In-Situ Machining

Precision field machining that minimizes downtime

Goltens

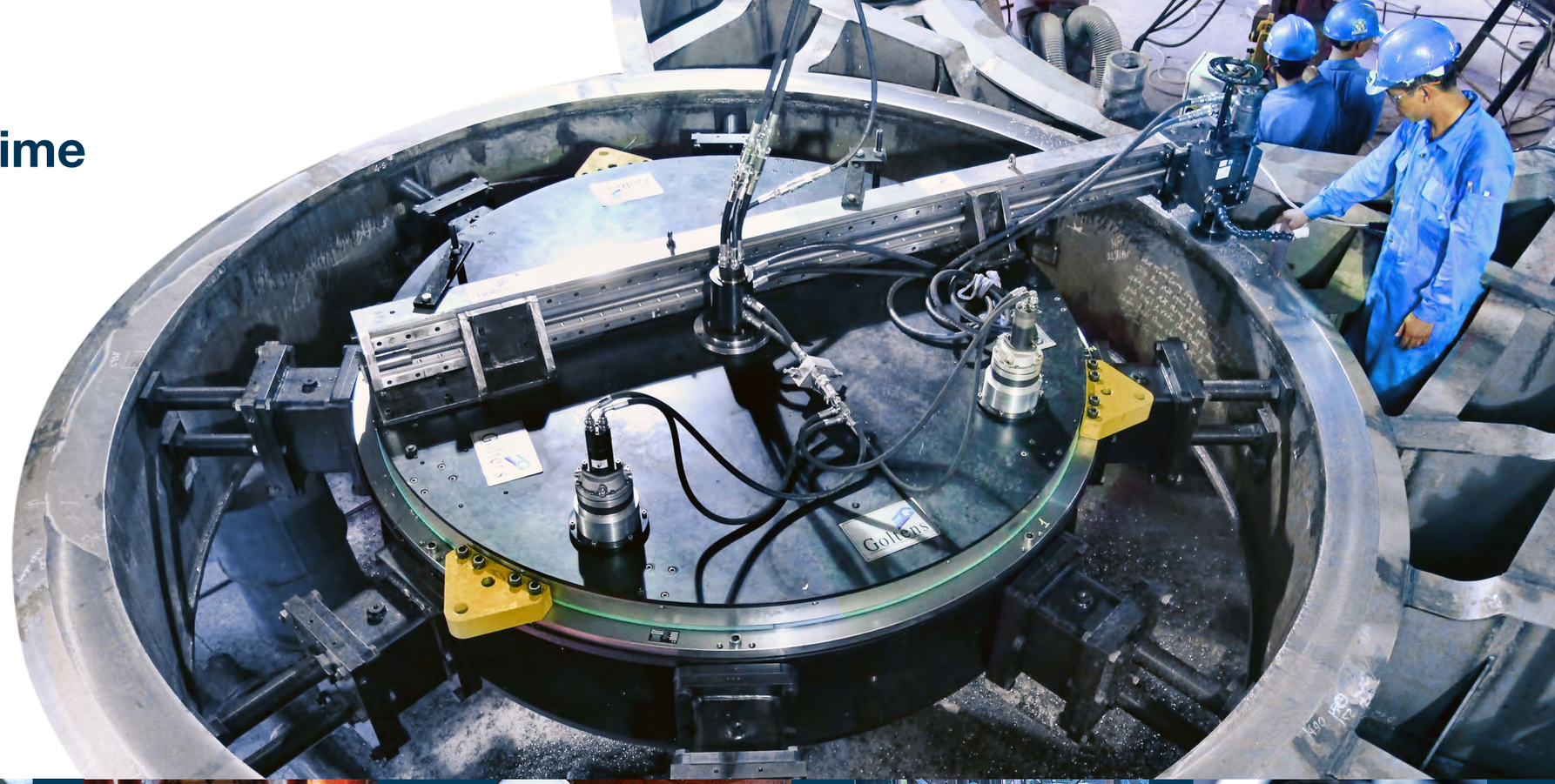
Trusted Globally

We minimize asset downtime

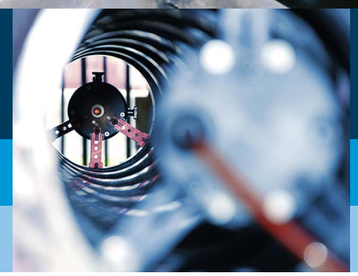
Downtime equals lost revenue and the pressure on the decision makers is unforgiving. Disassembly and transport adds exponentially to costs, time and complexity. The critical question is simple but hard to answer:

Can the problem be fixed, at what price, how fast and with what probability for success?

