## AL360 WINDSURF AND TOOLS

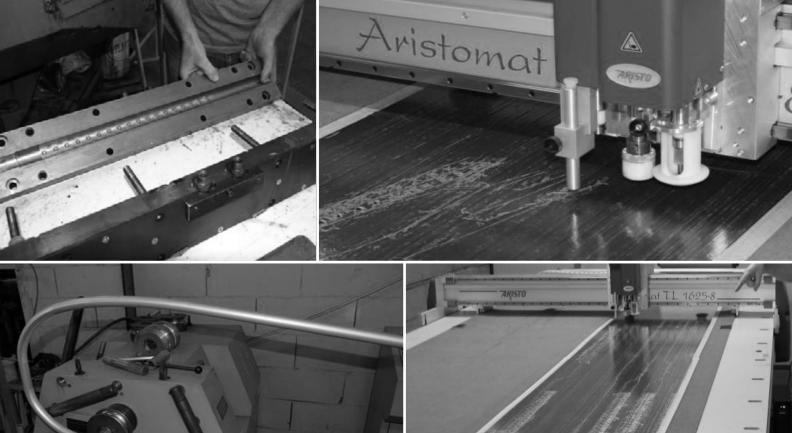






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#### **AL360**

2018

#### WHY choose AL360?

We don't want to sell a short-lived products, our principal aim is to make windsurfing equipment that will last for many and many years and remains perfect, with a Made in Italy guarantee.

#### MADE IN ITALY

AL360 is a factory that, differently than others competitors, designs and manufactures all his products in Italy.

For each ones of our products we are always looking for new ideas to develop in a better way the functionality and quality of the products that we sell around the wordl. Working in this way make possible to our factory to guarantee a high standard of quality and safety on all the products.

For us the main factor is not just to develop or testing our prducts, but we always take at the first place the Made in Italy quality above everything, as guarantee of quality all around the world.



#### **FREESTYLE | WAVE | SLALOM**



**EUGENIO MARCONI** 



RAIMONDO GASPERINI





MATTIA PEDRANI campione italiano Freestyle2008



I-66 MATTEO SPANU Team freestyle



DANY BRUCH
Team wave

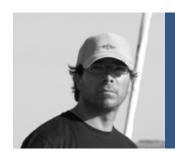




I-720 FABIO CALO' Team freestyle



l-261 **JACOPO TESTA** Team freestyle



B-09 ROBERTO DA COSTA Team freestyle

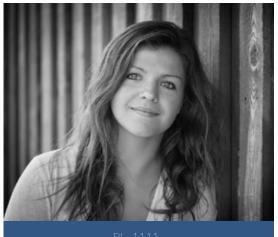




FEDERICO INFANTINO r∘ Fuerte Wave CLASSIC 2012



**VALTER SCOTTO** 



**JUSTYNA SNIADY** 



ANDREA **FRANCHINI** 







CATERINA STENTA



**ANDREA BALDINI** 





**FRANCESCO ORSI** 



**ANDREA FERIN** 



**GRETA BENVENUTI** 





ZARA **DAVIS** 





# PRODUCTS -

#### BOOMSMADEAND BUILT ENTIRELY IN ITALY

#### alu mono booms

The alu-mono booms are made with a 6082 Aluminum Alloy, that's an alu alloy of silicon-magnesium manganese used for a general production, this kind of alloy has a very good strength and corrosion resistance too.

