

# Marine Applications

Diesel Engines



**JOHN DEERE**

At home on the water









# Peace of mind

Whether you're working on the waves or relaxing on your yacht — worrying about your engine is the last thing you want to do. That's why commercial and recreational boat owners throughout the world have been relying on John Deere engines for more than 30 years. John Deere PowerTech™ engines are durable, fuel-efficient, and easy to maintain. And they are backed by a vast service and support network that can keep you operating — no matter where you go.



## Propulsion engines – more power in the water

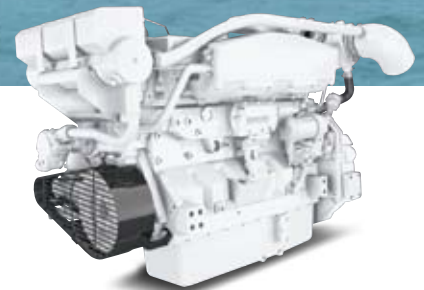
John Deere PowerTech engines are built for long life, reliable performance, fuel efficiency, quiet operation, ease of access to main parts, and simplified integration. They give you the power you need when you're on the water. Choose reliable John Deere engines from 56 to 559 kW (75 to 750 hp).



**4,5L**  
56 – 112 kW  
75 – 150 hp



**6,8L**  
115 – 298 kW  
154 – 400 hp



**8,1L**  
175 – 280 kW  
235 – 375 hp



# Generator drive engines — the strong silent type

For auxiliary power from 40 to 417 kW (54 to 559 hp), John Deere generator drive engines deliver quiet, smooth operation that never lets you down. You may even forget they are aboard until you turn on the lights or plug in an appliance. This quiet reliability is why John Deere has become the preferred provider of generator drive engines worldwide, producing more engines in our power range for marine generators than any other manufacturer. They are available in 1500 rpm for 50 Hz and 1800 rpm for 60 Hz configurations.



**Generator Drive Engines**  
40 – 417 kW  
54 – 559 hp

## Marine generator engine ratings

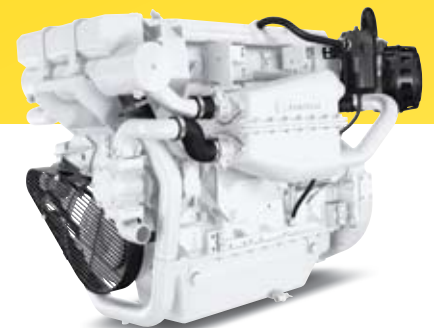
The marine generator engine rating is the power available under normal varying electrical load factors for an unlimited number of hours per year in commercial applications. This rating incorporates a 10 percent overload capability, and conforms to ISO 8528 prime power. Average load over a 24-hour period shall not exceed 67 percent of the prime rating, of which no more than 2 hours are between 100 percent and 110 percent of the prime rating. The marine generator rating is restricted to generator applications only.



