

GAIN AN EDGE WITH ELECTRIC POWER SYSTEM UPGRADES

Electromechanical systems and field services for large vessels and port operations

Our rapid-response field services team will keep your marine operation's electric power systems in peak condition, whether you need electric propulsion motor rewinding, ship service generator troubleshooting, or control system modernizations. FLANDERS can also rebuild or upgrade the electric rotating systems of any machine in your operation:

- Commercial cargo vessels
- Cruise ships
- Large navy, coast guard, and research vessels
- Offshore oil and gas exploration and production vessels, pipe-laying ships
- Tugs and barges
- Work boats

- Hoists and cranes
- Dredges
- Bridges
- Conveyors
- · Other auxiliary machines

Unlike many companies that service marine vessel power, control, and electrical systems, FLANDERS also has full in-house R&D engineering and state-of-the-art, short-run manufacturing capabilities.

That gives us exceptional range in the custom marine power systems we can offer you.



\$3 \$___\$ \$__\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$ \$___\$



POWER SYSTEMS

ELECTRIC PROPULSION AND ONBOARD POWER GENERATION

FLANDERS offers a wide range of state-of-the-art, custom marine power systems, including:

- Ultra-efficient, high-reliability replacement MG sets and motors. Both vertical and horizontal systems; designed to reduce energy loss, vibration, maintenance, and noise
- Higher horsepower drop-in replacement motors and drives. Also, lighter systems of equal power with a smaller footprint
- **Smooth-start, medium-voltage AC drives.** With Active Front End for high-power marine applications such as running thrusters and primary propulsion motors—including dual-drive systems
- **DC to AC retrofits.** For cranes, hoists, conveyors, and other auxiliary machines

CONTROL SYSTEMS

UPGRADES, SYSTEMS INTEGRATION, AND CUSTOM SOLUTIONS

To improve the efficiency, safety, control, and reliability of machines in your operation, our control systems experts can help you:

- Modernize the control systems of individual machines, or coordinated systems
- Implement new automation systems
- Integrate power system upgrades, custom PLCs, and condition monitoring instruments into your master control systems
- Improve data visualization and HMI
- Standardize the user interface across machines

SERVICES

FROM TOKYO TO DUBAI TO THE PORT OF HOUSTON

Our electric power and control system specialists can modernize outdated machines and keep your ship motors, generators, and support machines reliably performing at a high level.

- 24/7 troubleshooting and repairs
- Fast motor exchanges while in port
- Repairs, rebuilds, upgrades—and storage—of motors, drives, MG sets, generators, alternators, and turbines
- Motor storage
- Onboard rewinding, commutator turning and undercutting, cryogenic cleaning, and laser alignment

- DC to AC machine retrofits
- Systems integration
- Machine audits and predictive maintenance
- Power distribution optimization
- New technology engineering
- Custom manufacturing, including for obsolete parts