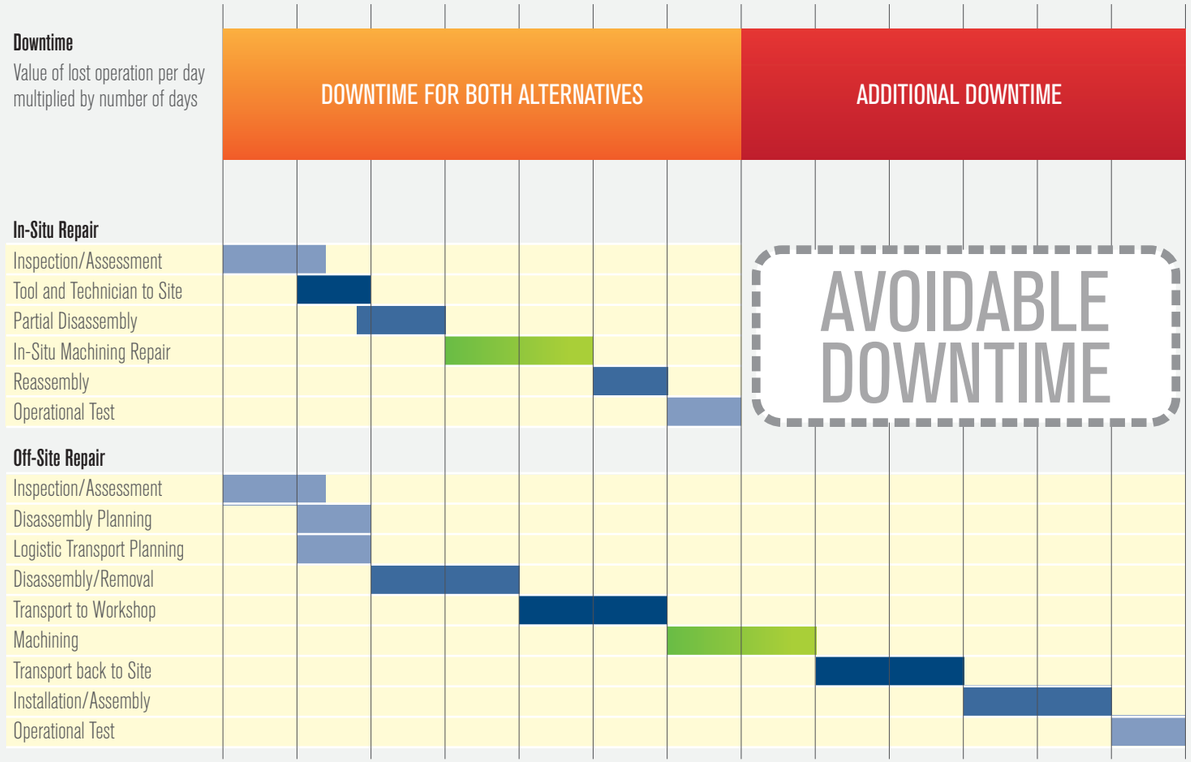
WHAT IS THE VALUE OF MY AVOIDABLE DOWNTIME?

THE KEY QUESTION FOR CHOOSING BETWEEN OFF-SITE AND IN-SITU REPAIR

WHAT IS THE VALUE OF IN-SITU REPAIR?



GLOBAL FOOTPRINT

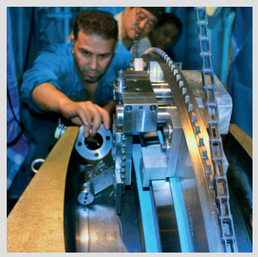
Our global network in 16 countries around the world gives us the ability to respond quickly to both routine and specialty requirements.

Case studies at www.goltens.com
Download dozens of case studies at http://www.goltens.com/p/cases=in-situ

ACCURATE, EXPERT REPAIRS AND MODIFICATIONS ARE MADE ON-SITE, RIGHT WHEN YOU NEED THEM.

Whether your requirements are an emergency casualty response for a damaged crankshaft or journal 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

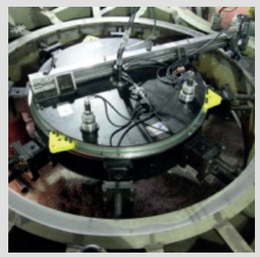


Heat Treatment/Annealing

Line Boring

Stern Tubes

General In-Situ/On-Site Machining



Laser Alignment

THE 4-LEVEL REPAIR APPROACH

1
Workshop repair
In cases where the part is non-critical and/or easily moved, the nearest Goltens workshop is the natural alternative.

2
Standard procedure
Goltens has well-proven tools and procedures based on 70 years of experience. We can dispatch an expert within hours for on-site assessment.

3
Adapted approach
In most cases where our standard tools will not do the job, a minor modification is what is needed.

4
Custom built tooling
We are toolmakers in addition to repair specialists. In our own workshops, we create the tools needed for one-off jobs.

www.goltens.com/in-situ-alteratives

THE ALTERNATIVE
See how Goltens can offer decision-making support through providing several alternative solutions.

SAY.BIZ

IN-SITU OR OFF-SITE REPAIR?

CRITICALITY: How will the problem affect our operation/production?
CHECKPOINT #1: Value of lost production per day.

TIME: What will the downtime be?
CHECKPOINT #2: Compare in-situ repair to off-site repair in terms of approximate downtime.

COST: What is the total cost of repair?
CHECKPOINT #3: Compare in-situ repair to off-site repair including the additional costs of planning, full disassembly, two-way transport, reinstallation and assembly.

VALUE OF AVOIDABLE DOWNTIME:
THE EQUATION: The difference in time between the fastest and slowest alternative multiplied by the value of lost production per day.

TYPICAL IN-SITU JOB:
- Critical to production
- Large size/hard to move
- Long transportation to workshop

TYPICAL OFF-SITE JOB:
- Not critical to production or
- Small parts/easy to transport or
- Can be dealt at a nearby workshop

TYPICAL MISTAKES:
- Compare repair only, not total cost
- Compare cost only, not value of avoidable downtime

THE VALUE OF BEST ALTERNATIVE:
Value of avoidable downtime
– Extra cost of chosen alternative
=Net value of the best solution

Goltens
Trusted Globally

The In-Situ Machining Expert

Goltens is a solutions-driven supplier providing some of today's most technologically advanced in-situ field machining services.

Goltens' mission and goal is to Minimize Asset Downtime for our customers from across industries around the globe. By performing these services in-situ, you will be able to realize tremendous savings by eliminating costs and additional downtime associated with the disassembly and removal, logistics, transport and reinstallation of the machinery or equipment.

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

Behind our strength is the breadth and depth of our global network in 16 countries around the world, which gives us the ability to respond quickly to both routine and specialty requirements.

Goltens' excellent reputation for short lead-time and quick response is unsurpassed in the industry.

INDUSTRIES SERVICED

- Marine
- Offshore Oil & Gas
- Stationary Power
- Petrochemical/Refineries
- Mining
- Shipyard/Shipbuilding
- Hydro-Electric Power
- Wind Power
- Manufacturing/Other Industrial

IN-SITU MACHINING

- Crankshaft/Journal Machining
- Heat treatment/Annealing
- Line Boring
- Stern Tubes
- General In-Situ/On-Site Machining
- Laser Alignment

In-Situ Machining

Precision field machining that minimizes downtime

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-Situ 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 and 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.com

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