



Ship motion
group

**Propulsion Systems
& Services**

We promise you
the ultimate
ship motion experience.

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Ship Motion Design

Superior maritime performance.

We revolutionize propulsion and steering systems to enhance the performance, safety, and efficiency of maritime vessels. Our cutting-edge solutions meet the dynamic needs of the modern yachting industry, ensuring every voyage is smooth, controlled and efficient.

We understand that the heart of a vessel's performance lies in its propulsion system. That's why our advanced propulsion solutions are engineered to deliver maximum power, superior fuel efficiency, and the highest standards of environmental sustainability.

Trust Ship Motion Design to provide the innovation and reliability your vessel needs for optimal performance in all maritime conditions.

What we deliver

Without any compromise.



Innovative
technology



Customised
solutions



Industry-leading
expertise



Commitment
to excellence



Client-focused
service



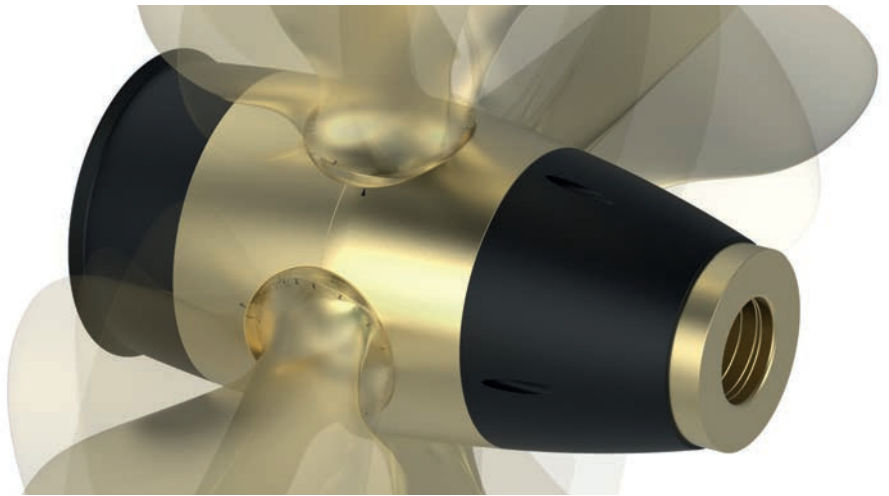
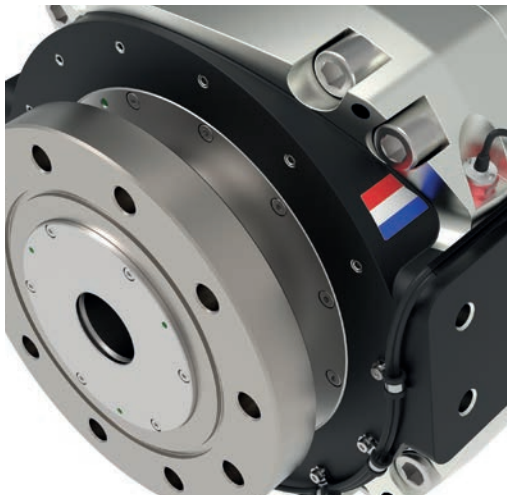
Proven
success



(Hybrid) Controllable Pitch Propeller

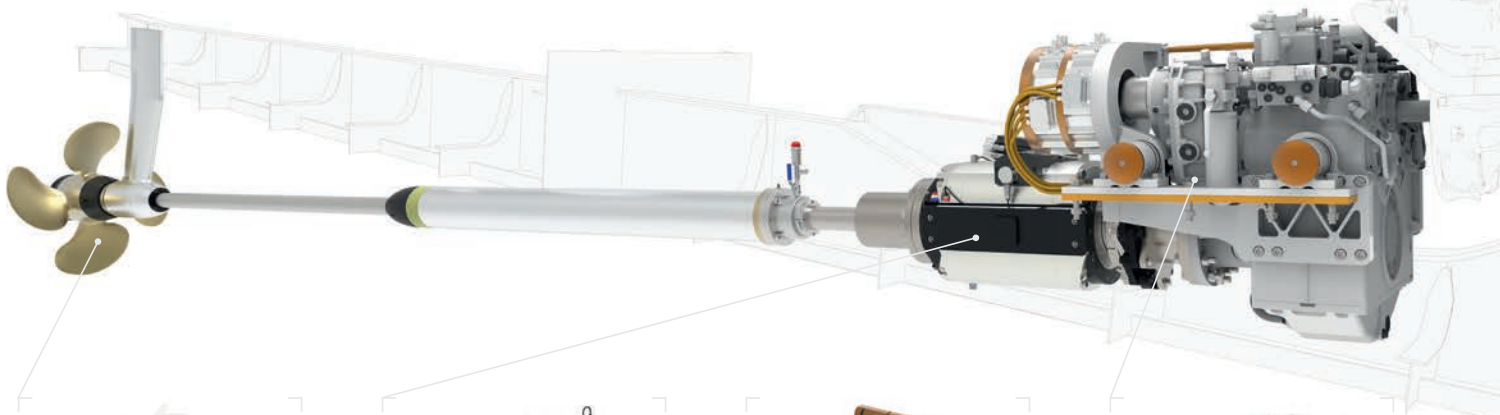
The ultimate solution for modern maritime efficiency and precision.

Our (H)CPP technology allows you to adjust blade angles in real-time, optimising fuel consumption and thrust for any operational condition. Whether you are navigating tight harbours, cruising at high speeds, or balancing hybrid propulsion systems, our CPP delivers unmatched manoeuvrability and performance.



(H)CPP

State of the art system to offer unparalleled performance.



