

HOOD

yacht spars

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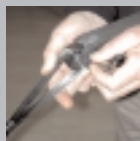
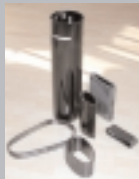


“Carbon has proved itself to be the material of choice for spars... so why not carbon rigging, too?”

HOOD YACHT SPARS president, **John Boyce**, sees a future where nearly everything on big yacht rigs could be made from carbon fibre.

Well, we got there in the end and our filament winding facility is now proving that our bold decision was the right one - although there have been times in the last 18 months when I wasn't quite so sure.

In fact, it is now delivering results well in excess of our expectations - giving rise to exciting and creative thoughts on using it for other lightweight carbon components.



Top: Filament wound components show better material consolidation than conventional lay-ups where voids and tucks occur easily.

Above: Prototype carbon terminal attached to solid carbon rigging with stainless pin and rose bearing.

Why not carbon rigging? A carbon mast can now achieve a weight in the order of 50% of a comparable aluminium spar.

But carbon rigging could be a mere 20% of the weight of stainless steel - offering massive performance advantages. Filament wound, uni-directional carbon is particularly impressive when used in tension (as in standing rigging) and we have already made carbon terminals containing stainless steel rose bearings.

Curing the long carbon shrouds may have to be done in vertical ovens but the enormous potential has prompted us at Hood Yacht Spars to patent the concept of carbon rigging.

Watch this space!

John Boyce

Spinning Carbon



Hood Yacht Spars' new filament winding hall is up and running and seriously open for business

In the last issue, **HOOD YACHT SPARS** described their plans to install new filament winding technology to reduce the costs of carbon rigs for large cruising yachts. Technical Chief **Mike Orange** recounts the design, commissioning and incredible performance of the new plant.



Hood's new computer controlled filament winding machine can wind mast sections over 35m long.

The machine winds pre-preg carbon fibre - called 'tow-pregs' on to a mandrel from the delivery head which tracks backwards and forwards along the full length of the spar. It has the ability to produce uni-directional products which are so important in modern day rigs.

The rate of winding and the varying precise angles (right down to 7°) ▶



Proof of the pudding... The carbon mast for an Italian Rimar 36 like this took less than 2 days to wind.



After assessing a number of US based suppliers of Filament Winding machines, we finally commissioned local Essex based Pultrex to build and install the equipment in our newly constructed, 40 metre long, filament winding 'hall.'

The whole project has taken 18 months to complete up to the stage now where we are more than satisfied with the quality and integrity of the carbon spars now in full production.