. About Us.

Ergono Solutions Pte Ltd was incorporated at Singapore in 2022 with a Vision to provide First Hand and Most Innovative Solutions to all kind of Industries with special Focus on Marine and Industrial as they form the Core of Economy in Singapore.





ERGONOSOLUTIONS PTE LTD

Robust Solutions with Tenacity



SUSTAINABLE MARINE SERVICES



#02-01, 68 CIRCULAR ROAD, SINGAPORE 049422



Email us sales@ergonosolutions.com



WE SERVE

MECHANICAL, IN SITU & STRUCTURAL REPAIRS

- AFLOAT REPAIRS
- FABRICATION & STRUCTURAL STEEL WORK
- PIPING & INSULATION
- HVAC REPAIRS & MAINTENANCE
- DECK & ACCOMMODATION REPAIRS
- MACHINING & DYNAMIC BALANCING
- 3D PRINTING OF PARTS

CONDITION MONITORING SYSTEMS (CMS)

- VIBRATION ANALYSIS
- THEROMOGRAPHY
- LASER ALINGMENT

SAFETY EQUIPMENTS CALIBRATION & SERVICING

- LSA CALIBRATION AND SERVICING
- FFA CALIBRATION AND SERVICING

HYDRAULIC, ELECTRIC & AUTOMATION REPAIRS

- HYDRAULIC SERVICES & REPAIRS
- SPS OVERLAY
- ELECTRICAL, AUTOMATION & INSTRUMENTATION

MECHANICAL, IN SITU & STRUCTURAL REPAIRS

HVAC REPAIRS & MAINTENANCE:

- Provide turnkey project solutions encompassing engineering design from associate company, supply, and installation, testing and commissioning of new heating, ventilation, and air-conditioning systems complying with class requirements.
- Equipment supply, installation, testing and commissioning of air-conditioning and refrigeration system.
- •Design, fabrication and installation of spiral/rectangular ducting system including thermal insulation and jacketing.
- Marine supplier for spares and compressors of reputed brands like Carrier, York, Daikin, and Sabroe and Japanese and Korean brands.
- Manufacture and erection of Mild, Galvanized and Stainless Steel ductwork systems.
- •Installation of complete ventilation/Air Conditioning Systems
- •Manufacture and installation of Aluminium, Galvanized and Stainless Steel Canopies, including Associated Extract Systems
- •Installation of small to medium-sized Mild, Galvanized and Stainless Steel canopies, including associated extract systems
- •Installation of Marine and offshore ventilation and air conditioning systems (for engine room, accommodation, hazardous area)







MECHANICAL, IN SITU & STRUCTURAL REPAIRS







MACHINING & DYNAMIC BALANCING:

- Proven track record aided with State of the Art equipment's & Specialized Procedures
- Services include Turning, Boring, Drilling, Milling, Facing, Knurling, Thread & Gear etc
- •Rudder Trunk, Steering Flap, Winch Pedestal, Heel Pin Housing, Stern Tube & Rudder Bush
- Rudder Stock, Thruster Shaft, Windlass & Mooring Winch Shaft, Pump Case & Cover, Hatch cover Roller, Pedestal Bearing etc
- Proven track record aided with State of the art
 Equipment's & specialized procedures
- Machining of Stern Tube, Crane Column, Crane
 Heel Pin, Rudder Trunk, Flanges etc

HYDRAULIC, ELECTRIC & AUTOMATION REPAIRS

HYDRAULIC SERVICES & REPAIRS:

- Full HPU repairs, servicing and maintenance services.
- •All major hydraulic supplier equipment for supply and quote available.
- Control valves and motors, servicing, overhaul and testing capabilities.
- Pressure testing and certification.
- Pipe and valve installation for hydraulics and cooling systems.
- Pipe line flushing, maintenance and servicing.
- Hydraulic system repairs and maintenance.
- Heat exchangers and plate coolers removed serviced and tested.
- Electrical fault finding and installation and repairs.
- Winches and windlass overhauls, repairs and servicing.
- Designing equipment for specialized jobs in accordance with customers queries.
- •Crane and transportation facilities available for major requirements.
- Full refurbishment and support base on site at Loyang.
- Design and fabrication of various kind Subsea ROV structures.