#### Specifications:

Rm 290 Rp0.2 250 Hardness Hb 85 - 90 Elongation 8%

#### ergal mono booms

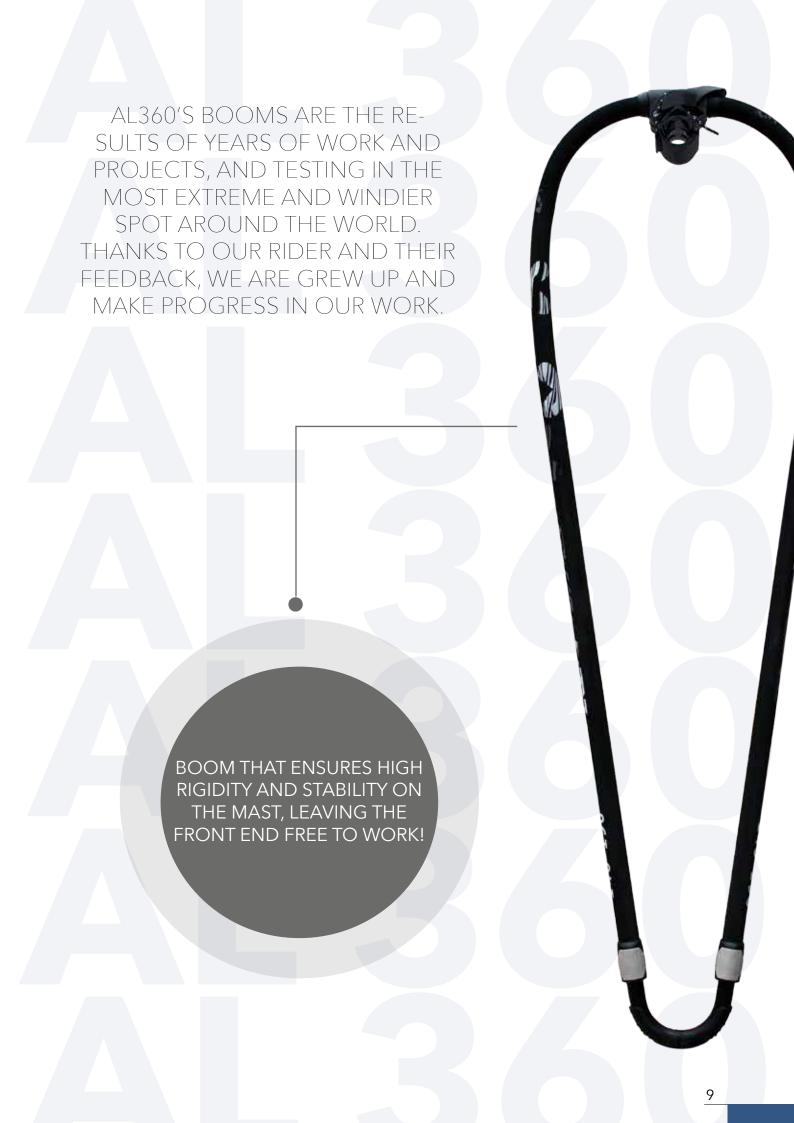
The ergal-mono booms are made by a 7075 Aluminium Alloy and Zinc, the main use is in the aeronautical and aerospace sector, particularly used for made structural parts.

#### Specifications:

Rm 560 Rp0.2 495 Hardness Hb 145 Elongation 7%

#### carboon booms

For what concerns the carbon booms process, we can't given the full informations of the manufacturing process or the details of the materials used for, that information are confidential and are the main factors of our high quality manufacturing work; this knowledge about the materials and concepts-work represente years of mechanical research and trials. All of our carbon-booms are made by 100% carbon, unlike others brands that use a combination of materials not just carbon but a mix with glass fibers. Our products are made by high-strength unidirectional fibers "prepeg", and the undirectional fibers process allow a greater freedom in the gradations used in the various layers.



#### ALU-MONO















ALU-MONO is a reasonable price boom for amateur windsurfers who aspire to have a high-level product for a good price. The boom is built in 6082 alloy, completely anodized to avoid salty water oxidation, provided with tubes of 29mm diameter. The key feature of this boom is that tubes and the extension are made of a one-piece monocoque part. E3 Alu-Mono features the same curves of the high-level E3 carbon booms, the tubes are lined in soft grip dual density for best grip while sailing: moreover the graphics come with a vast range of colours allowing many customization options. Back-end and front-end are made of 20% of elastomer nylon, all the nylon parts are the same for every model in our range, from the Alu to the E3 Carbon including slalom and race booms: this ensures great reliability and resistance for all the parts, even in the most affordable models.

| MODEL        | SIZE    | DIAMETER |
|--------------|---------|----------|
| Mono alu 140 | 140-190 | 29       |
| Mono alu 150 | 150-200 | 29       |
| Mono alu 160 | 160-210 | 29       |
| Mono alu 170 | 170-220 | 29       |

