

The *Manta*: Sexy, sexy, sexy! Like a poised dominatrix, this black carbon fiber lounge chair is a must-have for anyone who owns a Lamborghini or Ferrari—one simply cannot have too many sexy Italians! Carbon fiber's strength (the chair can carry up to 300 kilos) allows the back legs to taper ever so finely, and it provides this cushion-less chair a gentle flexing yield.

# REDUCTION IN STRENGTH

Mast Elements' Collection of Uniquely Handsome, Lightweight and Incredibly Strong Carbon Fiber Furniture

Mast Elements is an Italian company dedicated to the development of high-end carbon fiber composite furniture and accessories. Its products are completely designed, developed and manufactured in Italy. They are particularly proud of the quality of their handcrafted pieces and they are especially proud of their sense of aesthetics and functionality. They also are very proudly emphatic about the fact that every aspect of their products, from design, prototyping, materials, handcrafting labor, and finishing are 100% Italian.

Carbon fiber is not, of course, a traditional or even natural material for furniture. It is the offspring of modern technologies in search of the ultimate lightweight structural material. Its most high profile use and proving ground has been in F1 auto racing. It is now ubiquitous in cycling machines for professional racing and a mainstay in the aerospace and naval industry.

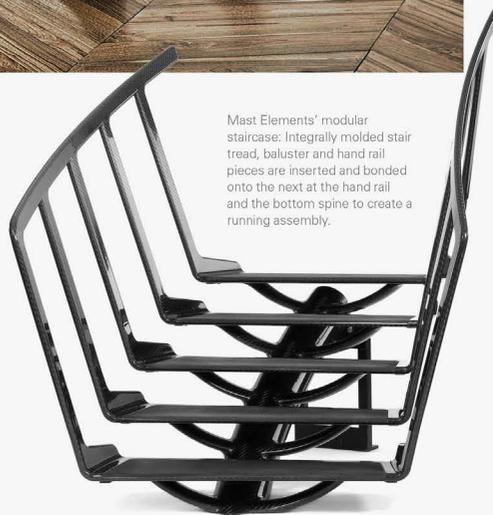


In the background, the *Manta* in black and in white. In the foreground, the *Suspended*—a carbon fiber cantilever coffee table, which can take a surprising amount of load.

Recently, carbon fiber has been employed in civilian aircraft in the form of the Boeing 787, which is half carbon fiber.

As a lover of traditional materials myself, I did not immediately warm up to carbon fiber as an aesthetically pleasing material. Lovers of fine objects always marvel at the patterns of fine wood burl, caress fine leather and appreciate the patina that develops from once burnished bronze. I initially could not feel that way about carbon fiber ten years

ago. But what are traditional materials anyway? They were simply materials employed for utilitarian items like say, wood for a chair. In its most basic form this would be a fallen log, then later a cut piece of log, then a rudimentary stool with legs cut from branches, then a stool with a back, then a chair with parts and shaped from mature wood, and so on, until you get to a structurally sound, ornately shaped oak chair faced with burl veneer that becomes a desirable Louis XIV piece.



*Mast Elements'* modular staircase: Integrally molded stair tread, baluster and hand rail pieces are inserted and bonded onto the next at the hand rail and the bottom spine to create a running assembly.

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The *Fluid*: This is the fantastical prototype displayed at the Salone del Mobile 2014. Being a prototype without a mold to lay up carbon fiber against, *Mast Elements* 3D-printed a core of this chaise in one piece of plastic and sandwiched it between laminated layers of carbon fiber cloth.

**At the recent Salone del Mobile 2014, Mast Elements demonstrated its ability to create dynamic architectural interior components.**



Like traditional materials that have proven themselves over time, carbon fiber composites' fantastic proven structural utility have now given it wonder status. Carbon fiber composites are also not cheap, which has elevated it to a precious and therefore desirable material.