**9,0L**  
242 – 373 kW  
325 – 500 hp

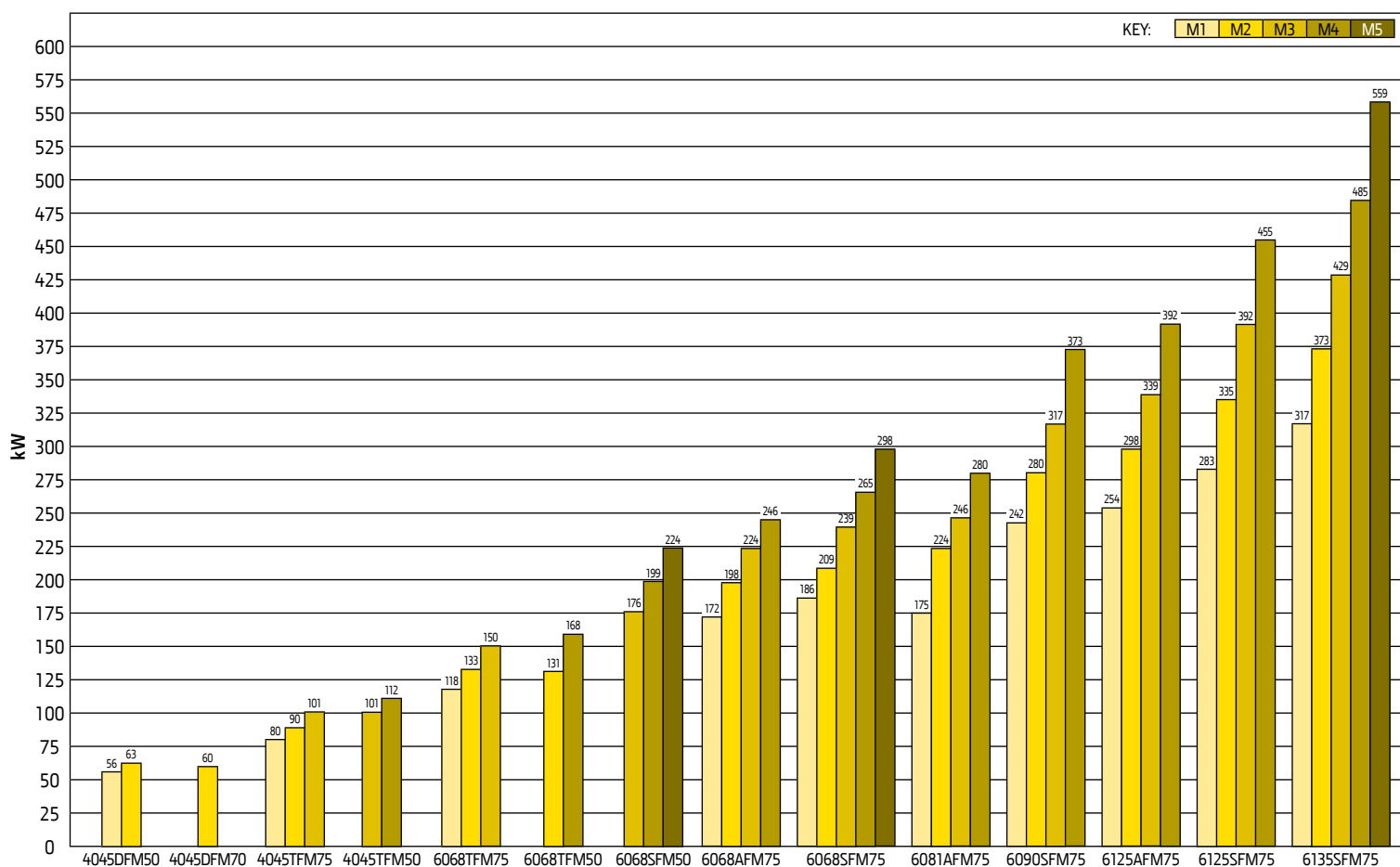


**12,5L**  
254 – 455 kW  
341 – 610 hp



**13,5L**  
317 – 559 kW  
425 – 750 hp

## Diesel Marine Engine Ratings



## Marine propulsion M ratings

Marine performance rating	Load factor*	Typical operation per year (hr)	Typical full-power operation (hr)	Possible applications
M5	≤ 35%	≤ 300	0.5 of each 8	Recreational yachts, cruisers, sport fishing boats
M4	≤ 40%	≤ 800	1 of each 12	Law enforcement, rescue boats, light-duty commercial and fishing boats, sport fishing boats, trawler yachts
M3	≤ 50%	≤ 2,000	4 of each 12	Light-duty utility boats, pilot boats, commercial fishing boats, crew boats
M2	≤ 65%	≤ 3,000	16 of each 24	Commercial fishing boats, work boats, long-range trawlers, off-shore boats
M1	> 65%	> 3,000	24 uninterrupted	Tug boats, heavy-duty commercial applications

\* Load factor is the actual fuel burned over a period of time divided by the full-power fuel consumption for the same period of time. For example, if an engine burns 160 liters of fuel during an 8-hour run, and the full-power fuel consumption is 60 liters per hour, the load factor is 160 liters / (60 liters per hour x 8 hours) = 33.3%.

