

The newsletter of Bruntons Propellers

Welcome to 'Prop Talk', our new publication designed to keep our customers informed of developments within Bruntons Propellers; also included will be the occasional tip from our technical department to help open up the 'black art' of propeller design.

We have spent the last two years, not just updating our corporate image and brochures, but adding significant new products to our product ranges, to ensure we continue to be world leaders in propulsion technology.

For sailboats, our unique Autoprop range has been joined by the 2, 3 and 4 blade Varifold folding propellers. This has significantly increased our customer base and improved our ability to optimise specific requirements and installations.



For power boats, the addition of the Q-SPD composite surface drive system to our product range, enables small and medium sized boats to reach exceptional speed and performance levels without adding complex and expensive systems to the vessel.

Sales of our high specification Class S propellers and sterngear for large motor yachts and commercial vessels continue to grow; this technology has now been adapted for smaller vessels to provide high levels of performance at cost effective prices.

We are always happy to help with technical advice so if you believe you have a challenging installation problem, or you just want the right propeller for your yacht, call or visit us at a show.



White Rabbit

Size doesn't matter!

From the largest to the smallest vessels we are hard at work providing the best propulsion solutions....

It's hard to envisage a greater comparison than these; White Rabbit, a 201 foot Superyacht and a Cornish Crabber 24, but they have two things in common, both have Bruntons propellers and both have happy owners.

Much has been written about White Rabbit's overall performance, including the remarkable lack of noise and vibration, for which we can take our share of the credit, and the owner of the Crabber, a 24 foot sailing yacht, was full of praise for the propeller we supplied for his yacht, "... since fitting an Autoprop, my boat's performance has radically improved in all areas."

Although your propeller is very much out of sight, the last thing it should be is out of mind. Whatever boat you own, the right propeller can make a huge difference to its performance. Funnily enough, this is even more the case if you own a sailing yacht. If you are still using a fixed propeller you are losing performance when you are sailing, when you are motor sailing, and, almost certainly, when you are motoring as well, as you can read in articles in the middle of this newsletter and in the testimonials on the back page.

Our design and development work never ceases, as yacht designers continue to produce new designs and specify new materials, so we must develop our products to provide the smooth, powerful performance demanded by yacht owners.

Take Baltic Yachts beautifully built 147' sailboat. Her powerful engine (750HP), combined with a lightweight structure, created unacceptable levels of noise and vibration with the first two propellers fitted. Baltic approached us to provide a solution and the 4 blade Varifold was born.

Today the 4 blade Varifold, along with 2 and 3 blade versions, are fitted by other builders such as Swan, Oyster, Southern Wind and Wally Yachts; all demanding the very best performance with minimum noise and vibration and the lowest drag under sail.

The majority of us have more modest vessels but the technology we develop to solve 'high tech' problems is applied to all our ranges, with resulting benefits to all, from the largest to the smallest craft.

Reliability, performance and manoeuvrability

More and more sailing yachts have feathering or folding propellers. David Sheppard explains this growing trend...

Reliability, performance and manoeuvrability you may think are three very pertinent reasons not to change your fixed propeller to a folding or feathering model. The reliability and performance of early propeller designs of the 1970's may have been questionable, but today's modern derivatives are built to withstand all types of conditions and usage. Most importantly, they have been rigorously tested and used successfully for many years around the world. This is what Sir Chay Blythe had to say about Autoprop.

"I selected the Autoprop propellers for our fleet of 67 footers. The boats now have more than a million miles logged in the roughest conditions without a single propeller failure.

That's why we again selected Autoprop for our new fleet of 72-footers. In the 1992-1993 Challenge, a contestant was dismantled in the Southern Ocean leaving the skipper a difficult choice - sail under jury rig to South America or motor to windward 2000 miles to New Zealand in order to rejoin the race. To his credit, the skipper chose the latter course and made the run safely - a feat of seamanship made possible by the reliability and efficiency of the Autoprop.

I can highly recommend Autoprop propellers to all sail boat owners



The crew of Concert had good reason to be grateful for the reliability of their Autoprop

who want the very best performance under sail and power."