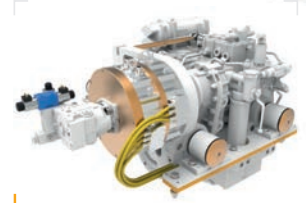
01
Custom Controllable
Pitch Propeller



02
Pitch
Control Unit



03
CPP
Control System



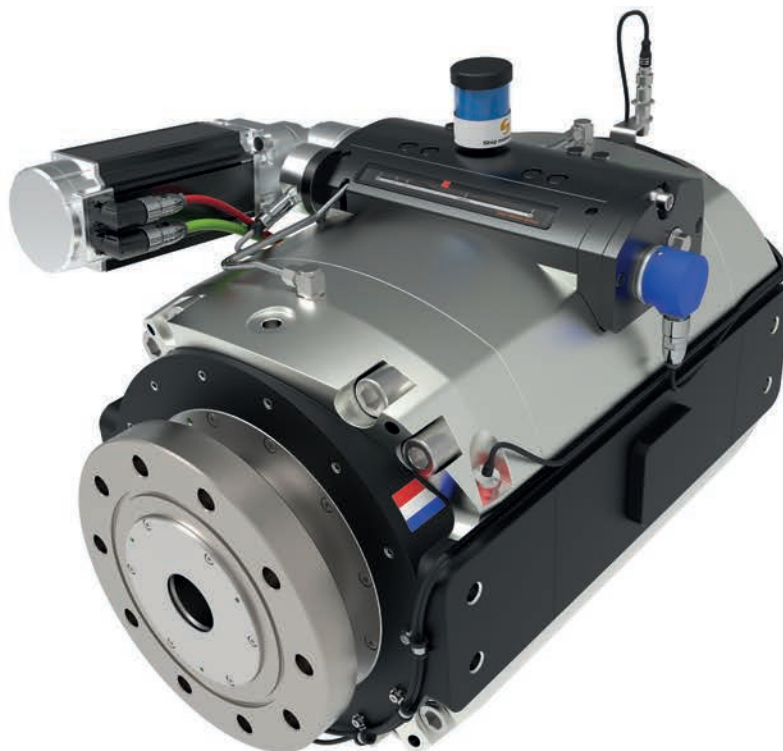
04
Hybrid Gearbox
Solution





Custom Controllable Pitch Propeller

Enhance your yacht's performance with our custom CPP, boosting fuel efficiency and manoeuvrability. Our HCPP integration for hybrid yachts optimises power output variations and transitions, while CPP-equipped sailing boats utilise unparalleled regeneration to recharge batteries and minimise drag.



Pitch Control Unit

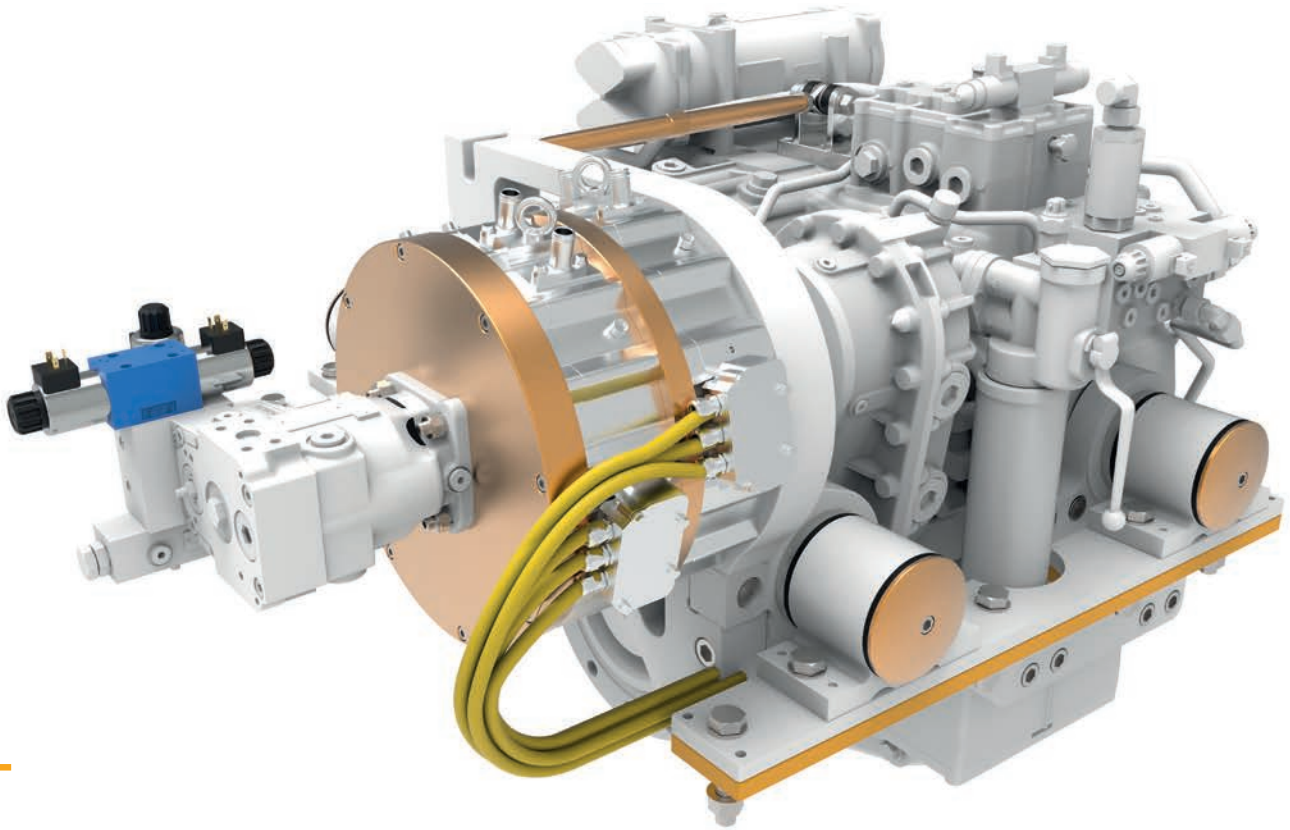
Experience precision, speed and reliability with our electrically powered PCU. Integrating a thrust bearing and cooling mechanism, our pioneering system ensures exceptional efficiency and endurance while simplifying operation and semi-elastic mounting optimise noise and vibration levels. With our patented Electric/Mechanical Pitch Actuation System, enjoy uniquely accurate and responsive pitch adjustments, setting a new standard in marine propulsion.





