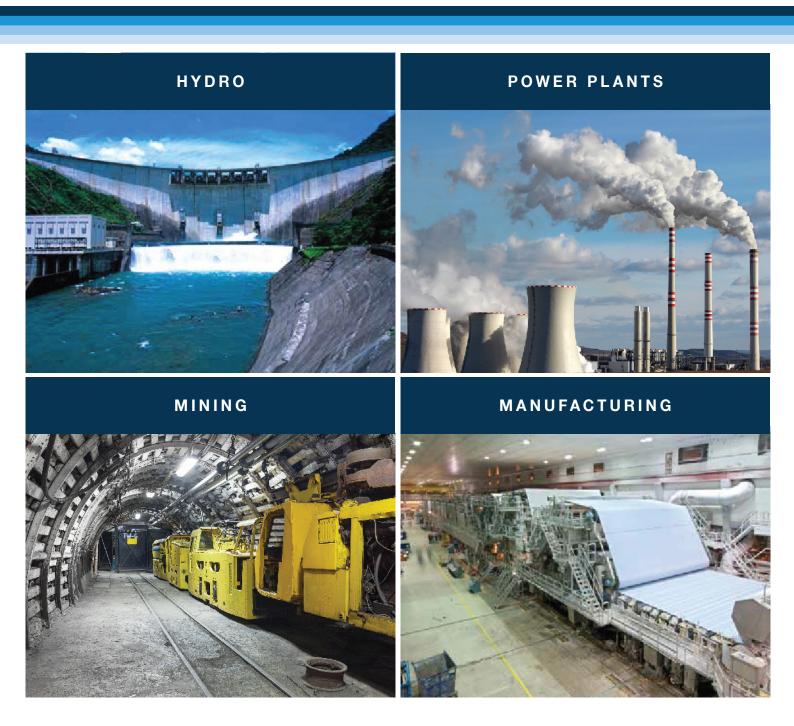
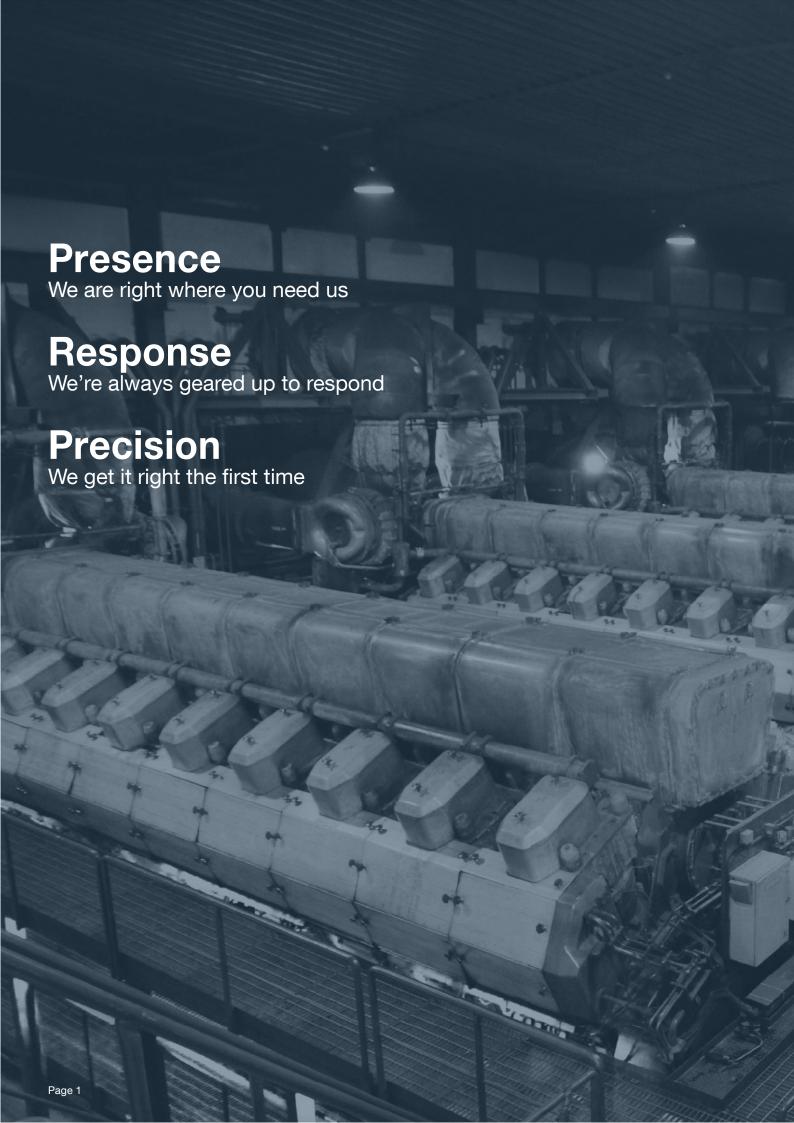


### **Industrial and Stationary Power**



Industrial and Stationary Power Services Provider





## **OVERVIEW**

Goltens is the preferred independent partner of power plant operators and industrial decision makers for every aspect of diesel engine repair. Time and time again, we have minimized their downtime and revenue loss via preventive maintenance and in-situ services when the unexpected occurs.

Beginning as a diesel engine specialist for the marine industry in 1940, we expanded our sought-after services to the industrial and stationary power segment. Leveraging on 15 countries, 25 locations, 1,300 highly trained specialists, state-of-the-art equipment and tools, we reduce asset downtime by being on site quickly when a situation arises and fixing the problem in the first pass.