#### **ERGAL MONO**

















| MODEL        | SIZE    | DIAMETER |
|--------------|---------|----------|
| Mono erg 140 | 140-190 | 28       |
| Mono erg 150 | 150-200 | 28       |
| Mono erg 160 | 160-210 | 29       |
| Mono erg 170 | 170-220 | 29       |
| Mono erg 180 | 180-230 | 29       |
| Mono erg 190 | 190-240 | 29       |



#### E3 CARBON

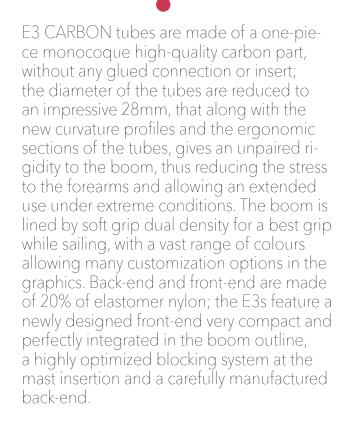












| MODEL       | SIZE    | DIAMETER | WEIGHT |
|-------------|---------|----------|--------|
| E3 carb 140 | 140-200 | 28       | 2.37   |
| E3 carb150  | 150-210 | 28       | 2.44   |
| E3 carb 160 | 160-220 | 28       | 2.51   |
| E3 carb170  | 170-230 | 28       | 2.58   |

#### E3 CARBON SLALOM

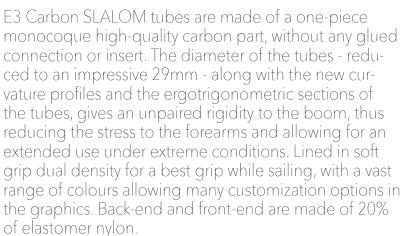












The E3s feature a newly designed front-end very compact and perfectly integrated in the boom outline, a highly optimized blocking system at the mast insertion and a carefully manufactured back-end, whose design allows perfect sail tuning capabilities for both slalom competitors and speed-amateur ones.

| MODEL         | SIZE    | DIAMETER | WEIGHT |
|---------------|---------|----------|--------|
| E3 slalom180  | 180-230 | 29       | 3.12   |
| E3 slalom 190 | 190-245 | 29       | 3.18   |
| E3 slalom 200 | 200-260 | 29       | 3.38   |
| E3 slalom 210 | 210-270 | 29       | 3.45   |



#### E3 CARBON SLIM

la nuova generazione dei boma











The carbon SLIM boom is a monocoque 100% full carbon unique piece, and this kind of boom is the beginning of a new generation of high performance and quality boom. The boom is manufactured completely of carbon fiber unidirectional HM (high modulus), thanks to which it was possible to reduce the diameter of the tubes of the boom to 25mm, retaining the rigidity and strength very high, combined with ergonomic curve and section oval tubes characteristic of the AL360's carbon booms, that makes it even more comfortable handles, even for who have small hands, as young guys or girls. Covered in soft dual density grip for better grip, plastic back-end and front-end are made of nylon with 20% elastomer, with a compact swing front-end very well integrated into the booms with high stability and rigidity on the mast.

| MODEL      | SIZE    | DIAMETER | WEIGHT |
|------------|---------|----------|--------|
| E3 slim140 | 140-190 | 25       | 2.1    |
| E3 slim150 | 150-200 | 25       | 2.19   |



#### E3 CARBON RACE

TESTED AND APPROVED BY 12 TIMES WORLD CHAMPION BJORN DUNKERBECK.











E3 Carbon RACE tubes are made of a one-piece monocoque high-quality carbon part, without any glued connection or insert. The diameter of the tubes - reduced to 29.5mm - along with the new curvature profiles and the ergotrigonometric sections of the tubes, gives an unpaired rigidity to the boom, thus reducing the stress to the forearms and allowing for an extended use under extreme conditions. Lined in soft grip dual density per a best grip, with a vast range of colours allowing many customization options in the graphics. Back-end and front-end are made of 20% of elastomer nylon. The E3s feature a newly designed frontend very compact and perfectly integrated in the boom outline, a highly optimized blocking system at the mast insertion and a carefully manufactured back-end terminal, whose design allows for perfect sail tuning capabilities for highly demanding formula sailors. Carefully designed to match the latest evolutions in slalom sails design.