CPP Control System

Incorporating sensors and monitoring devices to dynamically regulate propeller pitch for peak performance. Through intuitive interfaces and flawless integration, it enhances efficiency while adhering to safety standards. Remote access allow for real-time monitoring and adjustments from any internet-connected location. Despite its sophistication, the user-friendly interface streamlines operations for crew members.



Hybrid Gearbox Solution

The optional hybrid gearbox merges conventional mechanical gearing with electric motor technology, presenting a flexible and high-performance solution across diverse applications. While Ship Motion does not provide electric motors or hydraulic pumps, we specialise in seamlessly integrating all system components, ensuring flawless operation and maximising the benefits of any hybrid solution.



(H)CPP benefits



Unparalleled
power
regeneration



Feathering
to minimize
drag



Highly efficient
propulsion



Electrical fast
and accurate
Pitch Adjustment



Advanced
controls

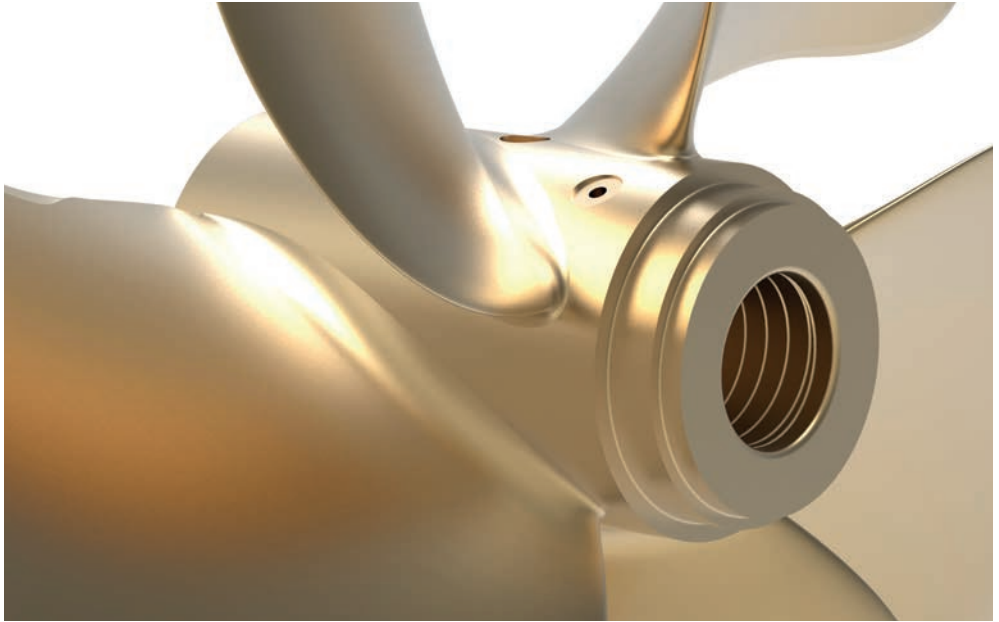


Application
tailored design

Fixed Pitch Propulsion

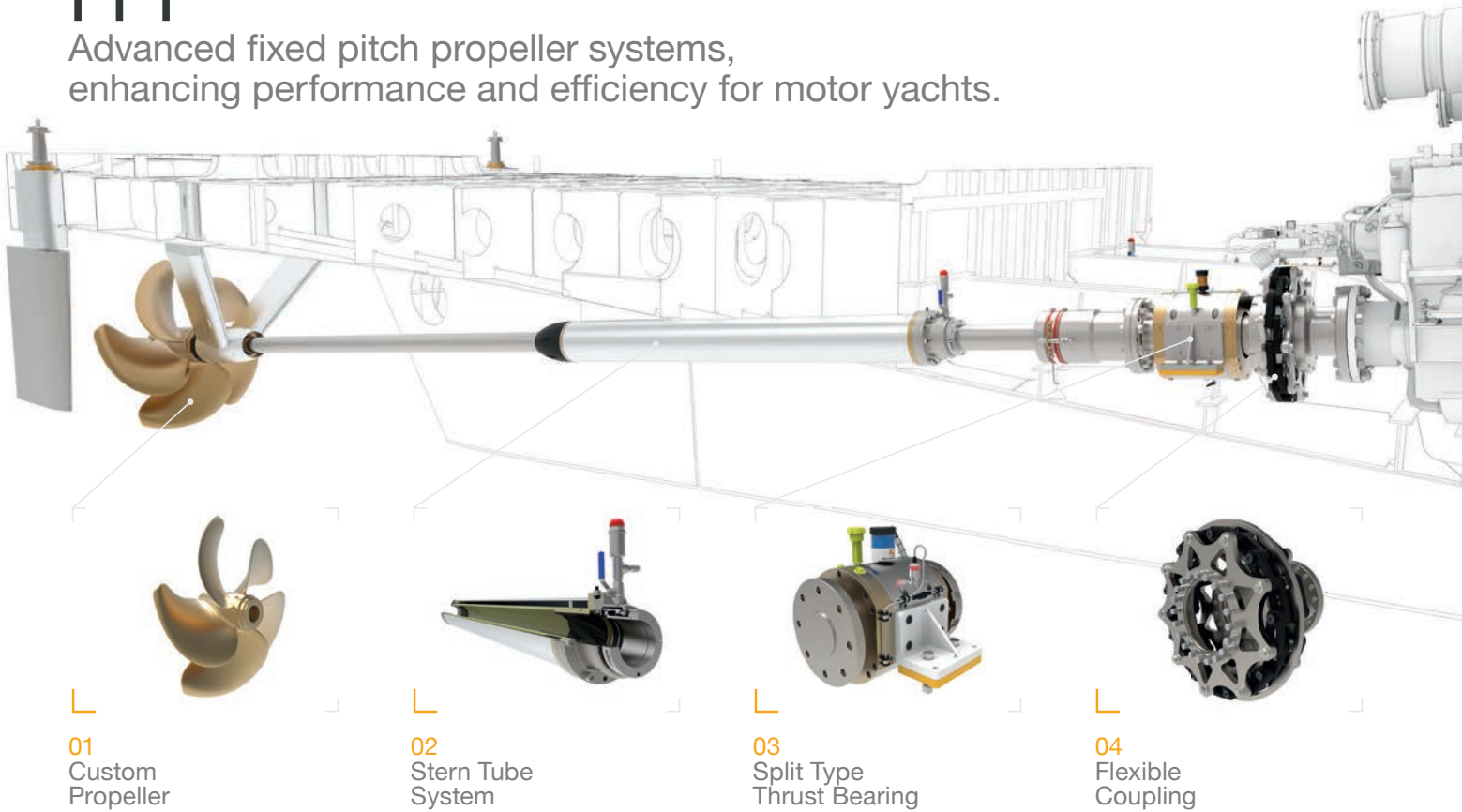
Reliable power and efficiency.

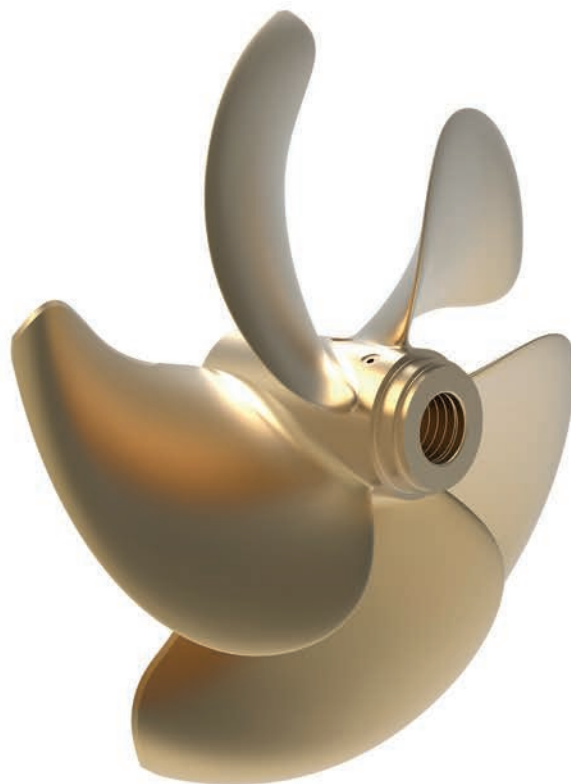
Designed to provide robust performance, reliability and efficiency for a wide range of yachts. Our expertise ensures that each FPP system is meticulously engineered and installed to meet the specific needs of our clients, guaranteeing optimal functionality and longevity.



FPP

Advanced fixed pitch propeller systems,
enhancing performance and efficiency for motor yachts.





Custom Propeller

Tailored to meet the unique operational requirements of each yacht. Engineered to provide optimal performance, fuel efficiency and durability, ensuring that your vessel achieves the best possible performance under all conditions.





Stern Tube System

By harnessing seawater for lubrication, we eliminate the need for oil-based lubricants, reducing environmental impact while maintaining efficiency. Crafted with a composite inner tube eliminates corrosion, our systems ensure durability and reliability in harsh marine conditions with minimal maintenance requirements.



Split Type Thrust Bearing

Precision-engineered to elevate marine propulsion systems, oil-lubricated which offer up to 5 degrees of dynamic alignment and enhancing onboard comfort. Water cooling is used for efficient temperature regulation to minimise losses. The split-type design allows for convenient in-situ overhaul without realignment.





Flexible Coupling

Our highly flexible couplings effectively transmit torque while accommodating substantial misalignments and reducing vibration. It is allowing for softer engine mounts to result in higher comfort levels onboard.