We work closely with leading equipment manufacturers to offer high quality parts and services, often with their authorization. But as an independent service organization, our loyalty belongs completely to our customers.

Due to Goltens constant high level of service, more than 3,000 customers across industries each year rely on us to organize plan and execute critical maintenance and repair work for engine and other mechanical components.

# Diesel and Gas Engine Services

Goltens can perform a comprehensive range of diesel and gas engine services, from routine maintenance to major repairs, on all major makes of diesel generating sets. Since the company started, our engineers and mechanics have focused on minimizing asset downtime for our customers.

Diesel and gas engine repair maintenance is one of our core services but our expertise doesn't end there. It encompasses all other related mechanical components, including turbochargers, fuel equipment, governors, alarm systems, electrical automation and control services. Goltens specialists possess years of OEM, Industrial and Power Station experiences combined with in-depth technical and engineering knowledge, aided by our extensive manufacturer relationships.

The total value we bring to our customers cement our position as a leading diesel engine specialist and a reliable alternative to OEMs.

#### **Goltens Advantages**

- Expertise in repair, reconditioning and replacement of damaged or worn out parts.
- Library of drawings and manuals for a large range of engines.
- Constantly up-to-date through continuous liaison with manufacturers.
- Skilled engineers and mechanics with industry and power station experience; technicians trained at the manufacturers' factories for quick troubleshooting and problem resolution.
- Readily available spare parts





## **Troubleshooting**

Goltens can quickly identify and troubleshoot the root cause of major diesel and gas fuel reciprocating engine failures anywhere in the world. Combined with our comprehensive diesel engine and in-situ machining services, our specialists can diagnose, plan and execute restoration from a catastrophic failure. Working with speed, efficiency and precision, we reduce downtime for stationary diesel generators.

Our customers are supported by our world-class workshops located in more than 15 countries around the world. Each one offers on-site diesel and gas engine maintenance and reconditioning services for a wide range of critical parts.

With our combination of troubleshooting diesel and in-situ services, Goltens is a one-stop shop that few companies in the world can match.

### **Engine Diagnostics**- Diesel Doctor

To reduce maintenance and operating costs while increasing machinery performance, efficiency, and reliability, teams of service engineers utilize the portable "Diesel Doctor" to perform troubleshooting, engine performance analysis, vibration and noise analysis, Engine Inspection Programs and repair preparations.

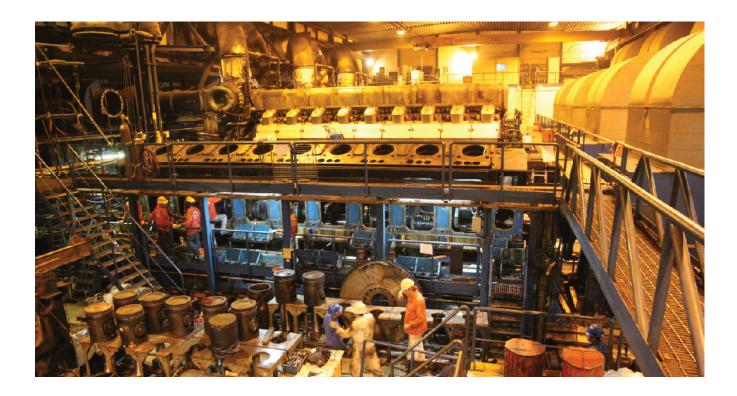




# On-site Repairs and Maintenance

Everyday, Goltens performs routine overhauls, new installations and retrofits after troubleshooting and diagnosing diesel engines casualties. Our skilled specialists routinely work on all major makes of 2-stroke and 4-stroke auxiliary and stationary power engines.

Together with our global presence and depth of resources, we can respond to any type of repair or maintenance requirement anywhere in the world rapidly.



#### **Preventive Service and Maintenance Agreements**

Goltens provides preventive service and maintenance agreements to ensure that customers enjoy maximum efficiency from the equipment or diesel generating sets during commercial operation.

Scheduled maintenance and inspection carried out at a regular agreed intervals will ensure the smooth running of the equipment while preventing unscheduled shutdowns from occurring.

Our high level response to call outs and dedicated local as well as worldwide team ensure that our service work is completed with minimum disturbance to your critical power systems.

A Goltens' Maintenance Agreement can be tailored to meet a customer's own specific requirements with options for call out response, number of schedule maintenance visits per annum and weekday or weekend maintenance.

## Crankshaft Replacements

When a crankshaft is condemned and cannot be salvaged in-place or in the workshop, Goltens specialists can execute complex crankshaft replacements swiftly and safely on all sizes of engines.

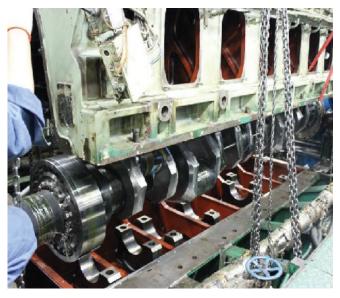
Additionally, we supply fully inspected, class certified, reconditioned crankshafts to restore an engine into working condition as fast as possible.

Our reconditioned crankshafts have a significantly lower price and shorter delivery time than a new one from the OEM because of our global network of stations and suppliers.

Furthermore, our workshops around the world possess the capability to recondition engine crankshafts.









## **Fuel Services**

Goltens provide diagnosis, reconditioning and testing of fuel equipment in our fully equipped workshops located strategically across the globe.

