







**Regional Headquarters** 



Marine

Oil & Gas

Stationary Power



**Trusted Capabilities** 



## Marine, Oil & Gas and

ISO 9001, 14001, 18001 certified

Goltens group of companies:

# **Stationary Power**

1,300 Skilled employees in

26 stations in 14 countries around the world



# Goltens U.A.E. - What we do



## Introduction

## **Our People and Culture**

Our highly motivated customer-focused, technical and support teams are primed to respond to customer requirements at all times. Our leading position in the market is built on innovation, technical excellence and reliability of service since 1940. These values continue to provide the base of our culture as we serve our customers old and new with an ever increasing range of services.

## **Our Quality**

The Goltens brand is recognised for excellence in the marketplace and we fiercely protect our reputation through training, education, and quality management systems. This is demonstrated by the retention of an extensive loyal customer base choosing Goltens as their preferred service provider.

## **Our Commitment**

Goltens will continue to innovate and provide smart solutions to keep our clients operating. We will continue to develop our people, tools, and range of services to serve the needs of our customers in the Goltens tradition and retain our market leader position.





## **Diesel Engine Repairs**

Professional maintenance assures operational reliability. Whether it is a main propulsion engine on a ship or a generator producing power in a power plant, its reliable and efficient operation is invariably directly linked to our customer's bottom lines.

Our decades of experience in installation, maintenance, repair and overhauling of diesel engines make Goltens a natural partner to our customers for their engine maintenance and repair needs.

As an independent service provider Goltens has developed pioneering repair technologies that help reduce cost and down time associated with ordering replacement parts when repairs can be equally effective.







- Alignment and Chocking are critical operations in repairs and new installations.
- Trained and certified technicians with vast experience of alignment of shafts, generators and any other equipment where straightness or flatness is critical.
- Authorised Chocking
- services using ITW Polymer
- Technologies' Chockfast®
- Pourable Chocking Compounds.

#### Troubleshooting, Maintenance & Repairs

- Fully equipped workshop for • engine overhauling.
- •
- Maintenance contracts.
- overhauling.
- engine components.

#### **Fuel equipment Repairs**

Workshop facility for inspection, servicing and testing of fuel system components including:

- - · Spindle/guides
- Fuel pumps
- Fuel injectors
- Nozzles
- Computer aided diagnostics. Troubleshooting, repairs and On-site honing and machining of







MITSUBISHI





**Channel Partner** Stationary Power



#### **Engine Parts** Reconditioning

Fully equipped workshop for reconditioning of engine components including:

- Piston crowns
- Cylinder heads
- Exhaust valve spindles
- Exhaust valve seats
- Exhaust valve housing
- Piston rods •

## **Turbocharger Repairs**

Goltens Dubai is an independent Turbocharger service provider that maintains its flexibility to offer after sale services to the complete range of manufactured Turbochargers

Our factory trained dedicated specialist work to the highest standards, with in depth knowledge of OEM components.





#### **Workshop Services**

Goltens Dubai has a highly sophisticated purpose built workshop which houses all the machines that are synonymous with providing OEM standards of services. These include:

- Standard Overhauls
- Surface Preparation
- Reblading of Axial flow Turbocharger shafts
- Damage Assessments
- Analytical Reporting
- Failure Mode Analysis
- Calibration
- Dynamic Balancing

#### Balancing

Goltens Dubai has the latest balancing machines from Schenck Germany with Schenck certified operators. Balancing method includes:

- Static Couple
- Dynamic
- Thermal Correction
- Indexing
- Biasing
- · Protocol Reporting

## Assembly / Disassembly

Factory trained engineers dismantle, evaluate and calibrate all components in accordance with the instructions and recommendation of the OEM.

All Turbochargers are supported by a detailed report outlining the condition of operations.

## Machining & **Reconditioning Services**

Goltens has a custom built workshop for reconditioning of 2 stroke engine components. Our end to end capabilities in reconditioning enable us to exercise tight quality control and deliver reconditioned parts that are generally considered to be the best in the industry.