FPP benefits



Seamless
system
integration



High
performance
and reliability



Innovative
sea-water
lubrication



Unparalleled
comfort



Low cost
of ownership



Reduced
environmental
impact

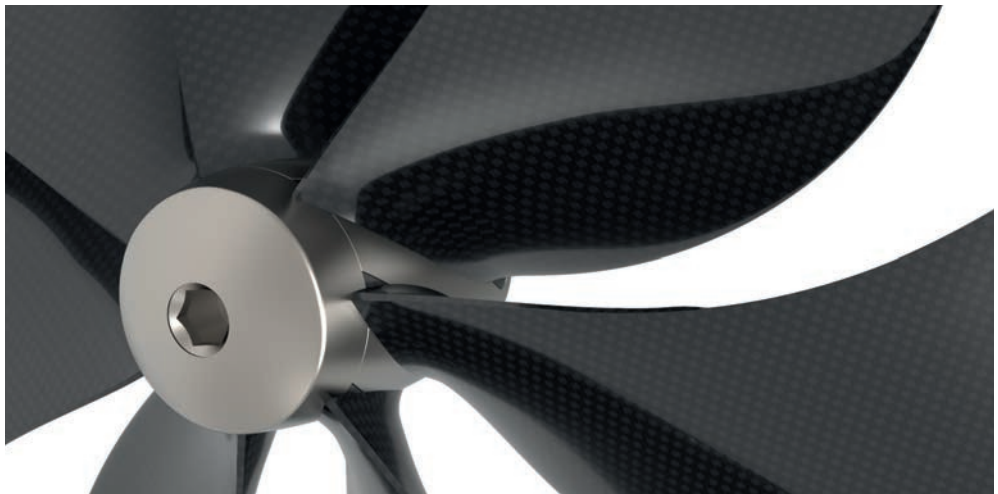


Retractable Propulsion System

Uncompromised propulsion performance.

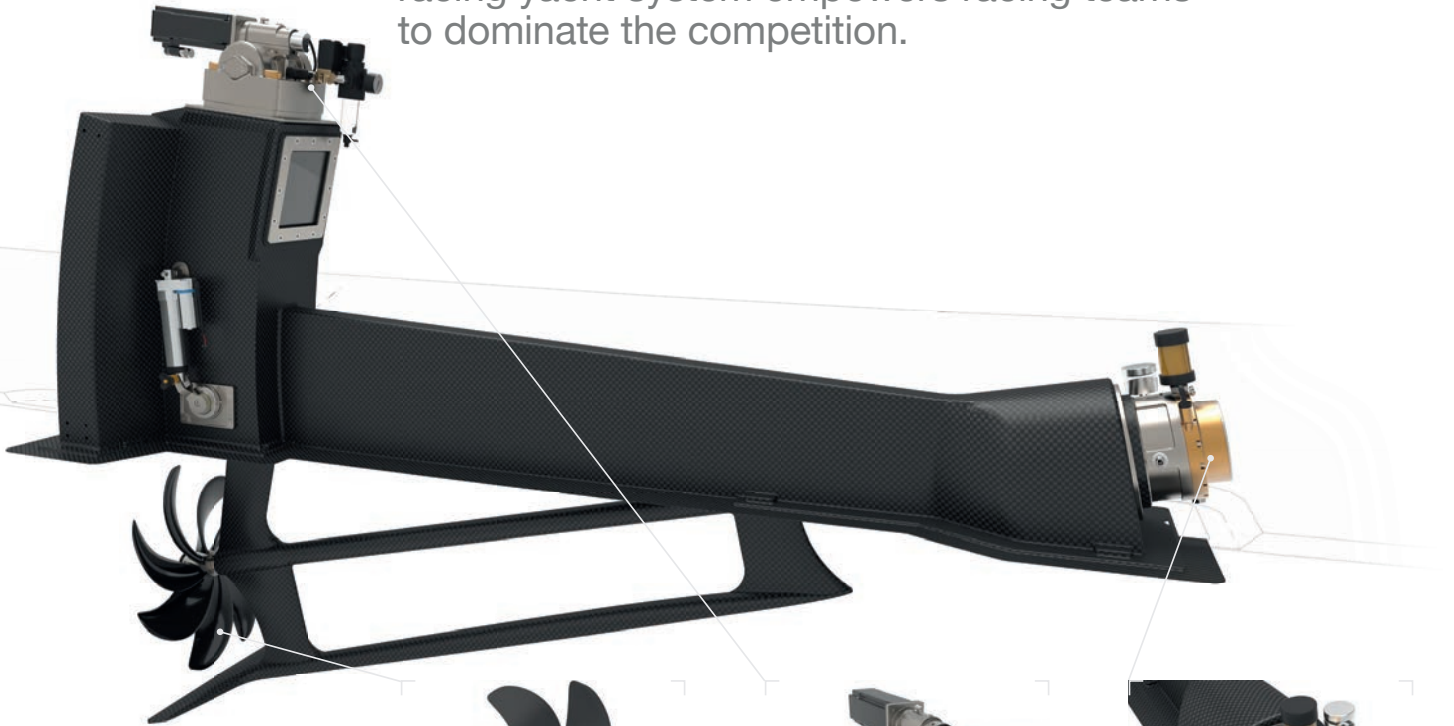
We offer specialised RPS' for both racing yachts and performance superyachts, tailored to meet specific requirements. The system eliminates drag when not in use, optimising sailing performance and enhancing maneuverability while maintaining sleek aesthetics.

For racing yachts our design ensures minimal weight, maximising sailing performance without sacrificing propulsion. For superyachts, our custom systems focus on performance, weight management and comfort, seamlessly integrating with the vessel's design to deliver superior propulsion efficiency and a luxurious experience.

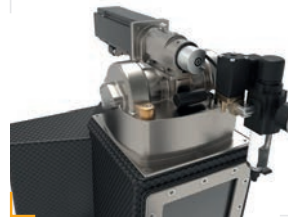


RPS for Racing Yachts

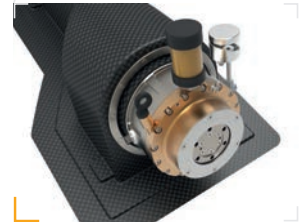
The state-of-the-art precision engineered racing yacht system empowers racing teams to dominate the competition.