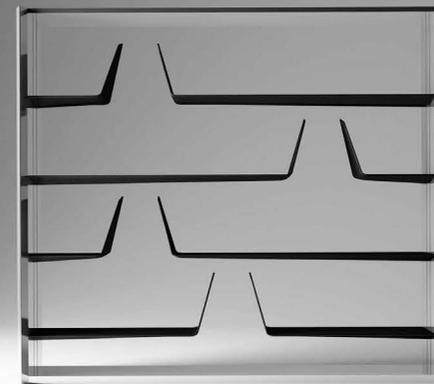
As far as visual appeal is concerned, well, handsome is as handsome does. Today, carbon fiber has certainly already far outstripped its handsome-is-as-handsome-does image. Carbon fiber objects are so associated with expensive high-performance equipment that jewel-like personal accessories made of carbon fiber are now fashionable. Carbon fiber facing-cloth is now applied in a variety of patterns and even colors in celebration of its new status.

At the recent Salone del Mobile 2014, Mast Elements demonstrated its ability to create dynamic architectural interior components. Not merely decorative applications, ME created modular stair components made of high modulus carbon fiber that when put together, sweep through the air to another floor completely unsupported



The Fluid is an elegant design with a fine tie found beneath that keeps the long chaise from spreading fore and aft. This chair is a single piece without any structural joinery.

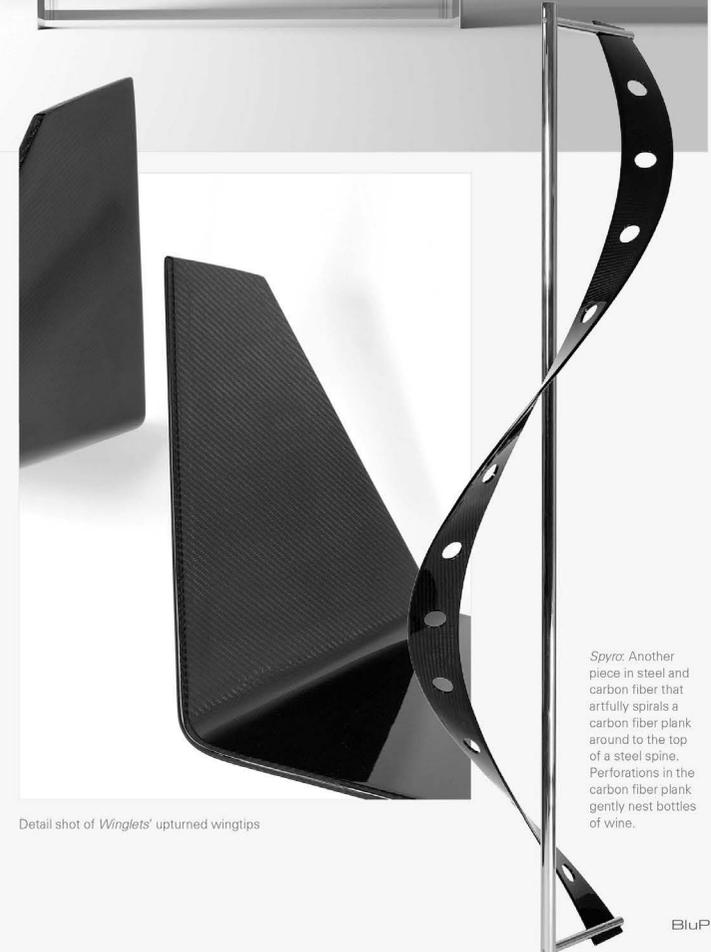
This metal bookcase employs carbon fiber shelves mounted only on one end. The shelves called *Winglets* take inspiration from sailplane wings with upturned wingtips and are tremendously strong. Again, there is a visual tension arising from a seemingly improbable structural arrangement.



in between. The delicate, improbable proportions of the staircase provide drama and a wondrous tension.

On display too at Salone del Mobile 2014 were their super sexy *Manta* lounge chair, a production item evocative of Lamborghini and Ferrari, and their prototype chaise chair—the *Fluid*, a demonstration of their design and prototyping abilities.

The Mast Elements company, in its demonstration of its ability to create architectural interior components, should be a valuable resource for architects and interior designers looking to accomplish cutting-edge designs for über high-end projects. Since the whole creative process for Mast Elements is in-house, communications for design collaboration should be quite good. ■



Detail shot of *Winglets'* upturned wingtips

*Spyra*: Another piece in steel and carbon fiber that artfully spirals a carbon fiber plank around to the top of a steel spine. Perforations in the carbon fiber plank gently nest bottles of wine.