A healthy stock of reconditioned parts is also available on exchange basis for immediate delivery to the vessel.

Other services include general machining, shaft cladding and parts manufacturing as per customer's specifications.





#### **Reconditioning**

- M.E. Piston Crown and Skirt. •
- M.E. Cylinder Heads. ٠
- M.E. Exhaust Valve Spindles, Seats and Housings. •
- M.E. Piston Rods and Connecting Rods. •
- Reconditioning and Recladding of M.E. Shaft. •
- Chroming and Heat Treatment. ٠

#### **White Metal Bearings Re-Metalling**

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- Re-babbitting of white metal bearings using centrifugal casting method.
- Remetalling by Static Method. •
- NDT testing for Bonding. •
- Slope machining of Stern Tube Bearings. •

#### **Parts Manufacturing and** Machining

- Manufacturing of machined parts as per client
- requirements.
- General machining.
- Machining of Large Pump Casing.
- Manufacture of Shafts, Bearings, Wear Rings etc.

## Governors, Actuators, Controls, Turbines & Retrofits

Goltens Co Ltd, Dubai Branch is the Local Distributor and Channel Partner for Woodward Engine Systems and Control Products covering the Middle East and Africa. Our team of highly specialised service technicians and applications engineers are able to overhaul, repair and test most types of Governors.

Goltens is able to perform a comprehensive assessment of your existing control system and based on this assessment, design a comprehensive solution that improves your engine performance and takes advantage of the latest technologies.







Local Distributor & Channel Partner – Middle East & Africa Recognised Engine Retrofitter (RER)

For Info contact engine.controls@goltens.com

#### **Field Services**

We offer around the clock services for installation, troubleshooting and repair across the marine, energy and industrial domains:

- Hydraulic, Mechanical and electronic governors and actuators.
- Power Management and Load Sharing Systems.
- Turbine controls and compressor anti-surge controls.

#### **Workshop Services**

- Well equipped workshop for complete overhauling of governors.
- Woodward test benches for testing of governors and actuators.
- Test bench for hydraulic amplifiers.
- Supply of governors (outright and exchange basis) and parts.

# Turnkey EPIC Upgrade & Retrofit Projects

As Woodward's Recognised Engine Retrofitter (RER), Goltens delivers Mechanical and Electronic Governors and state of the art digital control systems to modernize and upgrade reciprocating diesel and gas engines to the latest technologies.

These services are offered across Marine, Energy and Industrial domains.

# In-Situ Machining & Repair Services

Goltens is a solutions driven supplier providing some of today's most technologically advanced on site and In-Situ field machining services.

For 70 years Goltens has been providing our high demand, specialised services anywhere in the world 24 hours a day 365 days a year. We use a full range of large scale and small scale specialised tools to handle almost any challenge our customers present.

Whether you need an emergency casualty response for a damaged crankshaft or journal via in-situ machining or a large scale flange facing as part of a planned maintenance shutdown, Goltens has the skills and tooling required to get you up and running in the fastest, most accurate and cost effective manner possible.



#### Crankshaft / Journal Machining

In-situ grinding repairs on

- Crankshafts
- Journals
- Turbines
- Compressors



#### Heat Treatment / Annealing

Goltens has refined its process for annealing crankshafts and has received Germanischer Lloyd and Lloyds Register Marine Class approvals.

This process is safe, repeatable, highly controlled and has been developed over years based on profound metallurgic expertise.



#### **Boring Services**

Line Boring – Single and Multiple in-line boring across industry lines.

Stern Tubes – For emergency or routine repairs and maintenance, Goltens can mobilise techncians and specialised tooling to bore tail shafts of any dimensions and length.



#### Large Flange Facing and Surface Machining

Eliminates logistical and cost issues for repair and replacement on large equipment which is not easily moved.

Worldwide availability of machines capable of handling almost any specialised machining job.

