15	6812	6811	-1				7377	7380	3						
(stabilo) 16	6787	6785	-2				7402	7404	2						
							7185	7189	4						
							7121	7127	6						
							7103	7109	6						
							7028	7038	10						
							7032	7037	5						
							6986	6991	5						
							6994	6992	-2						
							6819	6824	5						
							6818	6822	4						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	531	1
A2	524	521	-3
B	518	515	-3
Δtrim (A1-B)	12		
Δaccel (B-A1)	128		
Spd Range (Δa+Δt)	140	102	(4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures of self-certified specimen.

(3) Measures not including the 60mm sliding tab.

(4) tested Specimen equiped with a 100-105mm speed system riser, as required by CCC rules.

Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	8319	8299	8311	8430	8793
2	8200	8179	8261	8382	8507
3	8168	8148	8166	8290	8300
4	8225	8207	8162	8284	8220
5	8099	8082	8137		8011
6	7952	7936	8128		7887
7	7881	7866	8168		7851
8	7909	7897	8195		7934
9	7653		8108		7709
10	7607		8055		7621
11	7517		7946		7571
12	7515		7940		7522
13	7454		7888		7636
14	7461		7872		
15	7336		7895		
16	7311		7920		
			7703		
			7639		
			7621		
			7546		
			7550		
			7504		
			7512		
			7343		
			7342		

Enzo3 L

scale ratio : **1.15782**

CCC Lines and Risers Length 20/04/2017

Lines	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	8098	8096	-2	8078	8083	5	8104	8108	4	8226	8222	-4	9144	9140	-4
2	7975	7974	-1	7954	7962	8	8051	8055	4	8175	8174	-1	8847	8844	-3
3	7942	7942	0	7922	7925	3	7953	7953	0	8079	8074	-5	8633	8635	2
4	8001	7999	-2	7982	7987	5	7949	7952	3	8074	8069	-5	8549	8551	2
5	7872	7873	1	7855	7865	10	7922	7928	6				8332	8329	-3
6	7719	7722	3	7702	7708	6	7913	7918	5				8203	8200	-3
7	7645	7646	1	7630	7633	3	7955	7957	2				8165	8156	-9
8	7674	7678	4	7662	7665	3	7984	7985	1				8252	8249	-3
9	7415	7419	4				7893	7894	1				8018	8022	4
10	7366	7368	2				7838	7839	1				7926	7930	4
11	7274	7280	6				7725	7724	-1				7875	7881	6
12	7272	7275	3				7719	7720	1				7824	7830	6
13	7209	7211	2				7665	7664	-1				7942	7941	-1
14	7216	7216	0				7648	7648	0						
(stabilo) 15	7080	7071	-9				7673	7673	0						
(stabilo) 16	7054	7044	-10				7699	7700	1						
							7472	7473	1						
							7406	7404	-2						
							7386	7385	-1						
							7309	7307	-2						
							7313	7311	-2						
							7266	7264	-2						
							7274	7272	-2						
							7088	7086	-2						
							7087	7082	-5						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	530	0
A2	524	520	-4
B	518	515	-3
Δtrim (A1-B)	12		
Δaccel (B-A1)	128		
Spd Range (Δa+Δt)	140	102	(4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures of self-certified specimen.

(3) Measures not including the 60mm sliding tab.

(4) tested Specimen equiped with a 100-105mm speed system riser, as required by CCC rules.

Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	8628	8608	8622	8744	9144
2	8505	8484	8569	8693	8847
3	8472	8452	8471	8597	8633
4	8531	8512	8467	8592	8549
5	8402	8385	8440		8332
6	8249	8232	8431		8203
7	8175	8160	8473		8165
8	8204	8192	8502		8252
9	7939		8411		8018
10	7890		8356		7926
11	7798		8243		7875
12	7796		8237		7824
13	7733		8183		7942
14	7740		8166		
15	7604		8191		
16	7578		8217		
			7990		
			7924		
			7904		
			7827		
			7831		
			7784		
			7792		
			7612		
			7611		

Enzo3 XL

scale ratio : **1.18069**

CCC Lines and Risers Length

20/04/2017

Lines

	A Reference Length (1)	A specimen measures (2)	A Δ	B Reference Length (1)	B specimen measures (2)	B Δ	C Reference Length (1)	C specimen measures (2)	C Δ	D Reference Length (1)	D specimen measures (2)	D Δ	K Reference Length (1)	K specimen measures (3)	K Δ
1	8254	8250	-4	8234	8227	-7	8263	8262	-1	8388	8388	0	9325	9319	-6
2	8129	8119	-10	8107	8101	-6	8209	8213	4	8337	8339	2	9023	9023	0
3	8095	8085	-10	8074	8070	-4	8109	8112	3	8238	8237	-1	8803	8807	4
4	8156	8148	-8	8137	8130	-7	8105	8110	5	8233	8230	-3	8719	8722	3
5	8027	8023	-4	8010	8012	2	8077	8080	3				8498	8504	6
6	7871	7866	-5	7854	7855	1	8068	8069	1				8367	8361	-6
7	7797	7793	-4	7781	7781	0	8111	8111	0				8328	8321	-7
8	7826	7822	-4	7813	7811	-2	8140	8143	3				8418	8422	4
9	7563	7556	-7				8050	8049	-1				8177	8183	6
10	7513	7511	-2				7993	7995	2				8084	8093	9
11	7419	7419	0				7878	7880	2				8031	8035	4
12	7417	7419	2				7871	7870	-1				7978	7981	3
13	7352	7352	0				7816	7820	4				8099	8085	-14
14	7359	7358	-1				7798	7801	3						
(stabilo) 15	7220	7211	-9				7824	7827	3						
(stabilo) 16	7194	7186	-8				7850	7852	2						
							7624	7630	6						
							7556	7559	3						
							7537	7542	5						
							7458	7468	10						
							7462	7469	7						
							7414	7417	3						
							7423	7423	0						
						(stabilo) 24	7228	7223	-5						
						(stabilo) 25	7227	7224	-3						

Risers (including maillons)

	Ref	meas (2)	diff
A1	530	530	0
A2	524	520	-4
B	518	515	-3
Δtrim (A1-B)	12		
Δaccel (B-A1)	128		
Spd Range (Δa+Δt)	140	102	(4)

Notes:

(1) Length of lines up to wing canopy, excluding risers and maillons

(2) Measures of self-certified specimen.

(3) Measures not including the 60mm sliding tab.

(4) tested Specimen equiped with a 100-105mm speed system riser, as required by CCC rules. Production is set to maximum range allowed of 140mm.

Lines+Risers Reference Length (mm)

	A	B	C	D	K
1	8784	8764	8781	8906	9325
2	8659	8637	8727	8855	9023
3	8625	8604	8627	8756	8803
4	8686	8667	8623	8751	8719
5	8557	8540	8595		8498
6	8401	8384	8586		8367
7	8327	8311	8629		8328
8	8356	8343	8658		8418
9	8087		8568		8177
10	8037		8511		8084
11	7943		8396		8031
12	7941		8389		7978
13	7876		8334		8099
14	7883		8316		
15	7744		8342		
16	7718		8368		
			8142		
			8074		
			8055		
			7976		
			7980		
			7932		
			7941		
			7752		
			7751		

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