



Mechanical Engineering Services Solutions

Reliable Machinery Performance • Precision Maintenance • Marine & Offshore Mechanical Solutions

ALQAQNOOS Engineering provides comprehensive Mechanical Engineering Services Solutions for marine vessels, offshore units, and industrial facilities. Our services are focused on maintaining, restoring, and optimizing mechanical systems to ensure safe operation, operational efficiency, and long-term equipment reliability.

Our engineering approach combines planned maintenance, corrective repair, system upgrade, and troubleshooting, supporting vessels during operation, dry docking, and emergency conditions.



Service Scope

Diesel Engine Maintenance & Overhaul

Professional maintenance and overhaul services for marine diesel engines, covering routine inspections, partial and complete overhauls, component dismantling, dimensional inspection, replacement of worn parts, reassembly, and functional testing. Services are executed to restore engine reliability, fuel efficiency, and emission performance, in accordance with manufacturer recommendations and class requirements.



Propulsion & Shaft Line Services

Mechanical services for propulsion and shaft line systems, including shaft inspection, bearing and seal servicing, coupling maintenance, and alignment support. These services reduce vibration, mechanical stress, and power losses, while improving propulsion efficiency and extending component service life.

Hydraulic Systems Engineering

Engineering, inspection, maintenance, and troubleshooting of marine hydraulic systems, including pumps, valves, actuators, cylinders, piping, and associated control components. Services focus on ensuring stable operating pressure, precise system response, leak prevention, and safe operation under varying load and environmental conditions.



Routine Mechanical Maintenance

Planned mechanical maintenance services aligned with Planned Maintenance System (PMS) requirements. Scope includes condition assessment, lubrication, tightening, adjustment, and replacement of wear components, helping to prevent unexpected failures, reduce downtime, and maintain machinery readiness.



Mechanical Troubleshooting & Repair

Systematic troubleshooting and corrective repair of mechanical failures using structured inspection techniques and root-cause analysis. Our engineers identify underlying causes of faults and implement effective repair solutions to restore machinery performance with minimal operational disruption.



Mechanical System Upgrade & Retrofit

Upgrade and modernization of existing mechanical systems to address equipment obsolescence, performance improvement, and operational changes. Services include component replacement, system modification, and integration of improved mechanical solutions to enhance safety, efficiency, and reliability.



Custom Mechanical Engineering Solutions

Tailor-made mechanical engineering solutions developed for specific vessel requirements or unique operating conditions. Scope includes engineering assessment, technical design support, fabrication coordination, installation supervision, and execution of specialized mechanical modifications.



Applications

- ✓ Marine vessels & offshore units
- ✓ Engine rooms & machinery spaces
- ✓ Propulsion and auxiliary systems
- ✓ Shipyards & dry-dock projects
- ✓ Industrial mechanical installations



Service Positioning

ALQAQNOOS acts as a Mechanical Engineering Service Provider, delivering inspection, maintenance, repair, and retrofit services through experienced engineering teams. Where required, OEM spare parts and specialized equipment are supplied and supported by approved manufacturers, while **ALQAQNOOS** manages engineering execution, quality control, and site services.

Your Partner for Reliable Mechanical Engineering Solutions

With **ALQAQNOOS** Mechanical Engineering Services Solutions, clients achieve reduced downtime, improved machinery reliability, and extended equipment service life, supported by professional engineering execution and industry best practices.