## Marine Engine Propulsion Power Ratings

Engine	Power Rating
6135SFM75	317 – 559 kW
6125SFM75	283 – 455 kW
6125AFM75	254 – 392 kW
6090SFM75	242 – 373 kW
6081AFM75	175 – 280 kW
6068SFM75	186 – 298 kW
6068AFM75	172 – 246 kW
6068SFM50	176 – 224 kW
6068TFM50	131 – 168 kW
6068TFM75	118 – 150 kW
4045TFM50	101 – 112 kW
4045TFM75	80 – 101 kW
4045DFM70	60 kW
4045DFM50	56 – 63 kW



## Marine Engine Generator Drive Power Ratings

Engine	Power Rating
6135SFM75	366 – 458 kW
6125SFM75	338 – 400 kW
6125AFM75	330 kW
6090SFM75	244 – 306 kW
6081AFM75	178 – 214 kW
6068SFM75	160 – 191 kW
6068AFM75	153 – 183 kW
6068TFM50	98 – 125 kW
6068TFM76	98 – 121 kW
4045TFM75	61 – 80 kW
4045TFM50	63 – 78 kW
4045DFM70	44 – 50 kW
4045DFM50	44 – 53 kW



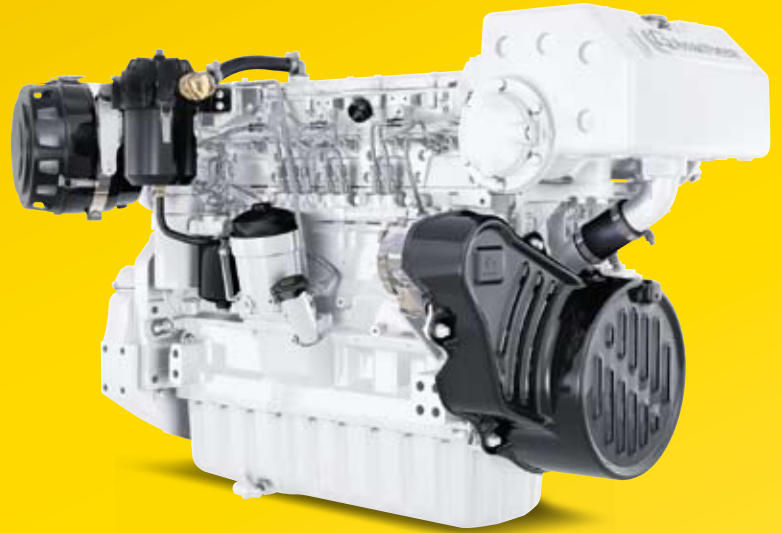


# Auxiliary engines — ready when you are

## Auxiliary engines

From 36 kW to 559 kW (48 – 750 hp) John Deere PowerTech engines can be used to run vessel auxiliaries such as pumps, winches, deck cranes, hydraulics and generators. With displacements from 2,4L up to 13,5L finding an engine that fits your application has never been easier.

We've got you covered when it comes to emissions with engine models available in every required emissions level from non-certified engines up to current tier levels.





# Effortless engine power

## Easy to install

John Deere marine engines can be configured for propulsion, generator set, and auxiliary applications. Our full range of reliable, fuel-efficient engines have the power to meet your needs. We also offer a choice of options and accessories to fit any application.

The simple and clean design of John Deere marine engines allows direct access to connection and service points for the cooling system, fuel supply, lubrication system, and exhaust system.

- Compact design for easy installation
- Front PTO with electronic clutch to drive pumps and accessories
- SAE flywheel and housing options
- Wet or dry exhaust elbows
- Keel cooled or heat exchanger cooled

## Easy to operate

Prewired instrument panel provides electronic control of engine functions and instant access to engine diagnostics.

- Includes tachometer, oil pressure, voltmeter, water temperature, and hour meter gauges
- Electronic information display is bright and easy to read
- Multilanguage text display

## Easy to maintain

- Internal coolant passages minimize leaks by eliminating hoses and fittings
- Dipstick and oil fill on either side
- Poly-vee belt drive increases durability
- Washable, dry-type air filters can be serviced quickly and easily
- Replaceable wet liners, precision-joint connecting rod/cap joint, and replaceable valve seats make rebuilding easy
- Gear timing maintenance-free during entire life of engine

## Quiet operation and low vibration

We strive to design engines that go almost unnoticed. This is why all the moving parts are dynamically balanced. The torque available at low rpms also reduces engine speed and, consequently, noise level during vessel operation.

