



## East Asia Composites crafts a 13 m motor launch for Hebe Haven Yacht Club

Modern yacht clubs require a multi-purpose vessel to suit the varied duties required. These can include race management for observing race starts and finishes, as well as assisting the club's sail training or providing a VIP race viewing experience for members and guests.

### **Combined expertise: East Asia Composites, One2Three and CCG**

East Asia Composites has been commissioned by the Hebe Haven Yacht Club of Hong Kong to construct a 13 m motor launch to conduct club duties. The vessel is classed with the local registry with the structural design work in accordance with the requirements of DnV/GL.

The naval architects for the vessel are One2Three Designs of Sydney with the Australian office of CCG completing the full structural design of the fiberglass and foam sandwich construction. The interior design was made by East Asia Composites.

### **Robust and lightweight boat for race management**

The primary use of the vessel is for race management in the waters off Hong Kong, with a large open upper deck providing ample space for observing race starts and finishes. To ensure that the crew has the best possible view the aft wheel house deck has been engineered by CCG. The thick sandwich panel ensures that the deck has sufficient stiffness and reduces the need for an intrusive supporting structure for the main deck below. The aft

deck structure has been strengthened to allow the vessel to act as a towing vessel for the club's fleet of smaller day boats and sail training activities.

### **Multiple engineering design methods**

The design and construction of this vessel is a showcase of the abilities of CCG and Diab materials. The structural design of the vessel conducted by the CCG engineers in Australia includes hull, deck and deckhouse laminates, as well as the supporting structure. Multiple engineering design methods were used including classification rule programs for the main structural elements combined with finite element analysis of the sun awning to reduce the weight and complexity of the structure.

The hull laminate is constructed with a combination of *Divinycell HM* and *H series* foam with vinylester infused E-Glass skins. The internal supporting structure of bulkheads and beams are sandwich panels and foam top hat beam fabricated with *Divinycell H* foam.