

# Membership case study: UMing



## The future today: New Eco design to replace the existing fleet

### Context & objectives:

U-Ming's strategy in the expansion and replacement plan:

- To replace old and uncompetitive ships while also to place new orders for eco and efficient ships to enhance fleet competitive edge
- New vessels design differentiation to meet demand of most customers rather than to order existing design ships, take our recent new order as example:

## SOLUTION

### New vessels

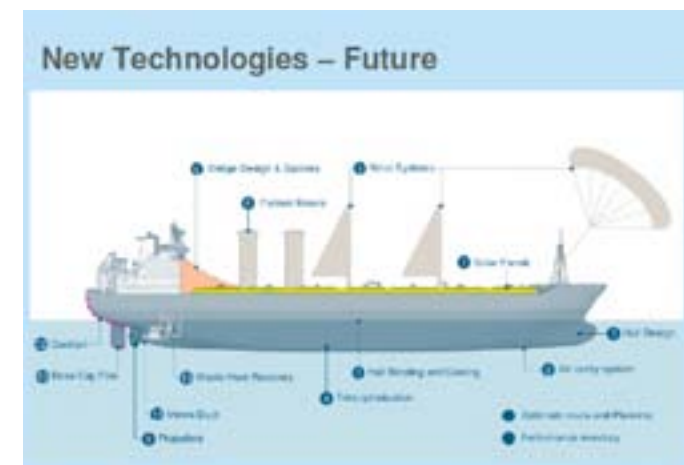
In the recent fleet replacement plan we have ordered a series of 186,000 DWT to add to our fleet. We have cooperated with the ship yard to develop a completely new design. By taking the world's major port restrictions into consideration we have also found an optimized dimension, selected a longer LOA, wider beam and shallower draft.

We have also adopted a few energy saving devices, including duct before propeller, propeller boss cap fin, special low friction A/F painting. We have not only increased the loadable capacity by 5.5% but also reduced the fuel consumption by 20%.

We believe this development will not only benefit our company's income and increase our compatibility but also benefit the global village by reducing the CO<sub>2</sub>. In total we believe the reduction of the CO<sub>2</sub> will be equal to 25%. Following this strategy have since again ordered a series of 84,000 DWT. We found almost equal savings of fuel consumption as well as increasing the loadable capacity.

### Retrofit of existing fleet

For our existing fleet we have retrofitted the alpha lubricator which can save 30% from the cylinder lub. We have installed the PBCF which can save 2-3% of fuel. We have also installed a duct before the propeller which can benefit 5%. In addition we have also implemented a series of operation measure, such as engine tuning, propeller polishing, trim optimization weather routing voyage execution. The results are fantastic.



**More information:**  
[www.uming.com](http://www.uming.com)