Solutions for Marine Industry

Industrial Motors

Commercial & Appliance Motors

Automation

Digital & Systems

Energy

Transmission & Distribution

Coatings

Technologies that drive operational excellence.













Over service centers around the world

+49,000 employees (Oct/2025)

Product portfolio with over 1,500 product lines







WEG GROUP

















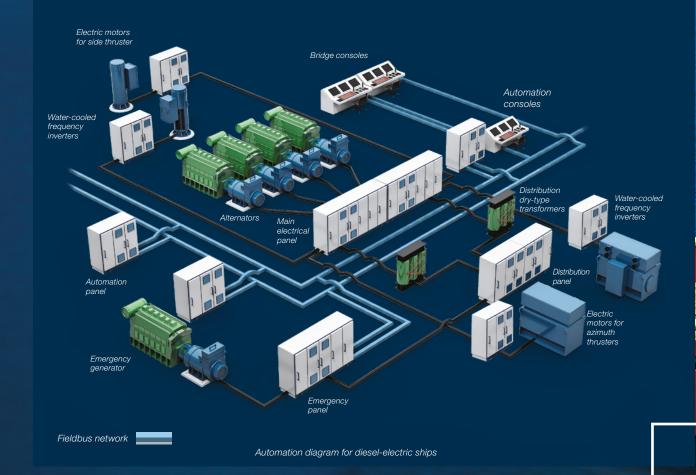






Solutions for the marine industry

WEG offers complete automation solutions, including panels, motors, alternators, transformers, and coatings for the maritime industry. In addition to cutting-edge products and services, WEG can provide integrated engineering services and automation systems, battery banks, and other vessel-specific solutions.





Scope of supply

WEG provides solutions for various types of vessels

- Electric motors for main and auxiliary propulsion, firefighting pumps, winches, and more
- Water-cooled frequency inverters for main and auxiliary propulsion
- Alternators for main, emergency, auxiliary, port, and shaft-mounted diesel generator sets
- ESS Energy Storage System
- Main and emergency electrical panels, low- and medium-voltage
- Distribution panels, demarches, and shore power
- Power generation management systems EMS and PMS
- Alarm monitoring systems AMS
- Automation system for tank loading and unloading control (solid or liquid bulk)
- Telemetry and vibration monitoring systems for assets with remote supervision
- Integrated electrical room
- Specialized paints for hulls, tanks, and other areas of the vessel
- Low- and medium-voltage transformers
- Integration engineering services
- Commissioning and startup
- Remote support
- Electric motors for main and auxiliary propulsion, firefighting pumps, winches, and more
- Inverters water-cooled frequency converters for main and auxiliary propulsion





Efficiency and reliability on board

WEG motors are designed to reduce operating costs, ensuring greater energy efficiency and operational reliability, requiring less maintenance.

Advantages and applications of WEG motors

- Compact with excellent performance
- High mechanical strength, low vibration and noise levels
- Design versatility, enabling various applications in the marine industry



W22 line

- Efficiency level in accordance with current standards¹⁾
- W22 Premium
- W22 Super Premium: exceeds the efficiency level specified in the standards
- Power ratings: 0.12 to 550 kW²⁾
- Frame sizes: 63 to 355 A/B²⁾
- Number of poles: 2, 4, 6, and 8²⁾
- Applications: transfer pumps, recirculation pumps, cooling pumps, anchor winches, lifting quipment, compressors, among others



W22Xec

- Meets the highest safety standards
- Flexibility to adapt to a wide range of applications
- Ensures safety in areas where an explosive atmosphere may be present
- Power range: 0.12 to 550 kW
- Frame sizes: 63 to 355 A/B and NEMA equivalent
- Number of poles: 2, 4, 6, and 8
- Applications: transfer pumps, fire-fighting pumps



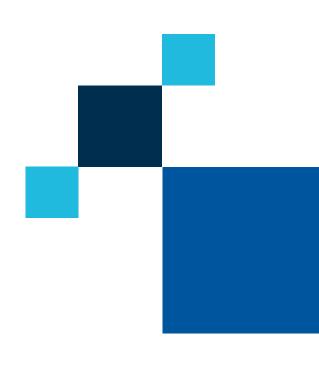
WELL line

- Longer service life
- Longer lubrication intervals
- High resistance to aggressive and corrosive environments
- Lower operating costs
- Power range: 0.37 to 550 kW
- Frame sizes: 90S to 355 A/B
- Number of poles: 2, 4, 6, and 8
- Applications: transfer pumps, recirculation pumps, cooling pumps
- L10h 50,000h
- Cx finish paint, in accordance with ISO 12944
- Exec and Exdb eb versions



W51 HD line

- High performance in the toughest applications
- High strength, durability, and low maintenance costs
- Power range: up to 1,400 kW
- Frame sizes: 315 to 450 and NEMA equivalent
- Number of poles: 2, 4, 6, 8, 10, and 12
- Applications: bow thrusters, stern thrusters, azimuth thrusters
- Line available for Exec and Exeb protection types





Onboard technology for an integrated solution

WEG offers complete packages of electrical panels, frequency inverters, battery banks and marine automation systems, all integrated and developed by highly qualified engineers.