Such evolution required a new concept boom designed with new curvatures conceived to keep the sail profile locked in even in the most extreme conditions, to yield the best results out of the sail's concept in a wide rage of conditions and to boost the overall performance of the rig.

The back-end is of two different kind, one is the standars slalom back end the other one is the wide back-end size 200mm.

| MODEL       | SIZE    | DIAMETER | WEIGHT |
|-------------|---------|----------|--------|
| E3 Race 220 | 220-280 | 29       | 1.24   |
| E3 Race 230 | 230-290 | 29       | 1.45   |
| E3 Race 240 | 240-300 | 29       | 1.66   |
| E3 Race 250 | 250-310 | 29       | 1.89   |



#### racing team edition













After years of testing and hard work is a pleasure for us to present our new creation RTE a pride product full Made in Italy from the AL 360 manufacture. A slalom boom creation, an unique innovative and lightweight boom, thanks to the 100 % carbon construction using the best fibers and resins on the world market; and with completely redesigned ergonomic curves, to provide maximum comfort without forgetting the importance of leaving the sail free to express his maximum power.

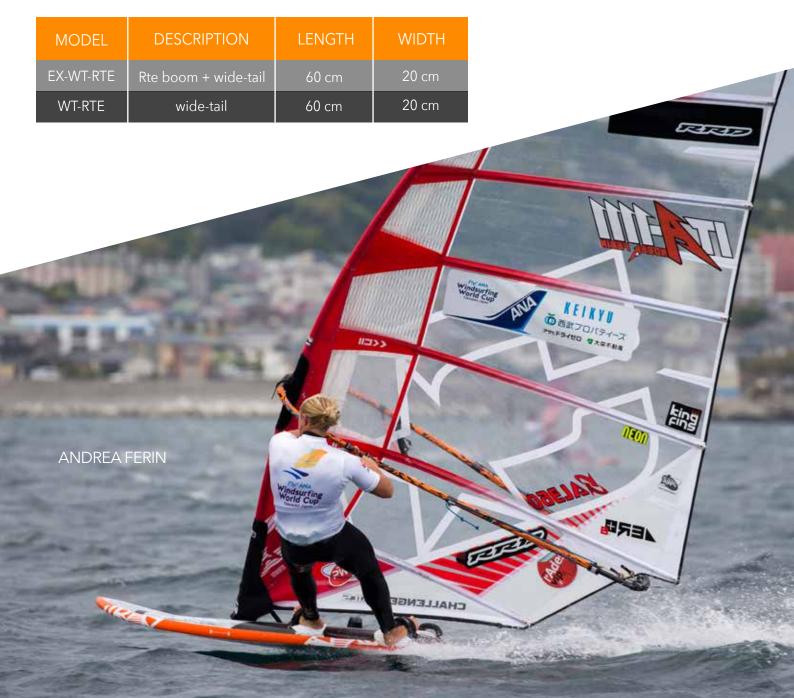
With the AL360's classical oval section and a diameters reduced to 28.5 cm; for a better grip of the hand as well as a considerable reduction of effort in load of the tendons in the forearms. New look of the graphic.

| MODEL                    | SIZE    | WEIGHT  | CURVE | DIAM.   | BACK END |
|--------------------------|---------|---------|-------|---------|----------|
| RTE-SL-180 (Slalom)      | 180-230 | 2,7 Kg  | 49 cm | 28,5 mm | standard |
| RTE-SL-190 (Slalom)      | 190-245 | 2,85 Kg | 49 cm | 28,5 mm | standard |
| RTE-SL-200 (Slalom-race) | 200-260 | 3 Kg    | 49 cm | 28,5 mm | standard |



#### What change in the new RTE slalom boom, compared to E3 slalom standard?

- center of gravity moved back, to a better equipment balance;
- wides and long curve to allow the complete freedom of the sail;
- diameter 28.5 in the area of the hands (compared to E3 Slalom boom with a diameter 29.5);
- unique lightest, lighter than the standar E3 Slalom.



# STS STATE OF THE PROPERTY OF T

AL360 MASTS'S WORKING PROCESS IS SIMILAR AS THE BOOMS CONSTRUCTION PROCESS IN A 100% MADE IN ITALY QUALITY, MADE WITH THE BEST PRE-PEG FIBER IN THE GLOBAL MARKET.

