

# Global Inspection Solutions

## Catamascans

### Background

Our client had three similar catamaran yachts, all over 50' in length, in various states of construction. They had received the boats and contracted to complete the construction, but without drawings or proper design plans, it was going to be a challenging task. They contacted GIS for help to document the 3D shape of each boat, so that they could quickly and accurately produce the design drawings they needed to finish the project.

### Our Process



Big boats are challenging enough, but a big boat in a small space introduced some new challenges. We first removed most of the build up and scaffolding around each boat so that there was a clear line of site for the scanner. We then took a series of 3D scans from various positions around the boat, from the ground and from a 30' man lift available on site.

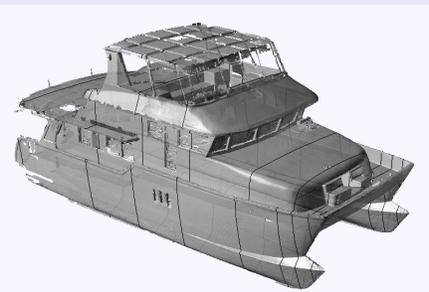
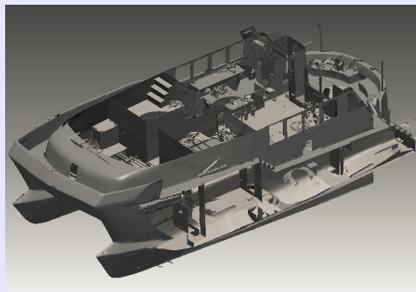
Another set of exterior scans was conducted from the decks of the boat itself, so that we could capture the deck surface, the exterior railing, and other features not visible from the ground. The scan quickly captured almost every inch of the boat hull top deck and exterior features, which we were able to stitch back together to form a complete 3D skin of the exterior.



We conducted a second set of scans through the interior of each craft, this time configuring our scanner to capture each interior room individually. We digitally stitched everything together to form a complete structure, inside and out.

### The Results

The scanner captured everything, and accurately documented every wall, door, cabinet and critical feature. We processed the data to form a full 3D model of each boat, with inside and out.



From the 3D model, we could quickly extract fairing curves, cross sections, individual room measurements and other critical measurements accurately and easily. We could also digitally fit large components, like engines and electrical equipment into the virtual model without the risk and difficulty of moving the real thing - an incredible time savings with large scale 3D scanning.