

Using titanium metal in a marine environment in conjunction with carbon fibre composites.

Earthrace Conservation run local conservation campaigns, mostly with Volunteers, in various countries. These involve the protection of endangered species, Beach Cleanups, School Outreach Programs, Public education or Rallies (<http://earthraceconservation.org/>).

Their current campaign will allow them to build an ocean-going vessel (ER2) to support the global campaign for marine conservation.

They have recently produced prototype components with a local company for the vessel from titanium metal that are naturally corrosion resistant and have superior strength to conventional metals. They now need to investigate their use in conjunction with the carbon composite materials they are planning to use on the deck of the vessel.

The project requires;

- a literature review is to determine the components meet international marine regulations
- the prototype parts to be tested through both virtual and physical methods
- the fastening interface of the titanium metal to the carbon composite material to be investigated

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