Flange Facing up to 7m diameter. Milling up to 3m x 7m.

## Laser Alignment

Goltens technicians use our state of the art alignment tools in conjunction with other in-situ machining services to diagnose causes of failure, install new or reinstall repaired equipment.



#### **Metal Stitching**

Repair of damaged casings using our pioneering metal stitching method.

Large experience of repairing various types of equipment casings and parts across the marine, energy and industrial sectors.

## **Green Technology Solutions**

Goltens Green Technologies was established in 2010 to assist and support ship owners to minimise the costs and operational impacts of the environmental compliance legislation coming into effect.

By taking an independent approach, we have become the market leader in the retrofit installation of such systems undertaking projects with all makes and models of systems and ensuring that the benefits and lessons learnt are applied to all projects.





#### **Ballast Water Treatment**

Goltens has unmatched retrofit experience having undertaken over 220 projects using systems from different manufacturers and installing them across the full range of vessel types.

#### **Exhaust Gas Scrubbers**

Goltens has the ability to undertake retrofit installations from Scrubber Installations to Fuel System modifications that allow engines to run effectively on Low Sulphur Gas Oil (LSGO) that will be required by the adoption of the 0.5% Sulphur limit in 2020.

#### **Goltens 7 Step Process**

**System Shortlist** or Selection

Effective coordination. Independent partner with in-depth experience. Global Capability.

**Onboard Survey** and 3D Laser **Scanning** 

Determines Feasibility, impact and conflicts on-board. Eliminates risk of manual measurement and onboard fabrication Completed with no disruption to vessel operations.

#### Modelling & Concept Design

Data from 3D Scan used to model Shortlisted systems. Confirms final location will not obstruct operations and verifies space for maintenance. Allows selection of the

optimal solution.

Engineering Generation of precise production

Detailed

package and detailed material specifications. Eliminates time consuming pipe

fitting process.

#### Purchasing & Prefabrication

Detailed material specification is delivered along with engineering design Can be used to compare estimates from different installation alternatives.



#### **LSGO**

Goltens has the ability to undertake the retrofit of installed diesel generators to run on dual fuel, closely cooperating with market leading manufacturers. These retrofits involve the installation of complex piping and control systems, plus the scanning and design process increases accuracy and speeds the installation.

#### Installation & Commissioning

Installation, Commissioning and crew training services worldwide.

Minimise operational downtime by splitting work packages and undertaking some during voyages, some alongside and some during dry-docking.

Worldwide availability of installation teams minimises voyage disruption. Service

Ongoing post installation support and service through Goltens Worldwide Network.

#### www.goltens.com

**Green Technology Solutions** 

## **Docking & Afloat Repairs**

Conveniently located in our purpose built facility in Dubai, Goltens is fully equipped to carry out vessel dockings, conversions and upgrades at our state of the art docking facility.

Availability of most specialist services in-house means that our experienced project managers and skilled technical teams can effectively control project cost, quality and durations for our customers.

Goltens today is the chosen docking partner for a number of prestigious local and international offshore vessel owners.

Our afloat repair team lives by our "round the clock, around the world" motto. Whether it is hull damage in Fujairah or engine overhaul in Africa, Goltens afloat repair teams are primed to attend repairs at a place and time of our customer's choice.



#### **Docking Services**

- Docking of up to 6,000 t lightship x 135m long x 6m draft vessels in Dubai.
- · In-house expertise for mechanical, diesel engines, hydraulic, electro, propulsion, piping and other services.



#### **Hull & Tanks Treatment**

- · Trained personnel and in-house equipment for hydro-blasting.
- · Covered painting facility for critical components.



#### **Class Approved Welding**

- Class approved 6G welders.
- Class approved welding • processes and facilities.
- Welding of special materials. •
- Cladding services.

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Propeller repairs. •

**HVAC** 

- System Troubleshooting.
- HVAC Solutions.







#### **Fabrication & Turnkey Projects**

AC Compressor Reconditioning.

