



Selcom S-MAX fly with the Risen - The fastest ultralight in the world

**S-MAX** (Selcom MultiAXials) – The light-weight carbon triaxial, at the core of the airframe structure, delivers high mechanical performances at Porto Aviation Group contributing to achieve significant strength to weight ratio, and unparalleled performances to their RISEN aircraft.

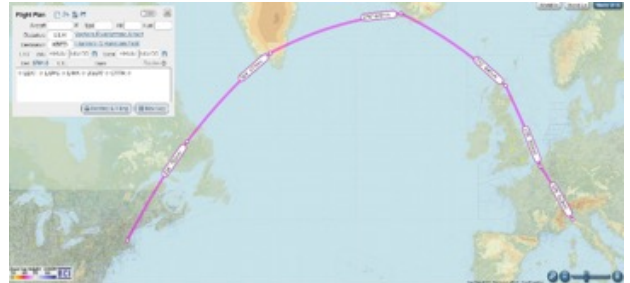
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The Porto Aviation Group (founded by Alberto Porto) is an innovative Italian start-up, designing, developing, and producing airplanes of excellence among these the RISEN is the highest performance ultralight aircraft in the world.

In 2010 the very first prototype of Risen was made. Since then, many challenges were won and records broken. It took part in 2017 to the Quarter Around the World Challenge - from Italy to Uruguay 11,205Km.

In 2019, the RISEN R02 beaten its own previous world speed record for the category (323Km/h it set in 2015), recording the official speed of 400,25Km/h.

In 2021 another long journey, from Italy to New York. This time Selcom, material supplier of multiaxials solutions was proud to be on board also as a sponsor.



For the construction of the Risen Alberto always relied on composites with vacuum infusion of laminated carbon fiber structures able to keep the entire airframe weight as low as 150Kg.

“Every detail as well as the overall shape of the aircraft were meticulously studied and optimized - Says Alberto as chief designer of the Risen.



To achieve the goal, we wanted a high-quality carbon fibre product to further optimize the highly loaded composite aerostructures. The synergy of these optimizations resulted in an aircraft of spectacular efficiency.

The team at Selcom was ready to take the challenge and to support with a structural, light weight (<230gsm) carbon fiber triaxial - CTXL series - derived from its S-MAX range. When the first laminates were tested,

**Porto Aviation engineers were impressed by the processability of the material. Mechanical properties and reduced manufacturing tack time have been the keystone for the rise of RISEN aircraft.**

Beyond the quality of the product, **Selcom's attitude in terms of technical support and flexibility** played an important role in support to this phenomenal challenge.

“It is true Selcom material performed indeed well on the Risen” said Alberto Porto “Nevertheless, when we took the decision to go for carbon fiber, we looked at many options and only Selcom offered us the complete package: high quality product and the upmost customer care level we were looking for to be successful.”



# Product Portfolio

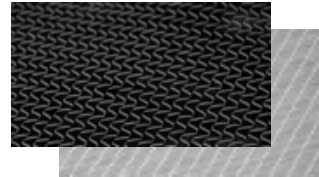
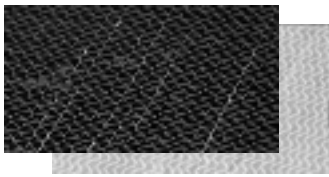
## S-MAX: Selcom MultiAXial

Unidirectional

Biaxials

Triaxials

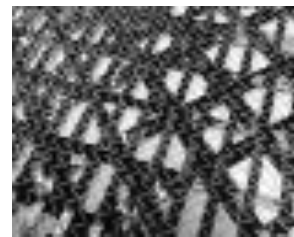
Quadriaxials



## S-PRO: Selcom Protect Repair Optimize

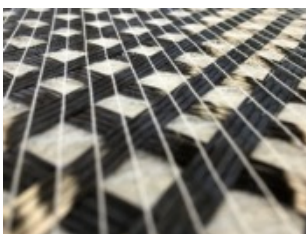


S-Grid



S-Mesh

## S-TREME: Selcom Tailored Range of Enhanced MultiAXials.. Easygoing



CrossForce®

S-Form

S-Bond

Selcom is a high-quality supplier of multi-axial solutions to the industrial market. For more information: contact our sales office in Italy +39 0438 585166 – email [info@selcom-srl.com](mailto:info@selcom-srl.com) or visit our website: [www.selcom-srl.com](http://www.selcom-srl.com)