Goltens' first delivery on every in-place machining job is the expert assessment that gives the decision maker an alternative. We don't always say, "Yes, we can repair it." However, when we do, we always have the expertise and tools to deliver on that promise. Moreover, we have a price and we have a date for when your normal operation can be reinstated.



In-situ Services



Industries Served

- Marine
- Shipbuilding
- Offshore Oil & Gas
- Diesel and Steam Stationary Power
- Wind Power
- Refineries
- Hydroelectric Power
- Manufacturing
- Mining

Crankshaft / Journal Machining

Over the past 60 years, we have applied our tooling and expertise to recondition over 25,000 crankshafts worldwide, as well as countless other rotating journals and shafting. As the first company in the world to complete in-place crankshaft grinding in the early 1950s, Goltens' tooling patents revolutionized the industry with massive reductions in downtime for owners.

Continuous R&D and field trials have given us the best tooling for crankshaft/journal machining in the industry. This allows us to perform large-scale jobs in a fraction of the time of traditional grinding, often with a single cut fillet to fillet with the highest tolerances. We apply our technology to challenges in the marine, industrial, stationary power and offshore sectors. We repair damaged journals on any and all manner of rotating equipment including compressors, turbines and other shafts.

Heat Treatment / Annealing

Every year Goltens encounters many failures that result in areas of excessive journal hardness. Loss of a crankshaft or other rotating shaft due to high hardness values is a costly, time consuming and extremely disruptive occurrence. Often, this hardness can be machined away. But when cutting it away extends below the manufacturer's limits for acceptable journal diameter, there are only two options – costly replacement or removal of the hardness.

Over the decades, Goltens has refined the process for annealing crankshafts and other shafting and can do this successfully on site as well as in our workshops around the world. A deep understanding of the metallurgy, expansion characteristics and safety precautions has been refined over the years into a safe, repeatable, highly controlled process.

Boring Services

Line Boring: Not all shaft failures can be easily corrected by machining or grinding. Sometimes the damage is so severe that the engine pockets have been damaged and the engine requires line boring. We have invested heavily over the past decade to enhance and refine our world-class line boring tools for use in all single and multiple in-line boring applications across industry lines.

Stern Tubes: Whether your repair is casualty related or part of a routine overhaul or maintenance interval, Goltens can mobilize the technicians and specialized tooling to bore tail shafts of any dimension and length. Ship owners and shipyards around the globe engage us for this precision machining job because of our tailored tooling and consistently excellent results.

Large Flange Facing and Surface Machining

Goltens' in-place machining capability eliminates the logistical and cost-related issues that go along with repairs and major replacements on any large equipment that is not easily moved. We can mobilize a wide range of equipment to your site, ensuring that it is operational as soon as possible.

Goltens' culture as a precision tool maker and our ongoing investment in capital machinery and in-situ machining personnel have made our stations around the globe capable of handling almost any specialized machining job. If we don't have the proper tool for your unique requirement, chances are we can build it. Our experience covers the full spectrum of marine/shipyard, offshore oil & gas, stationary power and general industrial applications worldwide.

Laser Alignment

Goltens' in-situ technicians have broad expertise using our state-of-the-art laser alignment tools. Goltens utilizes these techniques on a daily basis in conjunction with the performance of its other in-place machining services, and it is this repeated high tolerance usage that makes our technicians among the best in the world.

Goltens also offers these services on a stand-alone basis to support a wide variety of troubleshooting and alignment issues encountered by customers who are diagnosing cause of failure, installing new equipment or reinstalling repaired equipment or simply suspect their equipment is out of alignment.

Goltens

**When downtime is critical,
Goltens is equipped and capable.**

Our leadership in the machining of diesel engine crankshafts has long made us the chosen provider for complex marine machining tasks. Decades of experience with shipyards around the world makes us the clear choice for the complex machining solutions required in new build, retrofit and repair for commercial and military vessels.

Goltens has also for many years been deeply involved in the power generation industry providing dependable in-place machining tasks for both planned and emergency outages. Our experience from both maritime and land-based operations makes us well positioned to support a wide range of industries.

Global locations and precision tooling for complex operations under very demanding conditions have prepared us for the growing wind power market as well as the rapidly expanding offshore oil & gas industry. In mining, manufacturing and wherever large processing and construction equipment is used, Goltens' skilled machinists can quickly be on the job with the tools, equipment and technical expertise to solve the problem.

www.goltens-insitu.com