THESE MASTS HAVE A CONSTANT CURVES, THAT IT BEEN STUDIED AND DESIGNED ON THE SAILS OF THE LATEST GENERATION. THE LINE OF MASTS IS IN TWO CARBON PERCENTAGE: 80% AND 100%.

TO MAKE IT EASIER TO IDENTIFY THE TARGET PERCENTAGE OF CARBON ON THE MASTS HAS BEEN USED A DIFFERENT COLOR FOR EACH PERCENTAGE:

0

Blue 80%

Orange 100%



**RDM** 100%

**SDM** 80%

**SDM** 100%





| MODEL      | SIZE | IMCS | WEIGHT | CARBON |
|------------|------|------|--------|--------|
| Rdm100-340 | 340  | 15   | 1.3    | 100%   |
| Rdm100-370 | 370  | 16.5 | 1.3    | 100%   |
| Rdm100-400 | 400  | 19   | 1.42   | 100%   |
| Rdm100-430 | 430  | 21   | 1.65   | 100%   |
| Rdm100-460 | 460  | 25   | 1.8    | 100%   |



| MODEL     | SIZE | IMCS | WEIGHT | CARBON |
|-----------|------|------|--------|--------|
| Rdm80-340 | 340  | 15   | 1.24   | 80%    |
| Rdm80-370 | 370  | 16.5 | 1.45   | 80%    |
| Rdm80-400 | 400  | 19   | 1.66   | 80%    |
| Rdm80-430 | 430  | 21   | 1.89   | 80%    |
| Rdm80-460 | 460  | 25   | 2.11   | 80%    |

## mast extension

AFTER A LONG PROCESS OF DESIGNING WITH 3D SOFTWARE AND AN INFINITE NUMBERS OF TESTS TO GIVE BIRTH TO A EXTENSION OF GREAT DESIGN AND WITH BIG CONTENT OF TECHNOLOGICAL SOLUTIONS OF THE HIGHEST LEVEL AND QUALITY.

The Extensions Are Of Three Different Materials: **Alu, Ergal** and **Full Carbon 100%.** In The Next Pages The Technical Details Of Each One.



