



Racing for the America's Cup XXXI begins on October 1st with the Louis Vuitton Cup for challengers. OneWorld Challenge has been preparing to race in Auckland, New Zealand since November 2000. All the testing, training and effort of the last two years are ready to be put to the test. As a Team, we are now fully prepared.

The sea, a harsh environment at the best of times, is no friend to the mechanical systems of any racing yachts.



The OneWorld winch team implements an intensive maintenance schedule. The winch system of an IACC yacht contains over two thousand individual components. Hi performance materials are used throughout in the construction of these yachts. Strength, weight & corrosion resistance all of primary importance in the search for advantages over our competitors.

In the winch system, we are using a wide range of materials:

- Plastics - Delrin™, Ertalite™, Torlon™, Peak™
- Stainless steel grades- 316L, 17-4ph, 13/8 & 2205
- Aluminium alloys – 5083, 6061& 7000 series
- Titanium – CP grade 2 & 6AL 4V
- Carbon / Epoxy composite laminates.



We use the Sonica EP4300 ultrasonic cleaning tank at OneWorld. With an 18lts capacity and featuring the most advanced technology available in ultrasonic tanks - 'Sweep System Generator', we are able to clean contaminated components to a vastly improved level.



NDT or non-destructive testing forms an important part of our research & development process. Components selected for testing must be exceptionally clean and free from contamination. Ultrasonic cleaning is therefore a superior choice to ensure accurate results in dye penetrant testing.



Sea salt, oil, grease & rope particles are the main contaminants we encounter. Using Sonica UG & Sonica AC detergent solutions provides us with fast & efficient cleaning. At OneWorld, we are operating with a tank liquid temperature range set between 30 - 40°C.

Certain complete assemblies can be placed into the tank and cleaned without disassembly. This avoids unnecessary work and facilitates faster reassembly of the winch.



ONEWORLD WINCH TEAM
AMERICA'S CUP 2003

