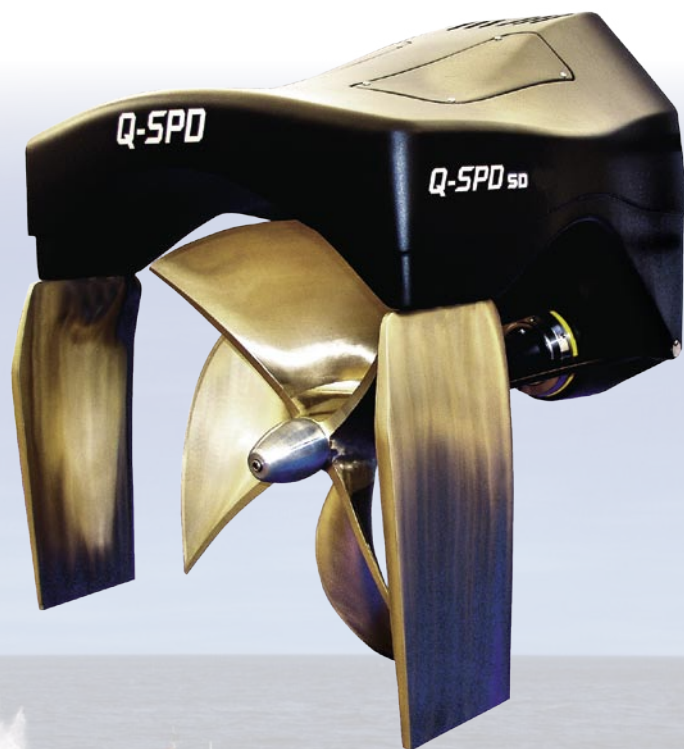


Q-SPD



ADVANCING MARINE PROPULSION

Q-SPD

The Q-SPD Advantage

Q-SPD's design team have developed The Q-SPD Advantage. They did this by taking the premium attributes of traditional surface drive systems and brought them together with exclusive and precise Q-SPD innovation. The Q-SPD Advantage was born.

Q-SPD Advantage is a solution that capitalises on the best of surface drive technology and the best of Q-SPD innovation.

"Q-SPD is a high performance alternative AND it offers all the classic benefits of conventional propulsion. The vessel is usable right through the speed range, not just at high speed. It is able to cruise easily and efficiently and pass through displacement to planning transition effortlessly with no stress on the engine, boat and crew. It tracks the boat well and steers well at all speeds, and it has superior manoeuvrability – THIS IS THE Q-SPD ADVANTAGE"
Head Design Engineer
Q-SPD International.

It actually works – it's not just a dream. It's real. You drive the boat just like a conventional propeller driven boat and it will respond the same AND it will go faster, accelerate quicker, and manoeuvre easier.

The Q-SPD Advantage includes a complete drive package, including, steering, integrated thrust bearings and intermediate drive shafts.

The Q-SPD Advantage boasts an extensive model range. It can be applied to vessels with power ranges from 200hp to 3000hp.

The Q-SPD Advantage - not only is it functional and innovative, it looks great too! The visual impact of its sleek design always impresses!



"The great advantages of Q-SPD are that your cruising is more smooth. Reduced drag and less weight means she runs faster and has minimum draught. No hydraulic system to maintain and less to go wrong. Q-SPD makes the yacht a lot safer and gives superior handling compared to rudderless drives and conventional shaft-and-prop installations"
ref: ROYAL DENSHIP

Construction is Lightweight & Robust

Q-SPD construction is composite, so they are exceptionally lightweight, as much as 50% lighter than other brands. The main housings are moulded from carbon-fibre and e-glass in an epoxy matrix using advanced infusion techniques. This produces extremely strong and tensile housings that will not corrode and are not susceptible to electrolysis.

Lowest Maintenance

The Q-SPD Advantage requires virtually no maintenance! No hydraulic lines or critical moving parts outside the vessel therefore they cannot be harmed by being submerged in sea water. Also, water lubricated shaft bearings and self-lubricating rudder bearings offer a long-life maintenance free operation.

Compact Design

Q-SPD's compact design and the use of flanking rudders rather than trailing rudders, ensures that the planing surface and water line length is maximised. This also means that long swim platforms are not needed to cover the drives.