Rdm alu



Rdm ergal



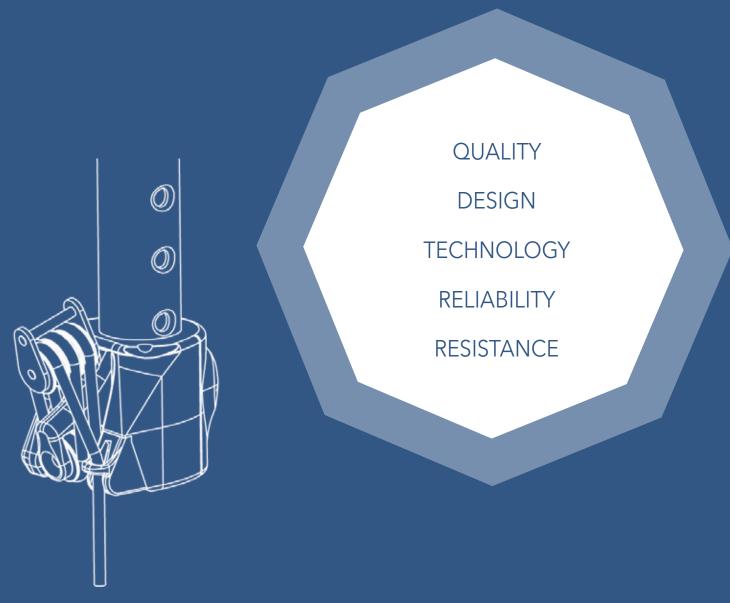
Sdm ergal



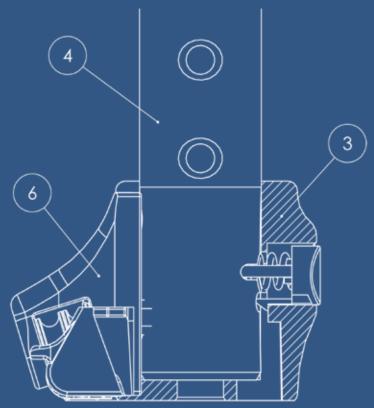
Rdm carbon



Rdm wood



- 1 The mast extension tube is made of a single piece (Detail. 4), reaches the bottom of the plastic part (Detail. 3).
- 2 The attack of the pulleys and cleats are a unique fusion of stainless steel (Detail. 6)
- 3 Cleats its inclined in line with the pulley to allow an optimal trim of the sail and avoid twisting the rope and greater resilience.
- 4 The attack pulleys (Detail. 6) is screwed directly into the extension tube (Detail. 4)



### mast extension rdm alv monocoque



Material used for the tube: Alloy 6082

MECHANICAL CHARACTERISTICS

Tensile strength Rm (N / mm): 290 Yield strength Rp 0.2: 250 Elongation A5: 8 Hardness HBS: 95

| CODE     | MODEL       | SIZE |
|----------|-------------|------|
| E.A.0-15 | rdm alu pin | 0-15 |
| E.A.0-25 | rdm alu pin | 0-25 |
| E.A.0-35 | rdm alu pin | 0-35 |

### RDM ERGAL mast extension rdm ergal monocoque

Material used for the tube: Alloy 7075

MECHANICAL CHARACTERISTICS

Tensile strength Rm (N / mm): 540 Yield strength Rp 0.2: 485 Elongation A5: 6 Hardness HBS: 153

| CODE     | MODEL         | SIZE |
|----------|---------------|------|
| E.E.0-25 | rdm ergal pin | 0-25 |
| E.E.0-35 | rdm ergal pin | 0-35 |
| E.E.0-45 | rdm ergal pin | 0-45 |



#### **SDM ERGAL**

mast extension rdm alu monocoque



Material used for the tube: Alloy 7075

MECHANICAL CHARACTERISTICS

Tensile strength Rm (N / mm): 540 Yield strength Rp 0.2: 485 Elongation A5: 6

Hardness HBS: 153

| CODE     | MODEL         | SIZE |
|----------|---------------|------|
| E.E.0-26 | rdm ergal pin | 0-26 |
| E.E.0-42 | rdm ergal pin | 0-42 |

#### RDM CARBON

mast extension rdm 100% carbon monocoque

Material used for the tube: IM unidirectional PREPEG fiber 100% carbon

MECHANICAL CHARACTERISTICS

Tensile strength (Mpa) 5500 Modulus: 290-2950 GPa

| CODE     | MODEL          | SIZE |
|----------|----------------|------|
| E.C.0-25 | rdm carbon pin | 0-25 |
| E.C.0-35 | rdm carbon pin | 0-35 |
| E.E.0-45 | rdm carbon pin | 0-45 |



mast extension rdm alu monocoque - wood



Material used for the tube: Alloy 6082

MECHANICAL CHARACTERISTICS

Tensile strength Rm (N / mm): 290 Yield strength Rp 0.2: 250

Elongation A5: 8 Hardness HBS: 95

| CODE     | MODEL        | SIZE |
|----------|--------------|------|
| E.W.0-25 | rdm wood pin | 0-25 |
| E.W.0-35 | rdm wood pin | 0-35 |

#### MAST BASE EURO PIN

-AISI 316 -









The AL360's base euro pin is a single piece of stainless steel AISI 316, during the working process there has creating some discharges spaces that facilitate the leaking of sand and dirt, in this way is more easy hook and unhook the extensions on the board.

INNOVATION

QUALITY

RESISTANCE

RELIABILITY

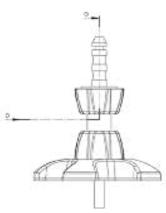
The single piece of stainless steel is strong connected by a universal tendon, that is durable, hard and flexible at the same time. The base is working in order to make easier to locking and unlocking it on the board thanks to the 5 breeds.

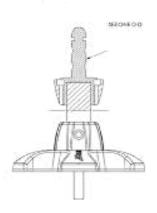
The finish, carbon look give a touch more elegant and unique at the base and creates a rough surface that doesn't slip your fingers and hands during the locking and unlocking.















For any information we are completely at your disposal, so please feel free to contact us

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