

# Z-THRUST - ADVANCED PROPULSION & THRUSTER CONTROL SYSTEM

A COMPREHENSIVE SOLUTION FOR THRUSTER CONTROL AND MONITORING FOR DP CLASS SHIPS

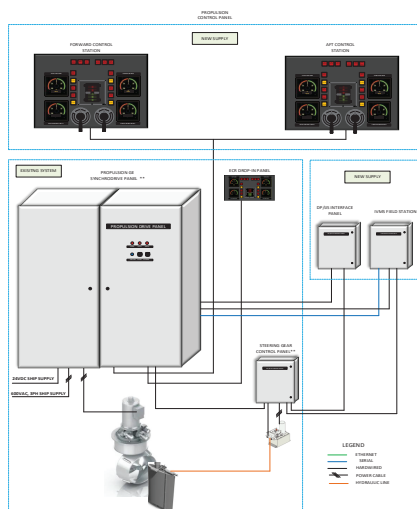
## WHO WE ARE

Amphicos Engineering Services LLC is a team of seasoned Electrical & Automation Engineering experts with decades of extensive experience in multi various fields of Land, Marine, Oil & Gas and trading. Our cutting-edge solutions are designed to make life easier, more efficient, and more productive.

## THRUSTER CONTROL SYSTEMS

Z-Thrust is a PLC based versatile and independent control solution engineered for engine-driven or electrically driven propulsion units, thrusters, and steering systems. Designed with flexibility in mind, it integrates seamlessly with Dynamic Positioning (DP) systems, Autopilots, and Joystick Control platforms to significantly enhance the vessel's manoeuvring capability.

## SYSTEM DESIGN



Built around an operator-centric philosophy, Z-Thrust offers intuitive and ergonomic interfaces that simplify vessel handling across all operational conditions. The system continuously monitors key operating parameters to deliver optimal performance, efficiency, and responsiveness, while ensuring all equipment operates safely within defined limits.

## CONTROL

### Thruster Control

- Reliable, high-precision control environment
- Resilient and flexible power management
- Pre- set points for various modes
- Load control, motor control, pitch control
- Lever calibration options

### Dynamic positioning

- Active Thruster control
- Accurate position maintaining
- Data Analysis & Data Visualization
- Technical System Support

### Enhanced Maneuverability

- User friendly interfaces
- Hi-fidelity and flexibility in operations
- Better maneuverability
- Z-Thrust — Advanced Propulsion & Thruster Control System

### System Healthiness

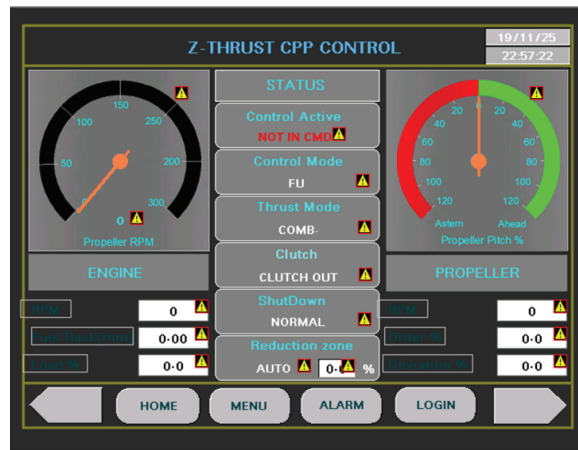
- Complete SCADA monitoring from one place
- Redundancy for critical systems
- Fast acting processors and interfaces
- Load clipping to prevent overloading Of power source

# Z-THRUST - ADVANCED PROPULSION & THRUSTER CONTROL SYSTEM

"WHERE PRECISION MEETS FIDELITY"



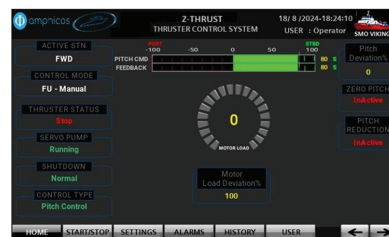
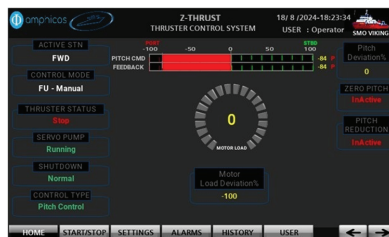
AUTOPILOT



STEERING COORDINATION



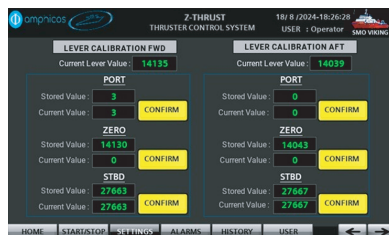
DYNAMIC POSITIONING



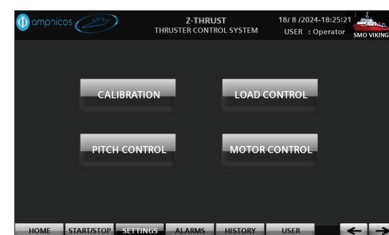
USER FRIENDLY INTERFACE



THRUSTER MANAGEMENT



THRUSTER CONTROL USER INTERFACE



EFFICIENCY & PERFORMANCE