Smooth and Quiet

By integrating the Q-SPD propeller and drive system with soft mounted thrust bearings, associated noise and vibration is isolated. Intermediate shafts with constant velocity joints take up alignment differences to transfer power with no losses and further ensuring smooth and quiet operation.

Superior Handling & Performance

Q-SPD Advantage utilises the engines exhaust gasses and passive ventilation to produce fast acceleration and efficient low speed operation. Q-SPD's unique propeller design not only offers maximum speed but also ensures effective reverse, plus predictable and precise manoeuvrability.

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SD Series

The Q-SPD SD series is now the most popular of all Q-SPD drive models. It began life as the ideal alternative to stern drives offering a virtually maintenance free solution. Today, the Q-SPD SD Series remains the most maintenance free solution on the market and is now also available in a range of models that can absorb up to over 2000hp.*

As with all Q-SPD models, the SD Series is constructed using high-tech materials and processes to produce lightweight yet structurally strong and tensile components.

Q-SPD's advanced propeller design, a unique ventilation system, integral thrust bearing and the evolution of the unique twin flanking rudders make Q-SPD SD Series smoother and quieter than any other surface drive. All this and the performance advantages of fully ventilated surface propellers. The twin rudders offer better tracking, maneuverability and handling at all speeds.

Q-SPD SD drives are compact in length, this means they do not impose on waterline length. They offer shallower draft than most other propulsion options, and can be used in single, twin and even triple or quad applications. They are suited to many hull forms including displacement catamarans and are ideal for both recreational and commercial applications.

The standard "Fixed" drive version has a 6° main shaft angle and includes an integrated water cooled thrust bearing. Thrust is delivered to the transom by way of the SD drives internal thrust bearing.

For some models, a "Direct" drive version allows some customisation to the main shaft angle to be preset 2° to 8° for applications where engine position does not lend itself to a 6° propeller shaft. For instance, where engines are mounted further forward. The direct drive SD can be supplied with a remote mounted thrust bearing and flexible coupling shaft or, depending on the application, the shaft may be coupled directly to the gearbox.*

Models SD110 through SD201 are designed for 12° transoms so they are a perfect stern drive alternative. The larger SD301 through SD350 drives mount to a 6° transom angle.



54' STEALTH 540 - South Africa

Q-SPD SD Drives are a viable alternative to conventional underwater shafts and propellers, water jets and other propulsion options. Performance and overall efficiency is improved, draft is reduced, conventional usability, handling and safety are enhanced.

*See Q-SPD's selection guide for guidance on which option might best suit your application



36' RAMCO - New Zealand

Q-SPD

MY Series

“The most obvious choice for fast motor yachts”

Q-SPD's MY series has been specifically developed for integrating into fast motor yacht designs. The Q-SPD drives behave like conventional propulsion in all respects with the added Q-SPD Advantage of superior handling and performance. This offers the motor yacht designer and builder a definite edge over their competition to out-perform and out-maneuvre without compromise.

The Q-SPD Advantage offers a no-nonsense, no-maintenance approach to high performance propulsion. There is no need for the operator to use complex trimming operations to optimise trim and load conditions. They will not



82' ROYAL DENSHIP OPEN - Denmark



overload the engines by using incorrect operating behaviour. Therefore, the operator can concentrate on simply driving the boat and looking after their passengers and crew.

You drive the boat just like a conventional propeller driven boat and it will respond the same AND it will go faster, accelerate quicker, and manoeuvre easier.

The propeller design and integration of the solution into the vessel design is the key. Q-SPD experts will work closely with designers to assist with effective integration of the drive system.

Components used in Q-SPD MY applications are modular. That is, Q-SPD can offer alternative configuration methods that best fit the motor yachts design and purpose. Q-SPD MY series solutions can be offered either in direct drive configurations or with integrated thrust bearings and for power options up to 3000hp.*

WB Series

The WB Series is for specialised application to commercial vessels such as water taxis, ferries, patrol boats and interceptors, crew boats, fishing and dive boats.

The same advantages that make The Q-SPD Advantage a superior option for recreational use are equally applied to commercial applications.

Q-SPD's advanced propeller design, style and application of Q-SPD technology produces high load carrying capabilities as well as all round superior handling and performance.

The WB Series has the same benefits as the SD and MY Series, taking into account specific needs of work boat and commercial applications. These benefits include lightweight composite construction, low maintenance, compact design, superior handling and performance, smooth, quiet and safe operation.