Low- and medium-voltage electrical panels

- Main and emergency electrical panels
- Distribution panels, breakers, and shore power
- Modular and flexible assembly options
- Customized, designed according to the vessel's layout



Water-cooled frequency drive

Low- and medium-voltage variable frequency inverters

- WEG frequency inverters are used to control speed and protect motors against overload, short circuit, overheating, ground fault, overvoltage, undervoltage, output phase loss, etc
- Frequency inverters can be supplied with water or air cooling
- Applications: thrusters, pumps, fans, compressors, winches, etc
- The product design allows for significantly reduced size, reliability, and easy maintenance
- Up to 4,160 V / 7,500 kW
- Up to 690 V / 3,800 kW
- Normal (110%/1min) and heavy duty (150%/1min)
- Complete diagnostic and monitoring functions, with communication capabilities with all renowned networks
- Applicable to a wide variety of propulsion control systems on the market



Low- and medium-voltage soft-starters

- WEG soft-starters are used to protect and limit the starting current of electric motors that do not require speed variation
- The HMI allows for easy parameter programming and facilitates commissioning and operation
- Applications: variable-pitch propulsion motors, compressors, pumps, fans, etc
- Benefits: low cost, less impact on the power plant during motor startup





Automation

- The WEG automation system is designed for a better operator interface, integrating all systems with performance and reliability, allowing for better control and monitoring of the vessel.
- Main functions:
 - Alarm system that allows monitoring and recording of all alarm logs
 - Energy management system that allows automatic control and protection of load generators. It also manages hybrid sources such as battery banks connected to a power plant or any other source
 - Load management system that allows monitoring and control of valves, pumps, tanks, and dry bulk products



ESS - Energy Storage System

- Naval-Certified battery bank
- Designed according to application needs and requirements
- Suitable for both varied loads and vessel propulsion
- Energy optimization in DP mode, combining batteries with diesel generation for fuel savings
- Rack-mounted for ease of maintenance
- Deck-mounted container or vessel-mounted compartment options
- Energy control system integrated with vessel power management, enabling optimized loading and unloading



WEGnology® IoT Platform

- Simple and scalable, it allows remote monitoring (telemetry) of the vessel's electrical and mechanical assets. This information is sent to the cloud and made available to the customer for creating dashboards, reports, and monitoring maintenance events and alarms
- The information is stored in the cloud, allowing the customer to access it from any location and creating customized views of the information through simple, online programming, providing flexibility and dynamism for day-to-day control and supervision



WEGscan and WEG Motion Fleet Management

- Online asset monitoring system used to prevent and detect failures, aiding in predictive and preventive maintenance
- Data is hosted in the cloud, allowing for the identification of patterns and the creation of alarm points to alert and prevent failures in monitored systems
- WEGscan allows for vibration and temperature monitoring of:
 - Motors
 - Generators
 - Shaft lines
 - Other mechanical elements



Flexible solutions for sustainable energy

WEG offers complete solutions for power generation for vessels, platforms, and propulsion systems. Our products are developed with high quality standards and cutting-edge technologies to meet global demands, supported by highly qualified engineering and power generation specialists.



WGM20 motor

- Applications: fans, pumps, compressors, rolling mills, main and side thrusters, winches, and others
- Power: 200 to 2,800 kW
- Voltage: 400 to 4,160 V
- Number of poles: 4 to 8
- Mounting: horizontal or vertical
- Water jacket cooling
- Advantages: suitable for operation in harsh dirt and harsh environments, reduced noise levels, suitable for operation with frequency inverters, minimal heat dissipation to the environment, and reduced dimensions



W60 motors / master line

- Applications: bow and stern thrusters, azimuth thrusters, firefighting pumps, shaft line drive (hybrid solution)
- Power: up to 50,000 kW
- Voltages: up to 13,800 V
- Speed: 3,600 to 300 rpm
- This engine line is supplied with air-to-air heat exchangers, air-to-water heat exchangers, or an independent cooling system, whenever necessary
- Advantages: design versatility and exceptional operating conditions, resulting in high performance and low maintenance



Synchronous alternators

- Applications: alternators for main, auxiliary, emergency, port, or shaft diesel generator sets, driven by diesel or gas engines, with different speed ranges
- Power: from 7.5 kVA
- Low voltage: 110 to 690 V
- High voltage: 2,300 to 13,800 V
- Poles: from 4 up
- Variable speed operation: upon request
- Advantages: suitable for parallel operation (load sharing) or stand-alone operation, self-ventilated or water-cooled. These generators are designed to meet all electrical requirements (e.g., harmonic distortion) and mechanical requirements for operation on different types of vessels

Irans Distribut

Excellence in power supply technologies

To meet the needs of the marine industry, WEG Transmission & Distribution offers a complete line of dry-type transformers. Manufactured with the best epoxy resin available on the market, they pose no risk of explosion and do not propagate fire. Another option is encapsulated dry-type transformers, using the vacuum/pressure impregnation (VPI) process. Both options provide safe application in confined spaces, where installation costs and downtime for maintenance and repairs play a decisive role in the product purchase decision.