01
Custom
Carbon Propeller



02
Stern Tube
System



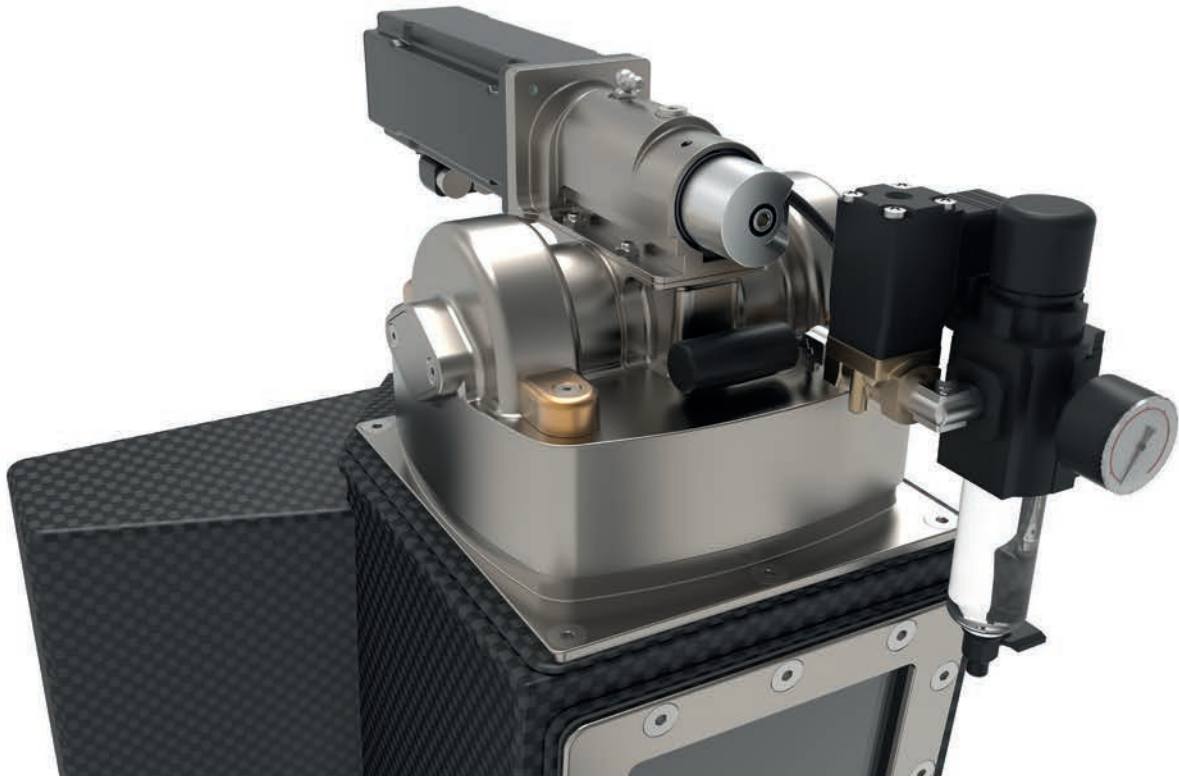
03
Split Type
Thrust Bearing





Custom Carbon Propeller

Our custom-designed carbon propellers maximise propulsion efficiency, allowing for smaller engines, reduced weight and enhanced sailing performance. Available in carbon with a Titanium hub, they offer lightweight durability for high-performance RPS'.



Retract/Deploy system

Providing a lightweight and efficient solution for raising and lowering the propulsion units in seconds. Powered by electricity, this system offers precise control over the movement of the propulsion unit, ensuring smooth operation and a double lock mechanism secures the propulsion unit while down, enhancing safety during operation.





Thrust and seal-housing

At the frontside of the RPS, propeller thrust is efficiently absorbed and seamlessly transferred to the hull structure. Enhanced with an oil-lubricated thrust bearing ensures maximum durability and smooth operation. Furthermore, a twin shaft seal arrangement guarantees a fail-safe system, providing added reliability.

RPS benefits



Eliminate
propulsion
drag



Lightweight
design



Proven
best system
in the market



Race- &
Superyacht
RPS available



Game changer
in sailing
performance



Uncompromised
motoring
performance



Ship Motion Services

With the establishment of Ship Motion Services Spain S.L. in Mallorca, we extend instant high-quality support, maintenance and spare parts services to owners of Ship Motion Group propulsion and steering products.

Our mission is to ensure the optimal performance and longevity of these systems, while also providing overall satisfaction and peace of mind for our valued customers.

What we deliver

No matter where you are.