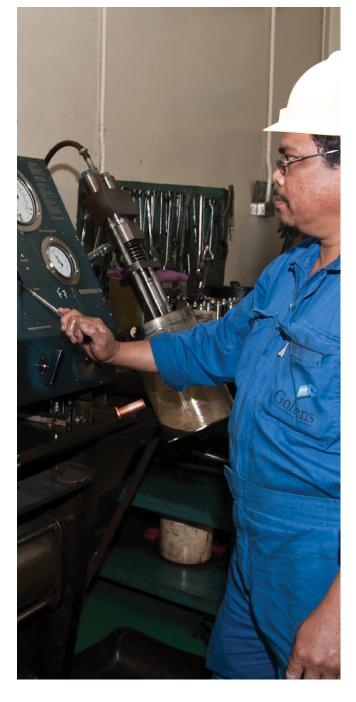
We have built a reputation for excellence due to our capabilities within injection equipment which are utilized to achieve the highest tolerances.

#### Typical components for reconditioning

- Fuel injectors
- Plungers and Barrels
- Fuel Nozzles
- Needle and Guides
- Fuel Valves
- Fuel Pumps
- HP Fuel Piping







## **Governors Services**

Goltens can overhaul, repair, recondition and test most types of governors in our fully equipped workshop facilities across the globe. Our highly trained specialists have years of experience resolving governor problems and they are available around the clock to go anywhere our customers require when a situation emerges. To further reduce downtime, we offer repairs on an exchange basis for many types of governors.

We service and overhaul governors for diesel generating sets, gas and steam turbines and provide a wide range of governors from our own stock. Goltens also offers technical consulting for new installations, retrofit and trouble-shooting.

All our overhauls obey strict quality control procedures from disassembly through cleaning, parts renewal, testing and calibration to original specifications. In fact, many Goltens stations are Authorized Independent Service Facilities for Woodward Governors.

They come with a full range of products and services for all governor related needs and are equipped with the necessary specialized tools, test benches, and spare parts to service a comprehensive range of governors and actuators.

#### **Advantages**

- Factory trained technicians
- Specially designed test benches and fully equipped workshops
- Large quantity of stocks governors to support an exchange
- Large supply of spare parts to support fast and efficient repairs/overhaul
- The vast experience that comes from overhauling and repairing thousands of governors annually
- Wide range of electronic testing equipment









#### Types of product supported and sold

- Governors
- Actuators
- Amplifiers

- Electronic controls for diesel engines
- Large supply of spare parts to support fast and efficient repairs/overhaul

# **Electrical and Automation Services**

In response to our customers' need for high quality, fast response services, Goltens stations worldwide established electrical, electronic and automation departments that provide repair, reconditioning, servicing, maintenance and afloat diagnostics wherever our customers need them.

Our marine electronics and instrumentation workshops repair and overhaul a wide range of automation and control systems.

Additionally, our calibration facilities utilize master instruments and procedures according to international standards.

#### **Advantages**

- Qualified technicians with experience
- Complete electrical and electronic testing facilities
- Rewinding workshop/capabilities
- Custom designs including line diagrams
- Workshop and on-site repairs and diagnostics

#### **Services Offered**

- Main switch board
- Starter panels / control panels
- Engines control / alarms / safety
- Bridge / MCR pneumatic electrical controls
- Motors / generator service / rewinding
- Automatic voltage regulators repair
- Repair / manufacture printed circuit board
- Circuit breaker repair / testing
- Thermography survey / reports
- Cables laying / termination



# Crankshaft/ Journal Machining

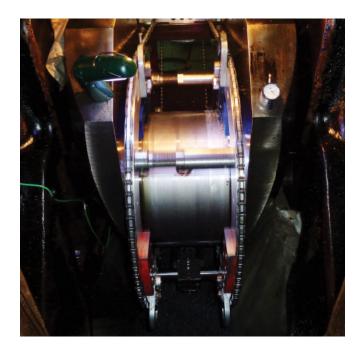
Goltens can repair damaged journals in-situ on all types of rotating equipment including compressors, turbines, other shafts and journals. We can perform large-scale jobs in a fraction of the time of traditional grinding. Our world-renowned services have pioneered massive reductions in downtime when dealing with crankshaft failure and damaged journals.

We have years of experience repairing bent and twisted crankshafts and annealing condemned ones to remove excessive hardness. On larger diesel engines and damaged journals, our highly skilled technicians can create a single cut fillet to fillet with the highest tolerance. We were the first company in the world to complete in-situ crankshaft grinding in the 1950s and our patents on crankshaft grinding tooling revolutionized the industry. We continue to stay at the cutting edge of crankshaft tooling through constant and focused R&D and field trials.

Because of our capabilities and years of providing creative solutions for the stationary power industry, we have been regarded as a leader in in-situ crankshaft and journal grinding and machining.