- Water-cooled exhaust manifold for cooler, quieter performance
- Engine isolators with optional mounting supports
- All 4-cylinder models have internal balance shafts to eliminate vibration

## Extra acceleration

When compared to similar-sized marine engines, John Deere engines generate more torque at low speeds. They develop power more quickly and are able to cruise faster at a lower rpm. This reserve power is especially handy when maneuvering in swells, tides, or currents. John Deere engines provide quick response and great flexibility at all times.



HelmView™ Display

## Operate with confidence

### Clean engines

With John Deere PowerTech engines, everything runs clean and efficiently — above and below deck. John Deere marine engines feature closed crankcase vents that eliminate undesirable gases in the engine room and keep the bilge clean.

### Clean air

John Deere also protects the air outside your boat by meeting all international, European, and United States emissions standards for regulated vessels.

- Environmental Protection Agency (EPA) Tier 2 regulations for vessels flagged in the United States
- European Union (EU) Recreational Craft Directive (RCD) for new recreational vessels from 2.5 to 24 meters in length
- European Union (EU) Directive on IWT (2004/26/EC) whose standards are also recognized by the CCNR for sailing on the Rhine
- Emissions certified engines over 130 kW (174 hp) come with a certificate of conformity showing compliance with regulations set out in Annex VI of the International Maritime Organization (IMO) MARPOL convention
- Engine International Air Pollution Prevention (EIAPP) certificates issued by the U.S. EPA or ABS are available for select engine models. Visit your John Deere dealer for details.

### Less fuel

The efficiency of John Deere marine engines makes a big difference in your fuel costs. A unique combustion chamber and electronically controlled fuel injection delivers the lowest fuel consumption levels on the market. In addition, thanks to our high torque level, our engines can be used at lower rpms. You can travel farther and get more out of every tank when you choose John Deere marine engines.

### Best warranty on the water — by far

Whether you're going to a work site or heading out to relax — it's nice to know that you're taking the best marine engine warranty with you. The John Deere warranty has the longest, most complete coverage of the major marine engine manufacturers. While others only include major components, our warranty covers everything. Plus, you get even longer worry-free cruising with our free 5-year/2,000-hour extended warranty for non-revenue-generating applications.\* Extended warranties up to five years are also available for commercial applications worldwide.\* See your John Deere marine dealer or engine distributor for details.

\*Conditions apply. See warranty registration.

### Easy access to parts and service

With more than 4,000 John Deere service locations worldwide, you're never far from help when you need it.



Log on to [www.JohnDeere.com/dealer](http://www.JohnDeere.com/dealer) to find the service dealer nearest you.

### Nothing Runs Like A Deere™

John Deere delivers reliable power on land and in the water. We provide the qualities you want most from a marine engine — reliability, easy operation, and fuel economy. John Deere marine engines serve the unique needs of marine applications and share the same reputation for quality and performance that their agricultural and industrial counterparts have enjoyed for decades. When you choose John Deere, you get the support of one of the strongest engine and equipment companies in the world.

### Certification

Our production sites are audited and certified by the major classification agencies. Our marine engines have type approval from the major marine classification agencies worldwide.







# Worldwide locations

## Europe, Africa, and Middle East

John Deere Power Systems  
Usine de Saran  
La Foulonnerie – B.P. 11013  
45401 Fleury-les-Aubrais Cedex  
France  
Phone: +33 2 38 82 61 19  
Fax: +33 2 38 84 62 66  
E-mail: JDMarineEngine@JohnDeere.com

## North America, South America, Brazil, and Caribbean

John Deere Power Systems  
3801 West Ridgeway Avenue  
P.O. Box 5100  
Waterloo, IA 50704-5100  
Phone: +1 800 533 6446 (U.S.)  
Phone: +1 319 292 6060 (Canada)  
Fax: +1 319 292 5075  
E-mail: jdpower@JohnDeere.com

## Mexico and Central America

Industrias John Deere S.A. de C.V.  
Boulevard Diaz Ordaz No. 500  
Garza Garcia, Nuevo Leon 66210  
Mexico  
Phone: +52 81 8288 1212  
Fax: +52 81 8288 8284  
E-mail: mexweb@JohnDeere.com

## Australia and New Zealand

John Deere Limited  
Power Systems Division  
P.O. Box 1126, Camden  
NSW 2570 Australia  
Phone: +61 2 4647 4857  
Phone: +61 2 4647 7867  
Fax: +61 2 4646 1236  
E-mail: 23SYDDC@JohnDeere.com  
www.deere.com.au

