



# FLUOROCARBON CASE STUDY

## THRUST BEARING PTFE IN SHIPPING APPLICATIONS

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### THE CHALLENGE

Our client requested a solution that would reduce the weight of a supporting bearing made from tin alloy in a military shipping application.

### THE SOLUTION

We supplied a 15+2% carbon-loaded PTFE bearing with a smaller area of contact but a larger load capacity making the bearing package around 20% lighter than the conventional design.

### THE OUTCOME

All the bearings we manufacture are lubricated, however at start-up this application would inevitably experience some dry rubbing and this blend gave better wear performance, reducing downtime due to bearing failure.

The lower coefficient of friction of PTFE also allowed certain developments around the use of navy propulsion systems that were not possible with tin bearings.