#### **Advantages**

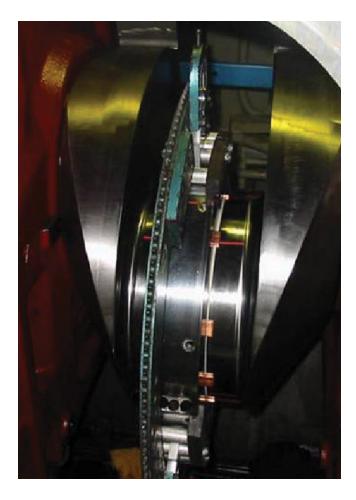
- Experience of having repaired over 25,000 shafts on any size
- Specially designed
   machining rigs for
   in-situ reconditioning
   without dismantling the
   shaft deployed at Goltens
   stations all around the globe
- A large global team of highly skilled In-Situ technicians to ensure a rapid, expert response anytime and anywhere





#### **Specializations**

- Machining crankpin journals up to 1080 mm dia
- Machining and grinding of main journal crankpin fillets
- Machining and grinding of tail shafts / shafting up to 1090 mm dia
- Machining and grinding of damaged
   Journals for steam, gas and hydro turbines
- Straightening of bent crankshafts
- Machining or grinding of crankshaft thrust collars
- Machining of coupling bolt holes (instead of reaming)
- Honing and / or blue fitting of crankpin journals





# Heat Treatment / Annealing

Goltens provides in-situ annealing for crankshafts and other shafting on-site in our workshops across the globe. We routinely repair damaged journals on different types of rotating equipment including compressors, turbines and other shafts and journals.

We also provide expert crankshaft failure analysis. Combined with our global presence and skilled workforce, our in-situ solutions are guaranteed to minimize downtime and avoid expensive shaft or equipment removal and replacement for industrial and stationary power generators.

We encounter dozens of crankshaft failures that result in areas of excessive hardness every year and have seen many land-based diesel engine operators suffer from this costly, time consuming, and extremely disruptive occurrence. Depending on the scope of the damage, our specialists often can machine away the hardness but sometimes it requires extensive below the manufacturer's limits for acceptable journal diameter. There are only two solutions: costly crankshaft replacement for removal of the hardness.

Using our heat treatment processes together with minor finish grinding / cutting, we can restore a crankshaft or journal without significant loss of shaft diameter. Over the decades, our techniques have been refined into a safe, repeatable, highly controlled process as our understanding of metallurgy, expansion characteristics and safety precautions to continue to grow. In fact, our in-situ annealing process has received Germanischer Lloyd and Lloyds Register Marine Class approvals.

#### **Advantages**

- Germanischer Lloyd Class approved annealing process
- Comprehensive capability to handle all aspects of hardness treatment inclusive of engine preparation, inspection, pre-machining, hardness removal and finish machining as well as engine reassembly
- A large global team of highly skilled In-Situ technicians to ensure a rapid, expert response anytime and anywhere
- Deep experience successfully annealing crankshafts across a broad array of makes and models of engines and rotating machinery
- Globally deployed and available portable annealing equipment for In-Situ application



#### Partial List of Diesel Crankshafts Annealed

#### \*Annealed by Goltens numerous times

**BERGEN** aB35:40V12, 40V16AG, 40V12AG, 40V16AG\*, BR M8, C25:33L8P, C25:33L9P, KVG16, KVG18, KVG18-

G3, KVG18-G4, KVGS18-G4.2

**COLT PIELSTICK** 10PC 4.2V

**DEUTZ** 12M640\*. 5BV 8M698. 6SVM 640

**GMT** 420 12 **IHI PIELSTICK 12V PC2** 

16CM 32, 453, 551, 6M20, 6M453, 6M552C, 8M19, 8M20\*, 8M25, 8M32\*, 8M552, 8M601 MAK

10V52/55A, 12V28/32, 12V52/55, 16U28LH-4, 16V40/54, 18V40/45, 18V40/54A, 5L28/32\*, 6L28/32\*, MAN B&W

6L28/33, 6L48/60, 7L28/32H, 7L40/45\*, 8L23/30, 8L27/38, 8L32/40, 9L28/32H, 9L32/40, 9L40/54,

MIRRLESS BLACKSTONE 16KV Major MK II\*, ESL 6MA, K6 Major MK3, K8 Major

**MITSUBISHI** 14V40/45A, KU30B\*, MHI 16 KU, V9V 40/54

**NIIGATA** 16V 32 CLX, 32 CX **PIELSTICK** 14VPC 4\*, PC2 **RUSTON** 6RKCM-H\* V12 PC2 **SEMT PIELSTICK SKL VDS** 26/20

12ZV40/48, 14ZAV40S, 16ZAV40s\*, 16ZAV40s, 18ZAV40S, 6AL25/30\*, 8S20, 8ZAL40, 8ZAL40s, AL **SULZER** 

25/30, ZA 40

SWD / WARTSILA 6TM 410, 8L280\*, 8TM620, TM 410

**WARTSILA** 12ZAV40S, 18V26, 18V32, 18V38, 18V46\*, 18V46B, 18VW32B, 6L32, 6L46C, 9V32

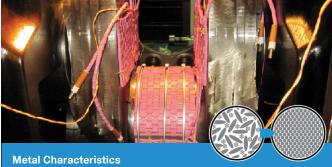


Homogeneous grain structure with a hardness that provides desired strength, rigidity, resistance to wear, corrosion and impact.



#### **Metal Characteristics**

Uneven grain structure with significant and visible differences in hardiness create areas that are highly susceptible to cracking and potential shearing under force. Oftentimes, this hardness goes deep into the metal and without annealing would result in the cindemnation of the crankshaft.



During annealing, once the metal reaches the critical temperature, the molecules are allowed to recrystallized (realign) to a state consistent with its original ductility and hardness when it was delivered from the factory. Hardness levels are reduced to within acceptable parameters and within maker tolerances.