- Vessel conversions and upgrades.
- Vessel refits. •
- Structural fabrication. •
- Tank fabrication. ٠
- Process and Power Generation. •
- Skid fabrication. •

## **Mechanical & Hydraulics**

Maintenance and repair of the wide array of mechanical and hydraulic equipment used on ships, rigs or industrial plants can be a daunting task. This is not only because of the technical complexity involved but also because of procurement challenges as most of these equipments are manufactured by different makers located around the world.

With the technical versatility of our experts and our global network, Goltens offers a one stop MRO solution for mechanical and hydraulic systems. This helps our customers realise economies of scale and lower transaction costs.





#### **Mechanical Field Services**

Installation, maintenance, troubleshooting, repair and overhauling of mechanical equipment including:

- Stern gear and propulsion systems
- Steering gear
- Gearboxes
- Compressors
- Pumps
- · Valves
- · Conveyor systems

#### **Hydraulic Field Services**

Installation, maintenance, troubleshooting, repair and overhaul of hydraulic equipments viz:

- Cranes
- · Winches
- Windlasses
- Cargo grabs •
- · Other material handling systems
- · Steering and stern gear systems

- **Workshop Facilities** 
  - Well equipped hydraulic shop with hydraulic test rig.
- · Full facilities for overhauling and repair of hydraulic control and valve blocks.
  - Fully equipped workshop for shop overhauling and repair of mechanical equipment.
  - Facility for reconditioning and manufacturing of parts.





## **Specialist Services**

- Workshop based and on-site dynamic balancing facility.
- Conventional and laser alignment ٠ systems.
- Infrared bearing temperature • measurement systems.
- Vibration analysis. •

## **Electrical & Automation**

Goltens offers a complete range of electrical and automation service solutions to marine, energy and industrial customers.

This includes both shop based and field services. The VPI plant used for varnishing of motors and alternators at our Dubai rewinding facility is one of the biggest in the region.

Apart from the normal maintenance, repair and overhauling services, we are able to offer our customers condition based maintenance regimes through the use of thermal imaging of switchgear and non invasive bearing temperature measurement systems.



#### **Field Services**

Installation, troubleshooting, maintenance, repair and overhauling of:

- Electrical power generation and • distribution systems.
- Control, alarm and monitoring • systems.
- Load sharing and power management systems.
- Pneumatic control systems. •
- Circuit breaker secondary current injection systems.



#### **Workshop Facility**

Fully equipped workshops for:

- Electrical panel manufacturing. •
- Circuit breaker primary current • injection systems.
- Repair of P.C.B., A.V.R and other • electronic components.

## **Rewinding Shop**

- Fully equipped facility for rewinding 11kv) motors and generators.
- Region's largest Vacuum Pressure • Impregnation plant for varnishing.
- Facility for testing of motors up to • 11kv.







of high and medium voltage (up to

#### **Condition Based** Maintenance

Thermographic surveys of electrical switchgear and rotating equipment.

## **Projects**

Pulling together the comprehensive services from across the company, Goltens Dubai is able to offer project management and co-ordination services which can cater to all repair, maintenance and overhaul projects. From removal of damaged structure to integration of electrical boards and panels, Goltens can do it all.

Typical Projects undertaken include:

- Collison Damage Repair. •
- Fire Damage Repair.
- DP2 Conversion. •
- Well Stimulation Upgrades. •
- Complete Engine replacements. •
- · Major Refurbishment of Stationary Power Plant.



#### **Panel Fabrication**

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**Electrical Outfitting** 

system and 32km of cabling.

Installed of 6 MCC panels, SCADA

Plate cutting and panel fabrication.



**Modular Construction** and Installation

Fabricated Pre-Outfitted modules. Installed modules and new roof structure.



**Outfitting - 1** Installed and commissioned vessel safety systems.



Overhauled existing, installed and commissioned new gensets and alternators.



**Outfitting - 2** Installation and outfitting of accommodation.



On departure











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