Zero Gravity
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A project by designers Angela Petitto and Aldo Bruno, developed during the Milan Polytechnic Master in Yacht Design, won second prize in the last edition of Lotus Prize, a prestige design competition promoted by the Chinese province of Hunan.

Zero Gravity – this is the name of the project by designers Angela Petitto and Aldo Bruno – is a 24 m sailing yacht, designed to be produced as a one-off. The design, develop during the design workshop of the 11th edition of the Milan Polytechnic Master in Yacht Design, co-ordinated by architect Andrea Vallicelli, won second prize in the prestige international design competition Lotus Prize 2012.

Interior design
The organic and futuristic design is meant to ensure continuity between interiors and exteriors, with perfect balance between architectural rigour and fluidity of the surfaces. The concept of fluidity is highlighted by the curved and embracing walls, occasionally interrupted by implosions that seemed natural deformities; the absence of sharp angles produces changing perceptive perspectives.

The access is characterised by stairways inspired by the aerospace sector, in polished stainless steel. Apparently suspended in space, they give an effect of weightlessness and zero gravity. The interior appears as a futuristic space, of an almost dazzling white, punctuated and highlighted by the light design.

The furnishings unfold along the walls, from the floor and the ceiling; the aim was to transmit the idea of a natural interior, that hides the careful design that went into it and seems to have grown spontaneously. The furnishings tend to float visibly, suspended in the magic of light. They were designed using curves and lines to create a sense of continuity, eliminating the boundaries between horizontal and vertical.

Exteriors
Zero Gravity seems sober and well calibrated in its profile, harmonious with its fluid surfaces and dynamic tensions. The exterior has shapes that are elegant and at the same time aggressive. The deck house is well defined, with its fluid surfaces and dynamic tensions. The profile unfolds forward, accentuated by the negative rake of the bow, an inclined transom and moderate rounding of the deck; it all creates a strong perception of dynamism.

Materials
The choice of a reduced number of materials aimed to give a sensation of simplicity, continuity and purity. The use of aluminium for the deck house, together with the glazed surfaces, makes it seem almost suspended, highlighting the design theme: the absence of gravity. Continuity with the hull, in carbon with a polished finish, is highlighted not just by the clean lines without angles but also by the negative rake of the bow, with a clear symbolic reference to America’s Cup hulls. The careful use of materials in strategic positions reflects and highlights some elements of the boat. For example, carbon fibre highlights the mast and the helm, as the chrome finish highlights the deck equipment such as winches and blocks and safety features such as the rail, continuing in the details of the cockpit furnishing. Minimal furnishing, well started in every detail, is rendered unique by the use of carbon fibre and epoxy resins painted with a metallic finish.

Everything is made lighter by large glazed surfaces, providing optical separation between the exterior and the interior. The combination of materials – carbon fibre, 3D Form panels, epoxy resins with a polished finish, steel and aluminium alloys, conditions and carpet in the master cabin – creates an environment with dynamic, bright and reflecting characteristics, amplified and made harmonious by natural light and artificial spotlights in strategic positions.

Specifications
- Type: Fast cruiser sloop
- Length overall: 24.50 m (80’)
- Waterline length (LWL): 22.79 m
- Beam: 5.90 m
- Waterline beam (BWL): 4.98 m
- Displacement: 37.5 t
- Ballast: 11.5 t
- Prismatic coefficient (Cp): 0.50
- Block coefficient (Cb): 0.70
- Speed under engine: 10.5 kn
- Engine: Yanmar 220 HP
- Sail area: 337m² / 3627 ft²
- Cabins: 6 guest + 2 crew

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