Sir Chay Blythe

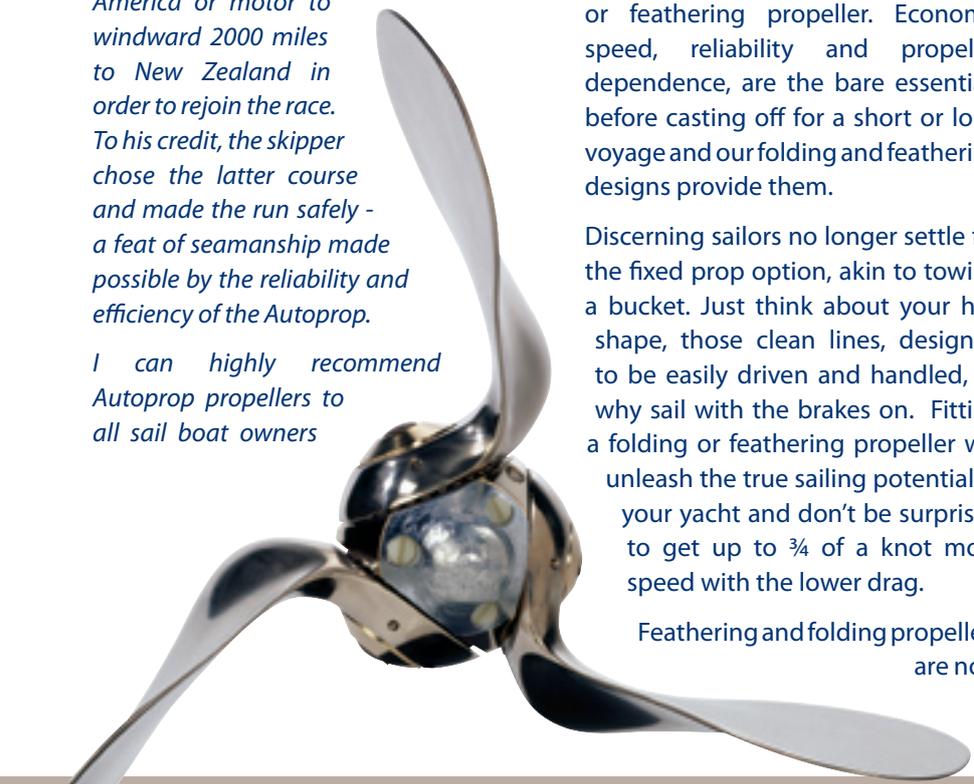
The trend is changing - more boat owners, skippers and their crew are realising the true potential of a folding or feathering propeller. Economy, speed, reliability and propeller dependence, are the bare essentials before casting off for a short or long voyage and our folding and feathering designs provide them.

Discerning sailors no longer settle for the fixed prop option, akin to towing a bucket. Just think about your hull shape, those clean lines, designed to be easily driven and handled, so why sail with the brakes on. Fitting a folding or feathering propeller will unleash the true sailing potential of your yacht and don't be surprised to get up to $\frac{3}{4}$ of a knot more speed with the lower drag.

Feathering and folding propellers are now

costing less, but most of the high-volume yacht production yards are still fitting conventional fixed pitch propellers. Many will not change or offer an alternative propeller. The decision to upgrade the propeller is left up to the boat owner and it is becoming the first choice on the "must have list" when buying a new boat. Making the correct choice and comparing the many propeller brands available can sometimes be confusing.

Bruntons offer a variety of propeller designs and we will help you to obtain the best propulsion solution for any given engine combination and yacht. We will ensure that all the essential elements to a good installation; pitch and diameter, fit to shaft, available clearance, are all carefully considered. We actually design and manufacture virtually all of the propellers we sell, and we have a propeller for every situation. Unlike some therefore, we have no reason to try and sell you anything but, exactly the right propeller for your yacht.



Q-SPD ... for more than a little extra

...it takes more than a 'go faster' stripe to get an 82 foot sports motor yacht to 'go' faster.

But faster it did go when it was fitted with the latest edition to our product ranges the Q-SPD surface drives. The Q-SPD range caters for yachts with engines from 200hp to 2500hp and will provide significant improvement in performance over conventional drives. The Royal Denship '80 Open' is no slouch, able to achieve speeds of around 35 knots but, as the '82 Open', and fitted with surface drives she is now doing over 45 knots.

Surface drive systems will undoubtedly improve a fast motor yachts performance but with Q-SPD's system there are many other advantages. Their systems are the lightest available, thanks to the use of aerospace manufacturing techniques and modern composite materials. Combined, these two factors produce ultra lightweight, high performance propulsion solutions which are ideally suited to a range of recreational and

commercial applications. The units are very low maintenance, corrosion free, easily installed and provide smooth and quiet running.

We have no doubt that Q-SPD's surface drive systems will be fitted to a growing number of motor yachts as more people appreciate the obvious benefits of to be gained. In the meantime we will be happy to give you full details.