Vacuum encapsulated dry-type transformer (VPI)

- Power ratings from 300 to 8,000 kVA with protection ratings up to IP54
- Few manufacturers offer this line in their portfolio
- Synergistic WEG product: MVW3000 inverter + 100% WEG transformer
- Product focused on sustainability, balancing greater efficiency and optimizing the use of natural resources, in addition to seeking environmentally friendly materials



Dry-type transformer

- Manufactured according to ABNT (Brazilian Association of Technical Standards) or IEC (International Electric Code) standards
- High voltage encapsulated in epoxy resin suitable for thermal requirements up to 200 °C
- Supply options for all IP protection levels required by national and international
- Environmentally friendly, as they do not contain insulating fluids with potential environmental impact or toxic gas emissions
- Low maintenance costs
- Space-saving, as they are compact compared to transformers immersed in
- Increased safety, since the resin used has self-extinguishing fire capabilities
- Dispenses with special civil works, such as firewalls or containment basins
- Has a simplified protection system.
- Reduces installation insurance costs

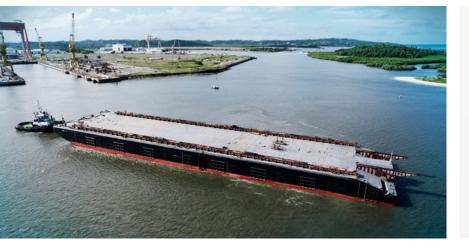


Coatings providing full protection

WEG has a wide range of coatings for several marine and offshore applications, from shop primers for steel plates temporary protection to high build epoxy anticorrosive linings and high performance antifouling systems with up to 5-year docking interval.

High performance antifouling coatings

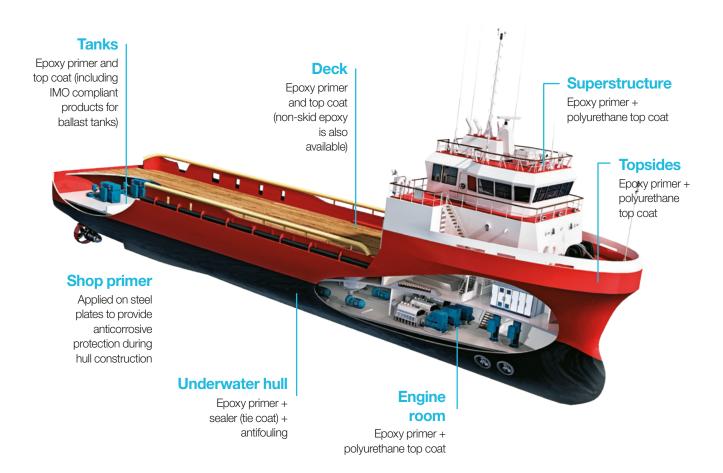
- WEG is licensed in Brazil to manufacture the entire ECOLOFLEX line of paints, developed with Nippon Paint Marine's patented high-performance progressive technology. This technology significantly improves the predictability of antifouling behavior through a more linear polishing rate and low leachate layer, ensuring controlled biocide release over the service life.
- The ECOLOFLEX line is certified by the main classification and certification bodies in compliance with the IMO Antifouling System Convention AFS/CONF/26, with performance already proven by thousands of vessels sailing around the world.



WEG is among the largest manufacturers of marine paints in Brazil, providing high-quality, high-performance products. Its products are certified and meet IMO resolutions for shop-primer paint, ballast tanks (IMO RESOLUTION MSC.215(82)) and are also certified under IMO FTP Code (Fire Test Procedures Code) / IMO RESOLUTION MSC 307(88) / MED 2014/90/EU.



General hull paint scheme







WEG offers inspection, repair, and repowering services for medium and large machines, including those from other brands. Services are performed on WEG facilities or in the field. WEG also offers a wide variety of coatings for equipment maintenance and protection.

Services

- Factory repairs and refurbishments
- Field services
- Installation and startup services
- Inspection and maintenance
- Warranty
- Technical and commercial training (at the factory or on-site)
- Field support linked to engineering





WEG has several references in the marine industry, including well-known names in shipyards and shipowners from around the world.

WEG products and systems are designed to meet all maritime application requirements. Upon request, all these products can be supplied with test certificates from certification bodies such as ABS, Bureau Veritas, DNV, Germanisher Lloyds, Lloyd's Registers, among others.



Marine certifications



ccs China



в٧ France



Germany



Italy



NKK Japan



Norway



South Korea



Russia



United Kingdom



ABS USA

The scope of WEG Group solutions is not limited to products and solutions presented in this catalogue.

To see our portfolio, contact us.



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