68' EXPLORER - New Zealand

The Q-SPD Advantage can also be an effective and rewarding solution for work boats that operate in low speed mode.

*See Q-SPD's selection guide for guidance on which option might best suit your application

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Model Range and Selection Guidelines

The table below give indications of typical Model rating limits along with sizes and approximate power ranges. These are intended as guidelines only. There are many factors that determine the correct Q-SPD solution, such as vessel weight and style, power speed and mission. Q-SPD will complete a full analysis for all applications to determine the correct arrangement and drive option.

Model	Type	(2) Nominal Drive Weight	Integral Thrust Bearing Rating	(1) Max Torque	(1) Max Power at 1200rpm	(1) Max Power at 2000rpm	Nominal Max Vessel Weight Per drive	Max Propeller Diameter
SD110-F	Fixed - Integral Thrust	110kg	15kN	1,500 Nm 1,106 lbft	200kW 270bhp	328 kW 440 bhp	6,000 kg 13,200 lb	26" 660mm
SD152-F	Fixed - Integral Thrust	120 kg	18kN	2,200 Nm 1,623 lbft	235 kW 315 bhp	485 kW 650 bhp	6,000 kg 13,200 lb	700 mm 27.5"
SD201-F	Fixed - Integral Thrust	125 kg	18kN	3,000 Nm 2,213 lbft	276 kW 370 bhp	656 kW 880 bhp	7,500 kg 16,520 lb	700 mm 27.5"
SD275-D	Direct - Remote Thrust	200kg**	na	4,000 Nm 2,950 lbft	522 kW 700 bhp	858 kW 1,150 bhp	9,000 kg 19,800 lb	34" 865 mm
SD275-F	Fixed - Integral Thrust	260kg	30kN	4,000 Nm 2,950 lbft	522 kW 700 bhp	858 kW 1,150 bhp	9,000 kg 19,800 lb	34" 865 mm
SD301-D	Direct - Remote Thrust	200kg**	na	5,200 Nm 3,835 lbft	671 kW 900 bhp	1,120 kW 1,500 bhp	11,000 kg 24,200 lb	34" 865 mm
SD301-F	Fixed - Integral Thrust	280 kg	30kN	5,200 Nm 3,835 lbft	671 kW 900 bhp	1,120 kW 1,500 bhp	11,000 kg 24,200 lb	34" 865 mm
SD325-D	Direct - Remote Thrust	200kg**	na	6,700 Nm 4,942 lbft	by app	1,455 kW 1,950 bhp	14,000 kg 31,000 lb	34" 865 mm
SD325-F	Fixed - Integral Thrust	300kg	40kN	6,700 Nm 4,942 lbft	by app	1,455 kW 1,950 bhp	14,000 kg 31,000 lb	34" 865 mm
SD350-D	Direct - Remote Thrust	200kg**	na	8,300 Nm 6,122 lbft	by app	1,791 kW 2,400 bhp	18,000 kg 40,000	34" 865 mm
SD350-F	Fixed - Integral Thrust	310 kg	40kN	8,300 Nm 6,122 lbft	by app	1,791 kW 2,400 bhp	18,000 kg 40,000	34" 865 mm
MY350	Direct - Remote Thrust	(3)	na	8,300 Nm 6,122 lbft	1,082 kW 1,450 bhp	1,490 kW 2,000 bhp	25,000 kg 55,100 lb	no limit
MY400	Direct - Remote Thrust	(3)	na	1,050 kgm 7,581 ftlb	1,567 kW 2,100 bhp	by app	36,000 kg 79,300 lb	no limit
MY425	Direct - Remote Thrust	(3)	na	1,485 kgm 10,722 ftlb	1,933 kW 2,590 bhp	by app	45000 kg 99,000 lb	no limit
MY450	Direct - Remote Thrust	(3)	na	2,040 kgm 14,728 ftlb	2,276kW 3,050 bhp	by app	55,000 kg 121,000 lb	no limit

(1) These specifications are a guideline only and apply to recreational ratings only. Actual application limits will depend on shaft speed, power to weight ratio and vessels speed. All specifications are subject to change.

(2) Weight excludes propeller

(3) Weights for MY series varies by installation due to different shaft, rudder and other component sizes that may apply.

** Weights for Direct Drive Type excludes Propeller Shaft, Q-SPD can calculate weight based on shaft length.

Specifications are correct as at 1 June 2011 and are subject to change.



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