HYDRAULIC, ELECTRIC & AUTOMATION REPAIRS

SANDWICH PLATE SYSTEM (SPS) OVERLAY

- •Overlay is the Process by which Original Structure is reinstated with help of SPS. The Original Structure is retained and reinforced with new Steel Layer and Polyurethane core resulting in strong, flatter surface
- •SPS is a structural composite material comprising two metal plates bonded with a solid polyurethane elastomer core
- Polyurethane core developed jointly with BASF, who supply material globally
- •Approved by major regulatory authorities, SPS is used in a wide variety of civil, offshore, maritime and special applications including: stadia terraces, structural flooring, bridge decks and the repair of offshore structures and maritime vessels
- •SPS is much simpler than stiffened steel plate and much lighter, slimmer and faster to erect than reinforced concrete
- •SPS has a low carbon footprint and is 100% reusable/recyclable
- Patent protected

HYDRAULIC, ELECTRIC & AUTOMATION REPAIRS

ELECTRICAL, AUTOMATION & INSTRUMENTATION

- Servicing of Electric Motor and Pumps
- Repair and servicing of Diesel Pumps, Generator and Compressor
- Rig Accommodation Electrical Installation wiring
- Ship Accommodation Electrical Installation wiring
- MSB Gladding Termination, Maintenance
- Rig SCR Panel Glancing termination
- Rig Top Drive Control Wiring & Glanding Termination
- Navigation Equipment Troubleshooting
- •PA & GA Communication Installation wiring
- Audio & Visual Alarm System Installation
- •Repair, Recondition, Overhaul, Renew, Trouble Shoot & Diagnostics services on offer
- •Generator, Alternator, Motor, Switch Gear, Control Panel, Breaker, Safety device etc
- •M/E & A/E Control Circuit, Manoeuvring Control, Alarms, Tank Gauging, PLC, DC etc
- •Rewinding of Rotor & Stator Coil, Exciter, Washing Bay, Baking Oven, Insulation Service



CONDITION MONITORING SYSTEMS (CMS)

VIBRATION ANALYSIS:

Vibration Analysis is a predictive maintenance method which allows early problem detection in rotating machinery, such as: Turbines, Engines, generators, mills, gearboxes, fans, shafts, motors, compressors, chillers, pumps, mixers, and driers - in fact, almost any type of active machinery. Each component vibrates differently and generates a characteristic noise that leaves a typical fingerprint in the spectrum in the form of a linear pattern. If damage is present, the pattern stands out from the noise floor.

Engine Liners 3D Scanning and Laser Alignment include alignment of main engines, pumps, alternators, stern tubes, among others.

Infrared Thermography for Assessing a wide range of electrical, mechanical systems, HVAC, and Hydraulic inspections.



LASER ALIGNMENT:

Our laser team, highly-skilled in load testing and bearing fitting handles the laser alignment jobs, from small to large components, which include alignment of Main Engines, Pumps, Alternators, Stern Tubes, Gear Box, Soft Generators.

We offers all alignment services to achieve the required geometric precision of machines and assets. It does not matter whether they are simple, small equipment or highly-complex machinery. Ambi-Sol relies on the latest laser technology for all its service calls, drawing on the complete range of in-house alignment equipment, including ROTALIGN and OPTALIGN.



THERMOGRAPHY:

Our Infrared Thermography Condition Monitoring technique is a process to identifying the abnormalities and monitoring change from the established defect signature of a system in live condition. ARIES utilizes Thermographic Survey for Electrical Equipment's Survey in Live Condition. We utilize below techniques to rectify and maintain the good condition of electrical equipment's.

Applications of the technique

- 1. Electrical Inspection
- 2. Mechanical Inspection
- 3. Building Inspection
- 4. Ariel Survey
- 5.Leak detection
- 6. Furnace Inspection



SAFETY EQUIPMENTS CALIBRATION SERVICING

LSA CALIBRATION AND SERVICING

- •Billy Pugh-Annual testing, servicing and repair.
- •BA compressor :- (Annual servicing, Repair & Replacement.)
- Air Quality Test :- (Annual Air Quality Analysis & Report)
- •Immersion suit :- (Annual servicing, Testing, servicing & Replacement)
- •Life Boats: Annual Servicing, upgrading, survey & Load Test.
- •Life Jackets :- Servicing, Repair & Replacement.
- Oxygen Resuscitation :- (Hydrostatic test, Annual servicing, Charging & Repair)
- Foam Analysis :- (Annual lab test & Report)
- Life Raft :-Annual servicing, Repair & Replacement
- Rescue Boat: Annual servicing, Repair & Replacement.

FFA CALIBRATION AND SERVICING

- •SCBA:- Hydrostatic test, Annual servicing, Charging & Repair.
- EEBD, ELSA: Test, Annual servicing, Charging & Repair.
- ◆Co2 Systems HP system & LP system:-Annual Servicing, Repairs, Hydrostatic Test, Surveys & Replacement & conversion from halon to Co2 system)
- •Foam Systems (High & Low Expansion):-Testing & Servicing
- •Sprinkler system :- Servicing, Testing & Survey
- Dry Powder System :- (Annual Servicing, Repairs, Hydrostatic Test, Surveys & Replacement.)
- •Fire Extinguishers:-All types of Extinguishers, Annual servicing, Refilling, Hydrostatic test, Repairs & Replacement.
- Fire Alarm Systems. :- Servicing, Testing, Survey's, Repairs & Replacement.
- Gas Meters Servicing