PEAK PERFORMANCE AS STANDARD

When we say peak performance as standard, we mean it. Our end-to-end design, engineering and manufacturing solution has been specifically developed to provide fully-optimised propulsion packages that are proven to go faster, reduce fuel consumption, last longer, and increase ride comfort (compared to hand-finished propellers).

Whether you have a brand new motor yacht in build, require a replacement solution due to damage, or are experiencing issues with your current set-up, we can help. Our CFD-designed, CNC-machined Class S propellers and stern gear packages can be manufactured in as few as two weeks, using our rapid production process, and we are recognised as a key supplier to leading boatbuilders around the world, including Sunseeker, Princess, Galeon and Ferretti.

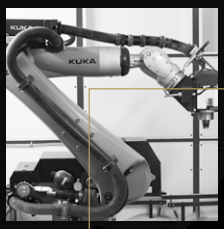
With decades of experience, combined with the very latest technology, including advanced robotics and machine learning, we know what it takes to design and manufacture the perfect propeller and stern gear package. We also understand how the design of your propellers and stern gear need to match your individual requirements. Because of this, we work with you to understand how your vessel is going to be used and design a solution to match – and always at a competitive price.

KEY FEATURES

- Designed using advanced computational fluid dynamics for each individual vessel, whilst considering expected use, location and owner's performance preferences.
- Manufactured using pattern-less mould-making and five-axis CNC machining for total adherence to the CAD design.
- Significantly improved propulsive efficiency due to bespoke nature and optimised rake and skew – reducing engine load by up to 3% at the same RPM to reduce fuel burn by up to 10%, or increase top speed by up to two knots.
- Vibration reduced by up to 50% compared to standard pattern props for improved ride comfort.
- Minimised cavitation for extended working life and extended replacement cycle.
- Manufactured to any classification society rules, including all IACS societies.

TRIALS COMPARISON

BETWEEN CJR CLASS S MACHINED AND A LEADING UK SUPPLIER (HANDFINISHED CLASS 1 PROPELLER)



Vessel	Sunseeker 57 Predator
Date	25th June 2019
Location	Poole, UK

SUMMARY

	Competitors Class 1	CJR Class S
Prop	29 x 39	29 x 38.5 MRKRevolution 1.05
Trials results	33.3 knots at 2375 RPM	33.9 knots at 2375 RPM

Trials demonstrate a 0.6 knot speed increase.

Vibration analysis at maximum RPM

Propeller blade passing frequency (101Hz) in aft cockpit

Competitors Class 1	CJR Class S	% change from hand finished to machined
2858mm/s^2	2170 mm/s^2	24%
2528 mm/s^2	1812 mm/s^2	28%

There is around a 25% reduction in vibration levels at the blade passing frequency.

Shaft frequency (20Hz) in aft cockpit at maximum RPM

Competitors Class 1	CJR Class S	% change from hand finished to machined
830 mm/s^2	386 mm/s^2	53%
795 mm/s^2	333 mm/s^2	58%

Vibration levels are less than half at the shaft frequency.

NOT ALL PROPULSION SYSTEMS ARE CREATED EQUAL

We don't use standard off-the-shelf patterns or a hand-made close match approach, and we always design and manufacture for a specific vessel. This provides our customers with peace of mind that everything we supply is going to perform exactly as expected, with maximum performance, efficiency, longevity and ride comfort.

Take a moment to explore our design and manufacturing process to understand the CJR difference, and why we are confident that our products are amongst the best in the world.

"Working with CJR has been a revelation. As they have demonstrated, technology can dramatically improve the achievable standard for performance and vibration levels. We have learnt that fully-machined Class S propellers are the only option for minimising vibration, putting less strain on the sterngear system and extending the lifespan of the vessel, plus improving crew comfort. The vessel is now saving a significant volume of fuel each day – equating to approximately 8–10% of annual usage. For us, this is an incredible saving and demonstrates the value CJR provides its customers."

Bob Mainprize, Owner of Mainprize Offshore

LOCATION

CJR Propulsion Ltd
70–72 Quayside Road
Bitterne Manor
Southampton, SO18 1AD
United Kingdom

CONTACT DETAILS

Tel: +44 (0)23 8022 2032
Fax: +44 (0)23 8021 1832
info@cjrprop.com

CJR PROPULSION