#### **Metal Characteristics**

The journal has an acceptable hardness across the entire surface of the pin and the surface has been polished to a finish generally of 0.03Ra or better

## **Line Boring Services**

Backed by the large scale, precision machining capability of Goltens workshops around the world, we offer in-situ line boring services. We can handle everything from the machining of caps to machining bedplates and blocks.

Our technicians and specialized tooling can be quickly mobilized to serve our customers' requirements anywhere in the world whether the job is casualty related, part of a routine overhaul or maintenance interval, or required for a newbuild project.

Over the past decades, we have enhanced and refined our specially designed boring tools, skilled personnel, and laser alignment equipment to execute work on all range and sizes of diesel engines with exact precision.

Our hard-won boring expertise can be applied for many applications including from a single bore, multiple in line bores or machining of bores at great distance in the land-based power sectors.

#### **Advantages**

- Specially designed portable boring equipment with lengths up to 10 meters
- Specialized laser guided measuring/ alignment equipment
- A large global team of specialists to ensure a rapid, expert response anytime and anywhere
- Engineering experts familiar with different engine makes and their individual design features
- In-situ tool designers capable of modifying our tooling to solve any machining challenge





#### **Specializations**

- Line boring main bearing or camshaft pockets standard and oversize
- Single pocket line boring standard and oversize
- Centerline shift in horizontal and vertical direction
- Machining of thrust faces
- Re-bushing of main bearing and camshaft pockets
- High tolerance in line boring of any cylindrical components or rotating machinery



# Flange Facing and Surface Machining

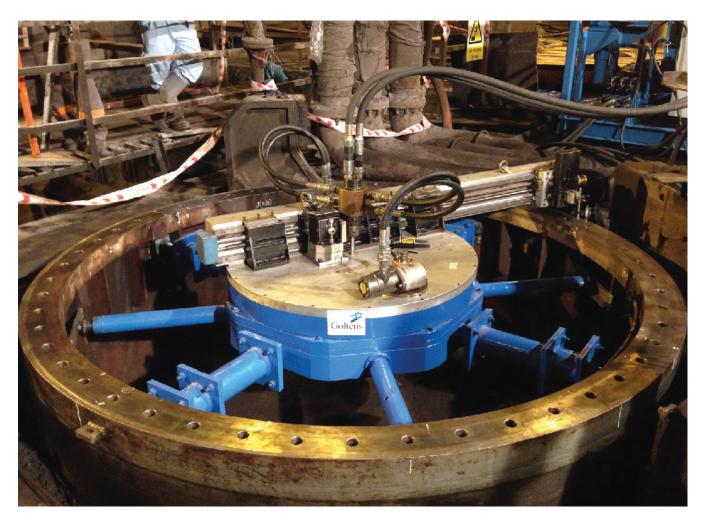
Goltens can eliminate the logistical and cost related issues that follow repairs and major replacements of large, near immovable equipment with our in-situ machining capability.

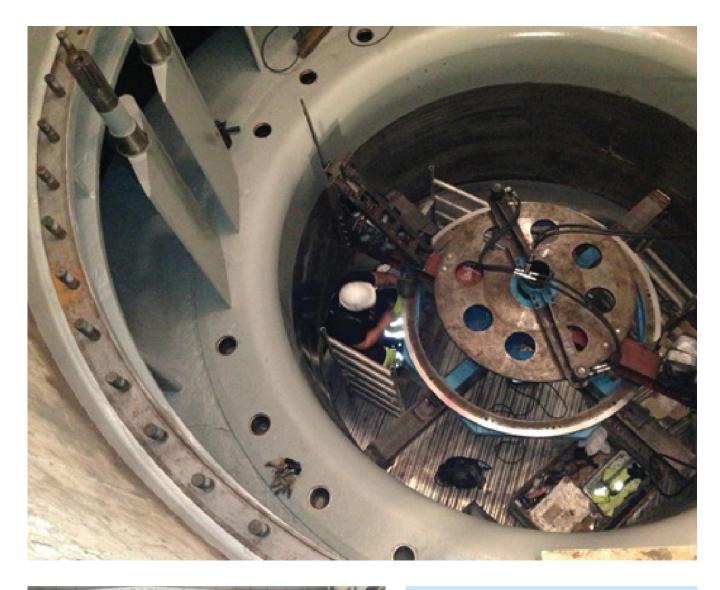
Because of our pride as a precision tool maker and our constant investment in capital machinery and personnel, every station is capable of handling almost any specialized machining job such as large-scale flange facing or surface machining for both engine repairs and maintenance.

We can mobilized a wide range of equipment to your site, ensuring that your equipment is operational as soon as possible and if we don't have the proper tool for your unique requirement, we can build the one you need.

#### **Advantages**

- Wide range of portable precision tooling of small and large scale deployed at stations around the globe
- Specialized laser guided measuring / alignment equipment
- A large global team of Machining Specialists to ensure a rapid, expert response anytime and anywhere







### Services commonly provided by Goltens teams include

- Small and Large scale Flange Facing
- Surface milling
- Reaming
- Sheared / Broken Stud removal

#### **Problems Often Addressed**

- Leaking Mating Surfaces
- Out of Line Mating Surfaces
- Worn out / Damaged Landing Surfaces
- Corroded Guide Rails / Foundations
- Seized / sheared bolts
- Cracked / broken metal components

## **Laser Services**

#### **Laser Alignment**

Goltens' laser alignment specialists are always prepared to respond quickly to our customers' requirements whether as a standalone alignment challenge or as support for our other services.