The right propeller first

There is a 'right' propeller for your gearbox. Make sure you get it says Toby Ramsay

When choosing an engine for your boat, it is important to consider the effect on the gearbox ratio of the propeller. Most marine diesel engines have a reduction gearbox, which makes the shaft turn slower than the engine, at a speed more suitable for the propeller. The gearbox ratio determines the rotation speed of the propeller in revolutions per minute (rpm):

Propeller speed (rpm) = Engine rated rpm ÷ Gearbox reduction ratio

The engine rpm and gear ratio, together with the engine power, are therefore critical for any propeller sizing. There are generally several gear ratios available with a new engine, so it is important to choose the best one. Generally the best approach is to start with the propeller and work forwards, starting with the

largest diameter propeller you can fit, then choosing the gearbox to suit it. Ultimately these factors could even determine the choice of engine, based on the engine rpm and available gear ratios.

If you are thinking of re-engining or choosing an engine for a new boat, please give us a call and we will look at the options for you.



Autoprop Owners - tell us how it is

We receive numerous communications from satisfied customers telling us of the many benefits they derive from fitting a Bruntons propeller. In this newsletter we feature Autoprop, and here are a few extracts covering a range of yacht sizes and types. In each case the complete testimonial is available on request.

Meet us at the boat shows!

2006

London - 6 - 15 January

Toronto - 13 - 22 January

Düsseldorf - 21 - 29 January

Chicago - 2 - 5 February

Goteborg - 3 - 12 February

Miami - 16 - 20 February

Amsterdam HISWA - 28 February - 5 March

Stockholm - 3 - 12 March

Auckland - 8 - 12 March

Oslo - 17 - 26 March

Madrid - 29 March - 2 April

Sanctuary Cove - 18 - 21 May

Melbourne - 6 - 10 July

Sydney - 3 - 8 August

Newport - 14 - 17 September

Southampton - 15 - 24 September

Monaco - 20 - 23 September

Annapolis - 6 - 10 October

Genoa - 7 - 15 October

Fort Lauderdale - 26 - 30 October

Hamburg - 28 October - 5 November

Miami IBEX - 1 - 3 November

Barcelona - 4 - 12 November

Amsterdam METS - 14 - 16 November

Paris - 1 - 11 December

Istanbul - 8 - 17 December (provisional)

With a clean hull and the newly fitted prop, I found that at 2600 rpm, my old cruising speed, boat speed was up by 0.7 knots. At the same cruising speed of 6.0 knots, rpm was only 2200, so that's what I now cruise at.

I am delighted with the performance of the Autoprop!

Patrick Manley, PBO freelance Journalist - Westerly Oceanlord

....the results are excellent and we are very pleased with it. The boat motors at 5.0 knots in still water with the engine only doing 1500rpm. The drive is very quiet and tiller feels steady and vibration free. Under sail the boat immediately felt free of the drag of the fixed propeller and we are sailing considerably faster, perhaps as much as 1.0 knot faster on some points of sail. The greatest pleasure however is that the twitching and vibration in the tiller, previously suffered when sailing, has completely disappeared. It now feels like a proper sailing boat and helming it is a pleasure.

Martin and Celia Richards - Etap 30I

We sail a Catana 381, a French-built Catamaran, sporting two Yanmar 2GM20s. We replaced our original three blade folding props with two blade Autoprops and left our winter berth at Port Napoleon along a narrow dredged channel in April. Motoring at our usual 2500 revs, I was astonished to learn from my wife that we were making 7.5 knots, rather than our customary 6 knots.

John Quarrie - Catana 381

I fitted an Autoprop to my Moody 42 this summer, prior to our summer holiday. I previously had a three bladed fixed propeller fitted from new in 2000.

I have been very pleased with the Autoprop. My boat is quite heavy by modern standards, and the sailing speed particularly in light to medium winds has improved considerably. Motor sailing, which we seem to end up doing quite a lot of, has improved enormously, with greatly reduced engine revs to maintain a good boat speed.

Mike Shepard - Moody 42

I wanted to get the best out of our boat when sailing and was fed up with spending good money on effective antifouling only to negate the effects by dragging around a 14" three bladed prop. I was prepared to compromise with some loss of performance under power. However since fitting an Autoprop my boat's performance has radically improved in all areas.

..... under sail my gaff cutter is now able to show off her full potential embarrassing many a Bermudan boat - travelling a good half to one knot faster.

Under power we are now able to achieve a good half a knot more at three-quarter revs and an extra three-quarter's of a knot at full chat. During a rough westward crossing of Christchurch and Poole Bay's the Autoprop really punched the boat through the short steep sloop.

It is not often you get your cake and eat it but I reckon I have with the Autoprop.

Mark Woodhouse - Crabber 24