Strong
engineering



High quality
manufacturing



Commitment
to excellence



Reliable and
high performing
products



Extended
service and
customer care

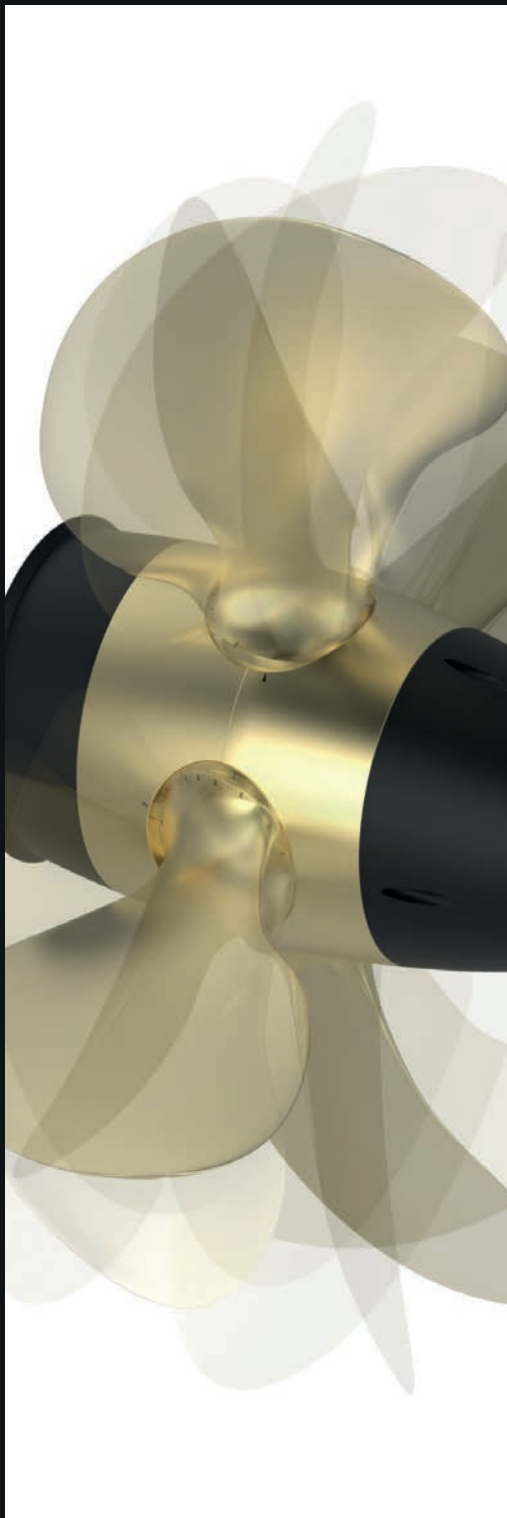


Alignment services

We extend our expertise to the broader yachting industry by offering alignment services.

Tailored to meet the specific needs of yacht owners and operators, ensuring that propulsion systems are precisely aligned for optimal performance and efficiency.



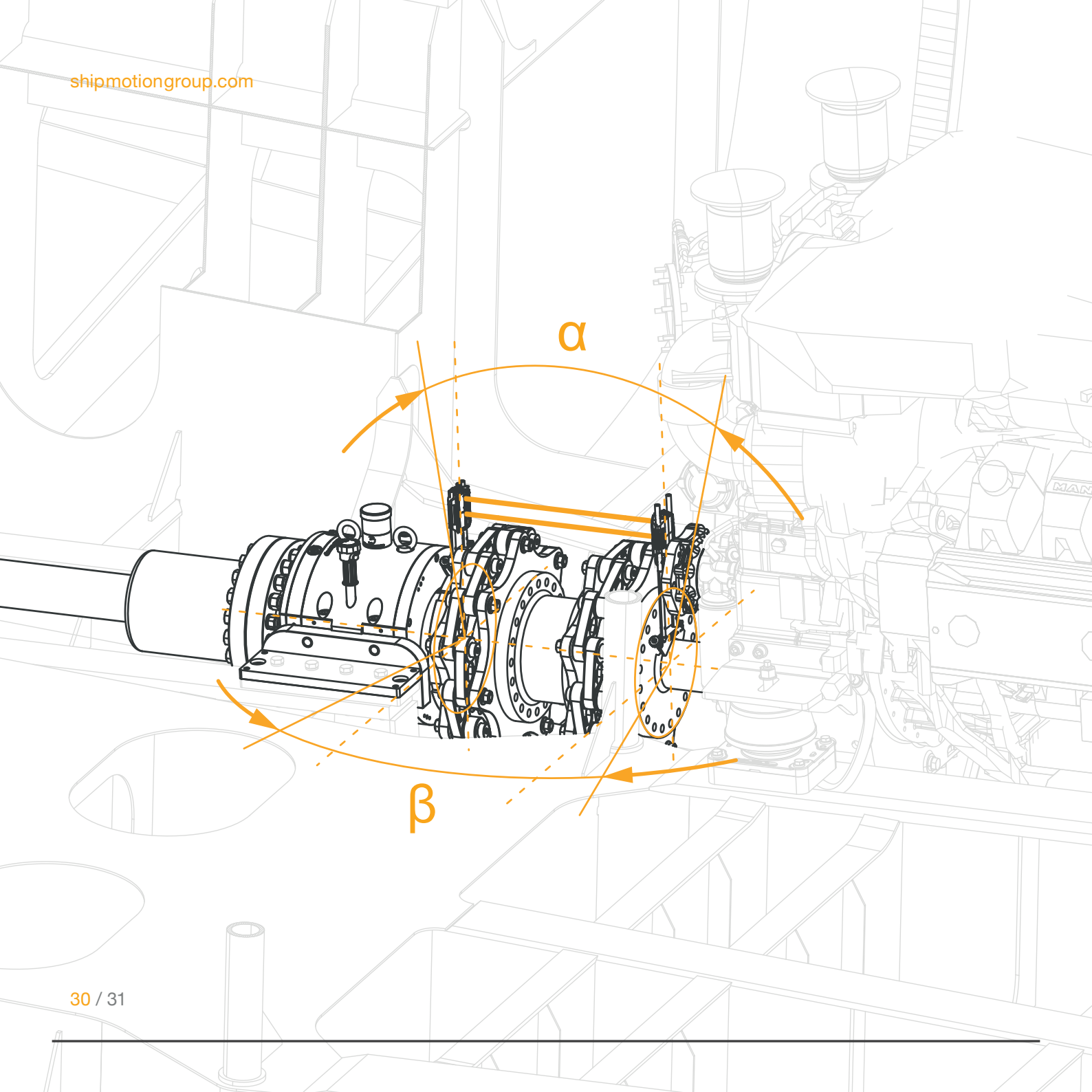


Installation and customer care

Ship Motion Design offers an extensive package of worldwide services to ensure the optimal performance and longevity of your marine propulsion system.

With our expertise and commitment to customer satisfaction, we are your trusted partner for reliable, efficient installation and maintenance.