Our technicians are experts in the use of our state-of-the-art laser, measuring equipment.

This, combined with our ability to respond to our situations anywhere in the world, makes Goltens a clear choice for the most challenging alignment jobs.

#### **Goltens Laser Alignment**

- Specialized laser guided measuring and alignment equipment located at our stations around the world
- A large global team of specialists who are expert in the use of the equipment to ensure a rapid response anytime and anywhere





#### **Laser Alignment Applications**

- Shaft alignment (couplings)
- Sheave/pulley alignment
- Straightness
- Flatness
- Plumb line





### Partial List of Alignment Issues Resolved

 Alignment check on main bearing pockets or cam shaft on diesel generating sets

## **Laser Tracker**

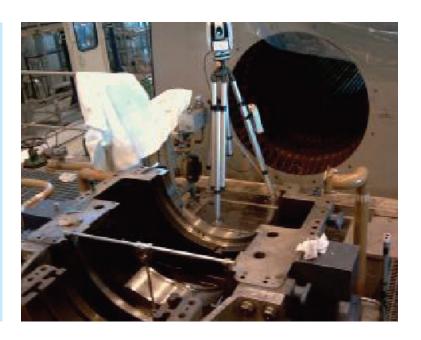
Laser Tracker equipment enhanced our capability to do dimensional, flatness, perpendicular, parallelism and spatial geometry measurements with distance of 320 metres with linear accuracy of 0.035mm and angular accuracy of 0.07".

The battery operated Laser Tracker enable wireless operation which made measurement at most locations possible; regardless on a 30-metre high crane pedestal or thruster well beneath the vessel.

#### **Power Generation**

Turbines and generators for use in wind or water power must withstand extreme conditions.

For checking strict tolerances, ultra high accuracy is essential. The Laser Tracker portability and flexibility make large-volume shaft or machine alignment, machine inspection or blade measurement easy.



#### **Aerospace**

The Laser Tracker portability and capability for one man operation make many challenging aerospace applications such as tool building and inspection, metrology assisted assembly or antenna construction when it comes to surveying, aligning engines and shafts or installing equipment.



### **Applications**



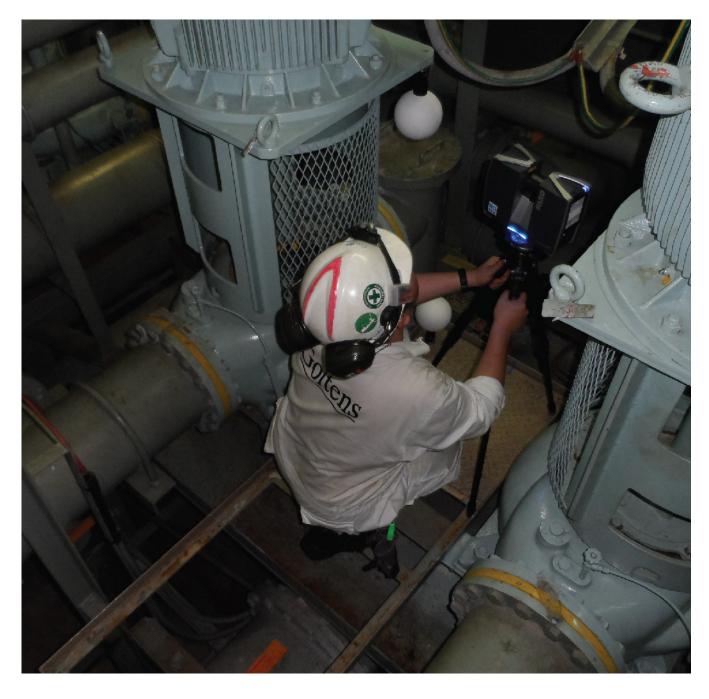




# 3 Dimensional Laser Scanning

Goltens has the capabilities to provide full range Laser Scanning services across various application sectors - especially for Industrial and Stationary Power.

From 3D Scanning at site/on board to basic and detailed engineering - our scanning services cover all key steps towards retrofits, system expansions, or similar application services. With our presence across the globe, we ensure prompt response and thus solutions through our dedicated and specialized team.



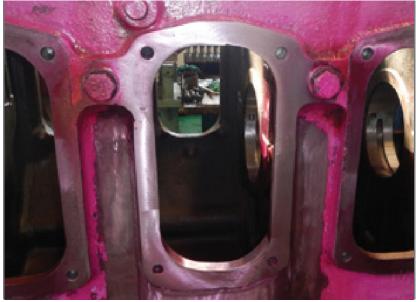
## **Metal Stitching**

Utilizing metal stitching, Goltens extends the lifespan of otherwise condemned component or major piece of equipment and minimizes asset downtime and saves them significant sums in the avoidance of unnecessary equipment replacement.

When cracks appear or major pieces break free from a cast piece, traditional welding is often ineffective and can result in more damage. Instead of replacement, our stations across the globe offer metal stitching, often the only reasonable method to repair and salvage the damage.







## Reconditioning

To help customers avoid the premature purchase of new replacement parts, Goltens offers reconditioning services to extend the service life of critical engine components.

We can recondition a wide range of parts, from the smallest component to complete engines. We are continuously focused on helping owners and operators of large diesel engines reduce the life-cycle costs of their assets for over 70 years.

We strive to recondition and return components as quickly as possible. But when an extended downtime is unacceptable, we can provide exchanges from our large stock of reconditioned components to keep it to a minimum.