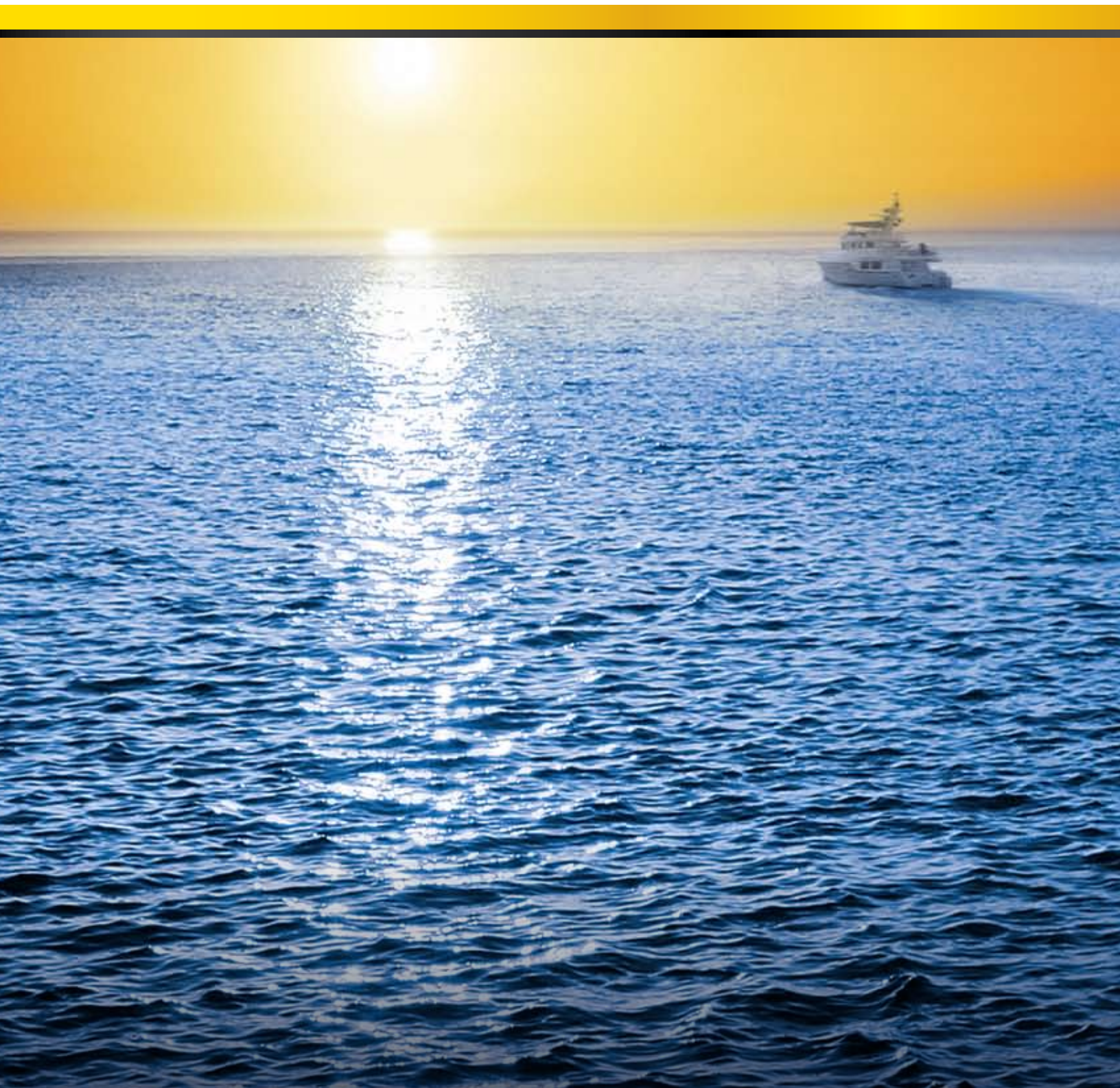
## Far East

John Deere Asia (Singapore) Pte. Ltd.  
#06-02/03 Alexandra Point  
438 Alexandra Road  
119958 Singapore  
Phone: +65 (68) 79 88 00  
Fax: +65 (62) 78 03 63  
E-mail: LiewLeongKong@JohnDeere.com





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