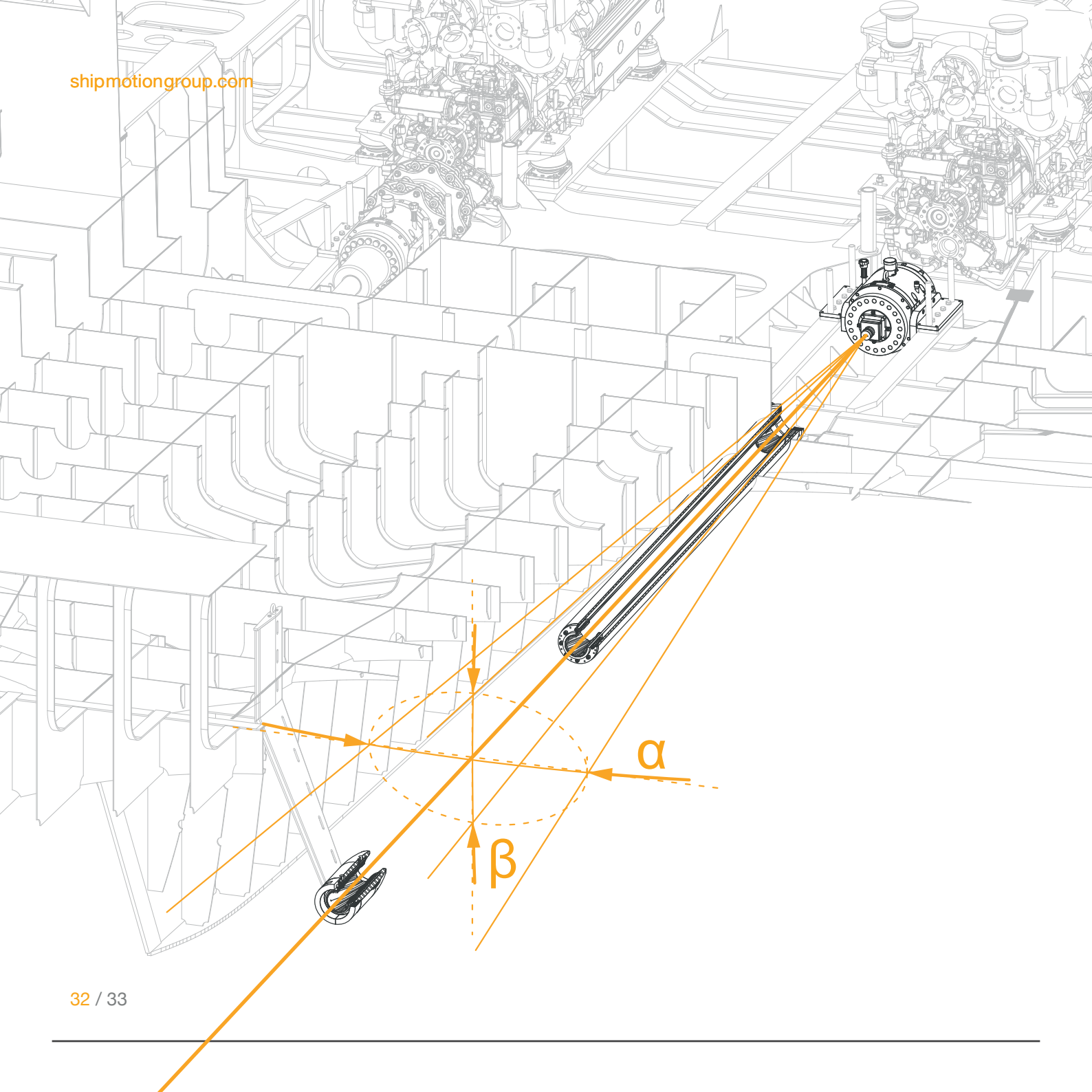
A detailed line drawing of a ship's propulsion engine, showing various components like the cylinder, pistons, and mounting brackets. The brand name 'MAN' is visible on the mounting brackets.

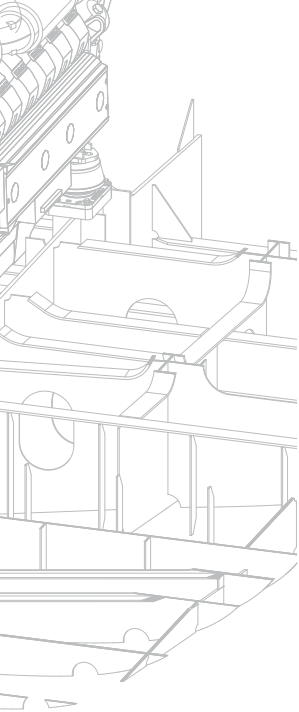
Propulsion Engine Alignment

Propulsion engines are aligned within a tolerated margin to the propulsion system.

- Misalignment occurs over time due to compression and aging of engine mounts.
- Yearly alignment checks and re-alignment of propulsion engines are required to avoid alignment-related failures.







Propulsion Shaft Alignment

Shaft alignment is the process of aligning stern tube bearings, thrust bearings, and intermediate bearings to each other within a tolerated margin.

- An absolute requirement for propulsion machinery before it's put into service, during class surveys and maintenance/modification works.
- Improves operational efficiency.
- Saves costs in the long term.
- Enhanced safety onboard.



Alignment benefits



Enhanced
Propulsion
Efficiency



Reduced Noise
and Vibration



Extended
Lifespan



Lower
Maintenance
Costs



Minimized
Downtime



Safety



Contact us today

To learn more about our products and services
and how we can assist you in achieving
optimal steering and propulsion performance
for your yacht.

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shipmotiongroup.com

Your partner for
integrated propulsion systems
and global services.

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