Goltens' reconditioning services are built upon disciplined and well-tested processes. Our reconditioned components comply with the maker's specifications and are returned like new. Additionally, all reconditioned components undergo non-destructive quality testing performed at various stages.

Due to the efficiency and precision of our services, makers worldwide have regarded Goltens as the cost effective option over the decades.









#### **Advantages**

- Large scale workshop facilities with locations around the globe
- Stock of reconditioned and class inspected spares for reconditioning on exchange
- Well-trained machinists operating under proven quality control and processes and procedures

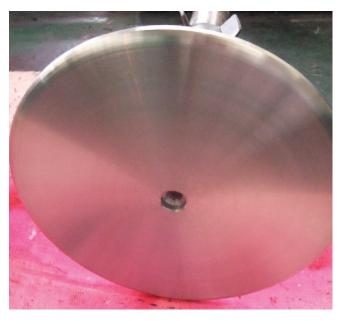
### Partial List of Major Parts Reconditioned

- Piston Rods/Connecting Rods
- Exhaust valve spindles, seats and cages
- Cylinder liners
- Piston crowns/skirts
- Cylinder heads/covers
- Heat exchangers









## Remetaling

Goltens specializes in reconditioning worn and damaged bearings to reduce our customers' costs and downtime.

Our services help avoid the acquisition costs of new replacement bearings and we constantly focus on providing the quickest possible turnaround time.

Recognized as a pioneer in the field, we developed centrifugal casting machinery to meet the highest tolerances and rapidly repair and recondition bearings. Every bearing is machined to the manufacturer's specifications and shipped back in a like-new condition.

For over 60 years, Goltens stations around the globe have reconditioned thousands of bearings with the most exacting tolerances every year; we lead the industry in the centrifugal casting of white metal bearings for industrial and stationary power applications.











#### **Advantages**

- Specially designed tools and machinery for remetaling
- Customized procedures and specially trained technicians to complete the job
- The ability to undertake bearings from 50mm to over 1000mm diameter
- The vast experience of having re-metaled over 100,000 bearings
- Precision machining of bearings to suit dimension drawings
- Library that includes specifications / drawings for most engines
- Ample White Metal Stock in inventory
- Competent non-destructive Testing technicians to undertake bond testing

#### Types of Bearings Reconditioned

- Crankshaft Bearings
- Crosshead Bearings
- Intermediate Bearings
- Turbine Bearings
- Pump Bearings
- Main Gear Bearings
- Thrust Pads for Main Shafts, Turbines, Crankshafts

### **Common Causes of Bearing Failure**

- Misalignment
- Loss of Lubrication
- Oil Contamination
- Extended Running Hours / Wear and Tear

## **Bench Grinding**

Goltens offers bench grinding services that can extend the lifespan of crankshafts worn by heavy, continuous load and unfavorable conditions. Our specialized equipment can handle any kind of grinding problem in our workshops and provide on-site solutions for certain situations.

Through our skilled engineers' careful methodology and years of experience, we can minimize downtime by solving the problem in the first try.

#### **Bench Grinding**

- Specially designed tools for grinding of bearing surfaces
- Trained engineers and mechanics who are skilled in the art of in-situ grinding and bench grinding
- Readily available tools for almost any engine and type



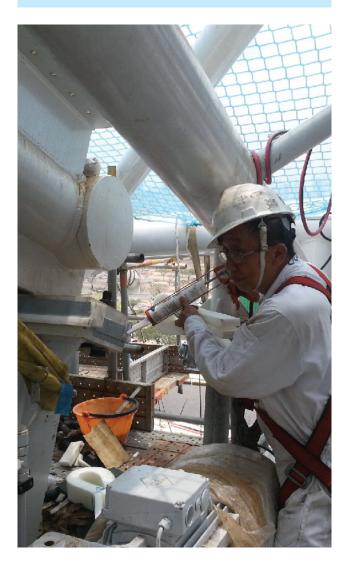
# **Grouting and Chocking**

Around the world, trained, certified and experienced Goltens technicians are always ready to design solutions for alignment and chocking which are critical operations in new buildings and repairs. We can supply a wide range of epoxy grouting and repair solutions to fit the needs of industrial and stationary power installations.

Goltens utilizes the market-leading Chockfast® System for permanent alignment of gas engine compressors and diesel engines, consisting of pourable Chockfast epoxy resin chocks Chockfast Blue high temperature grout, Chockfast Gray physical and thermal shock resistant chocks and Chockfast Red foundation-capping and strengthening compound. Through cement grouting, we stabilize engine foundations by pouring cement or resin and eliminate engine misalignment, movement, bolt stretching, slack nuts and breakage.

#### **Advantages**

- Minimise heat build-up on foundations
- Assure precise and unsurpassed contact with bedplates
- Provide a high coefficient of friction to help maintain engine alignment and reduce possible bearing or crankshaft damage
- Resist abrasion, impact, cavitation, corrosion, erosion and chemical attack



# Classification Approval and Authorizations

Our approved procedures are recognized by all major Classification Societies as follows:

#### **Class Approvals**















#### **Service Authorizations**























## **Trading**

Because of our global network, scale of operations and principal relationships, Goltens enjoys access to both OEM and non-OEM diesel and gas engine parts from leading manufacturers. We supply both new and reconditioned spares for engines as well as a wide variety of ancillary equipment.

Many land-based power operators across the world rely on Goltens for the supply of cost-effective spares to support their operations. We always prioritize quality in our spares and guaranteed to deliver it through our intensive quality assurance systems.

