THE EXPERT PROVIDER OF INTEGRATED VESSEL MANAGEMENT SERVICES TO THE GLOBAL OIL & GAS INDUSTRY.

YOUR INTEGRITY PARTNER

VEssel Management
One Partner for Life

Vessel Management

Stork provide a wide range of integrated vessel management and support services to successfully deliver complex vessel integrity projects.
As the provider of integrated vessel management services, we are committed to developing and introducing technical innovations that help deliver significant safety and efficiency benefits on your vessel projects and reduce shutdown time. These services are available on and offshore including:

- Scaffolding and rope access
- Inspection and NDT
- Onsite machining and bolting
- Specialist services (confined space entry, internal removal and replacement, coatings removal and re-coating, online desanding, sand washing, chemical treatment)
- HP/UHP water jetting
- Welding repair
- Composite repair
- Corrosion mapping
- iBolt flange management

**WHAT WE DO**

We provide the oil and gas industry with a fully integrated vessel management and support service capable of delivering complex vessel and TAR projects on and offshore. Through our capability and experience we are able to mitigate the risks and barriers that may occur during a shutdown workscope.

Taking complete ownership of the shutdown programme allows Stork to optimise the deployment of competent, multi-disciplined personnel, minimising bedspace requirements. The ability to carry out all activities within a shutdown workscope, from isolation to de-isolation, utilising these multi-disciplined teams, is a key differentiator for Stork.

**RESULTS & BENEFITS**

It is our goal to add value wherever we operate. It is our intention to add value on projects through:

- Multi-skilled teams delivering a complete vessel management service
- Managing potential conflicts between safety, non-routine tasks and high manning levels
- Multi-discipline teams reducing POB
- Best use of innovative technologies such as iBolt
- The provision of one focal point for covering all provided services
- Working in partnership with each client to efficiently manage the services required
Stork support clients to achieve their business objective of a safe and leak free work environment by providing appropriate management and control techniques. The integrity of bolt and flange connections is key to minimising production downtime.

Stork’s on-site bolting and machining division manages the entire joint integrity process from inspection through to assembly, testing and completion. Their experienced multi-disciplined technicians, supported by extensive stocks of specialist equipment are on hand to provide bolt tensioning and torquing services and on-site machining services worldwide.

Stork offer:

• A dedicated team of experienced engineers to support all client enquiries
• 24/7 response for technical queries
• Industry leading procedures and operational knowledge gained over 20 years in the industry
• In-house capability for bespoke solutions

The requirements set for bolted connections with regard to quality and reliability are substantial. Developments in bolt materials and gaskets now lead the requirement for good pre-calculated tension in bolted connections. The bolt tightening services offered by Stork include:

• Hydraulic Bolt Torquing
• Hydraulic Bolt Tensioning
• Induction Bolt Heating
• Nut splitting
• Joint splitting
**OVERVIEW**

Bolt flange integrity management software improves the safety, efficiency and cost-effectiveness of bolting operations.

The easy to use, web-based system provides a complete auditable record of all activity carried out on flange management workscopes from topside to subsea.

The software can be modified for specific platforms or projects and a major UKCS operator has already requested a bespoke version of the software for use across its North Sea assets.

**KEY POINTS:**

Stork operate a bespoke flange management software program, ibolt, that enables the handing back of plant and installations to the client with the confidence that every measure has been taken to ensure there will be no major leaks from flanges involved in the work scope.

All data relevant to each bolted connection from assembly through to final tightening (including all competency) is captured on an auditable trail for HSE requirements.

- Joint register populated by Flange Management Technician
- Job register table showing jobs logged into the ibolt software
- Records all data including torquing and tensioning data. P &ID & ISO drawings can be stored and marked up
Stork is a leading provider of Specialist Cleaning services to both the onshore and offshore sectors around the world.

Our service capabilities include:
- High Pressure & Ultra HP Water Jetting
- Removal, Treatment and Disposal of NORM
- Full Vessel Management
- Surface Preparation & Coating Replacement
- Camera & Thermographic Inspection

Our innovative solutions:
- Chemical Treatment Bath
- Cold cutting (up to 12” steel)
- Waste removal by vacuum system
- Sand wash to <1% oil on sand
- Online desanding of separators up to 60bar

Clients:
Stork have provided specialist cleaning services for all the major oil and gas operators including:
- Shell
- BP
- Petrofac
- Total
- ConocoPhilips

www.stork.com
# Integrated Services

**Driving Value**

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<th>Traditional Approach</th>
<th>Stork Partnership Approach</th>
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<td><strong>Planning</strong></td>
<td>• Client driven</td>
<td>• Embedded Stork support</td>
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<td>• Limited engagement</td>
<td>• Focus on best practice and value driven solutions</td>
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<td>• Identify pre-shutdown scopes</td>
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<td><strong>Survey</strong></td>
<td>• Information gathering</td>
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<td>• No focus on efficiency</td>
<td>• Focus on efficiency and effectiveness</td>
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<td><strong>Cost</strong></td>
<td>• Costs designed in</td>
<td>• Focus on value</td>
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<td>• Cost reduction by attacking margins</td>
<td>• Increased accuracy</td>
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<td>• Reduced cost</td>
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<td><strong>Execution</strong></td>
<td>• Individual teams</td>
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<td>• Multiple contact points</td>
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