#### **Range of Supply**

We can source a broad range of 2 Stroke and 4 Stroke Diesel Engines as well as Gas Engine Parts for most major Makers from Genuine or OEM sources including the followings:

#### 2-Stroke Engine Components



Piston Crown



Valve Spindle & Seat



Cylinder Liner

#### **4-Stroke Engine Components**



### Reconditioned spare parts





Cylinder Cover



Exhaust Valve Cage & Housing





#### **Bearing Metals**

OEM Manufactured bearings in standard, oversize and undersize









## Worldwide Network



#### Goltens Miami

2323 NE Miami Court Miami, Florida 33137, USA Phone: +1 305 5764410 Fax: +1 305 5763827 miami@goltens.com

#### Goltens Houston 7214 Clinton Drive

Houston TX 77020, USA Phone: +1 713 487 4900 Fax: +1 713 487 4904 houston@goltens.com

#### Goltens UK

Suite F5, Clyde View Riverside Business Park 22 Pottery Street Greenock, UK, PA15 2UZ Phone: +44 (0)1475 744655 Fax: +44 (0)1475 744666 uk@goltens.com

#### **Goltens Rotterdam**

Lorentzweg 29 3208 LJ Spijkenisse, Netherlands Phone: + 31 181 465100 Fax: + 31 181 465109 rotterdam@goltens.com

#### **Goltens Green Technologies**

Zernikepark 12 9747 AN Groningen The Netherlands Phone: +31 50 30 50 230 green@goltens.com

#### Goltens Oslo

Strømsveien 195-197 0668 Oslo, Norway Phone: + 47 22 88 39 30 Fax: + 47 22 88 39 31 oslo@goltens.com

#### **Goltens Red Sea** (Saudi Arabia)

Opp. King Faisal Navy Base Al Khumra Road PO Box 22709. Jeddah 21481. Saudi Arabia Phone: +966 12 636 3007 Fax: +966 12 636 7173 goltensredsea@goltens.com

#### **Goltens Bahrain** PO Box 50268

Hidd. Bahrain Phone: +973 17672135 Fax: +973 17466145 bahrain@goltens.com

#### **Al Fattan Goltens** Ship Building & Repair

Al Sadr Port PO Box 53509 Taweelah, Abu Dhabi Tel: +971 2 562 7742 Fax: +971 2 562 7740 alfattan@goltens.com

#### Goltens Dubai

Dubai Maritime City Ship Docking Yard PO Box 2811, Dubai, UAE Phone: +971 4 4376555 Fax: +971 4 4376556 dubai@goltens.com

### Goltens Fujairah Plot No. 33,

Port of Fujairah P.O Box 2501. Fujairah, UAE Phone: +971 9 228 1899 Fax. +971 9 228 1898 fujairah@goltens.com

#### Goltens India Private Ltd.

A-183, TTC Industrial Area MIDC, Khairane, Behind White House, Thane - Belapur road Navi Mumbai - 400 705 Phone: +91 22 41235582 / Fax: +91 22 41235585 india@goltens.com

#### **Goltens Chennai**

No.77/1 East Madha Church Street, Royapuram Chennai 600013 Phone: +91 44 25245657 chennaioffice@goltens.com

Goltens Vizag Plot No-121, D-block Auto Nagar Vadlapudi Visakhapatnam (Andhra Pradesh) Phone: +891 2533120 gw.vizag@goltens.com

#### **Goltens Singapore**

No.6A Benoi Road Singapore 629881 Phone: +65 68615220 Fax: +65 68611037 singapore@goltens.com

#### **Goltens Jakarta**

JI Danau Sunter Barat Blok A1/1, Sunter Agung Jakarta Utara 14350 Indonesia Pho ne: +62 21 6408091 Fax: +62 21 6401150 jakarta@goltens.com

#### **Goltens Surabaya**

Angtropolis Commercial Estate No. A5 Jl. Margomulyo Raya 46, Surabaya - 60186 Indonesia Phone: +62 21 7496043 surabava@goltens.com

#### **Goltens Vietnam**

Street No. 12, Dong Xuyen Industrial Zone, Rach Dua Ward. Vung Tau City Phone: +84 643 61 62 72 Fax: +84 643 61 62 70 vietnam@goltens.com

#### Goltens Shanghai

No. 533 Yuanzhong Road, Nanhui Industrial Zone, Nanhui District, Shanghai 201300 Phone: +86 21 5818 6628 Fax: +86 21 5818 6633 shanghai@goltens.com

#### **Goltens Guangzhou** Rm. 105, No. 20

Four Hectares Industrial Road Miaotou, Huangpu District, Guangzhou 510730 Phone: +86 20 8208 8729 Fax: +86 20 8208 8729 guangzhou@goltens.com

#### **Goltens Dalian**

Room 1108, Jinlian International Building No. 115 Youhao Road, Zhongshan District, Dalian 116001 dalian@goltens.com

#### **Goltens Korea**

Room 1003, ACE HighTech 21. 1470, U-Dong Haeundae-Gu, Busan, Korea Phone: +82 51 744 8000 Fax: +82 51 744 8008 korea@goltens.com

#### **Goltens Philippines**

Bldg 17A Berthaphil Compound 1 Jose Abad Santos Avenue, Clark Freeport Zone Clark Field, Pampanga 2009 Phone: + 63 2 584 4750 Fax: + 63 2 519 9294 Email: philippines@goltens.com

