

## MECHANICAL INTEGRITY SERVICES FOR OFFSHORE FACILITIES

High-performance offshore facilities used for drilling and production operations must be managed carefully throughout their life cycle in order to perform their required functions with maximum reliability, safety and efficiency. With reduced staffing and harsher, more remote locations in deeper water, offshore facilities require the review of a technical advisor to identify risk factors and issues to effectively manage deficiencies before these escalate into high-consequence scenarios.

### VERIFYING SAFETY, RELIABILITY AND INTEGRITY

As an independent and trusted advisor to the offshore industry, ABS Advanced Solutions has provided mechanical and asset integrity management services for more than 40 years. Our mechanical integrity experts use an effective, risk-based approach to assess, manage and track the condition of offshore assets that combines:

- Assessment of the current mechanical integrity framework
- Benchmarking the integrity maturity relative to industry peers
- Identification of areas for improvement
- Development of mechanical integrity improvement programs
- Technical advisory support during implementation
- Advanced Engineering services
- Incident investigation and root cause analysis services
- Data analytics and data management

### FOCUSING ON RISK FACTORS

Operators and regulators have shifted their focus toward more risk-based inspection processes to increase their understanding and management of the diverse risk factors inherent



to offshore assets and operations. Benchmarking priorities for safety and reliability during the inspection process continues to evolve based on the more complex design specifications, higher capabilities and advancing technologies.

Coupled with regulatory standards that require verification of safety management systems, operators must also verify that they are proactively considering mechanical integrity risks and planning ahead for future maintenance.

## EFFECTIVE INTEGRITY MANAGEMENT

Our experience has proven that adopting a systematic, risk-based approach to inspect machinery, equipment and control systems allows for more effective management of the diverse risks encountered offshore.

ABS Advanced Solutions has contributed to numerous industry committees addressing industrial process safety issues, including the American Petroleum Institute, American Society of Mechanical Engineers, National Fire Protection Association and Center for Chemical Process Safety (CCPS). Furthermore, our staff coauthored the CCPS' Guidelines for Mechanical Integrity Systems, which includes the standards followed by industry to assess and manage asset/mechanical integrity.

## OUR VALUE

Our approach allows asset owners and operators to optimize their inspection process, balancing inspection activity and resources with the potential risks present on the asset. This allows efficiencies in the planning, inspection and repair process to be realized, helping to reduce downtime and achieve more "focused" operating expenses while contributing to better industry practices.

We can provide the knowledge and assistance you need for a range of mechanical integrity services, including performing a damage mechanism assessment and developing corrosion control documents with informational integrity operating windows. Based on the data, our engineers will work independently to tailor a program for your facilities' specific needs.

With extensive experience in the development, implementation and management of mechanical integrity programs, ABS Advanced Solutions recognizes the need to deliver cost-effective solutions for maintaining reliability, improved safety and compliance.



© Jezper/Shutterstock



### WORLD HEADQUARTERS

16855 Northchase Drive | Houston, TX 77060 USA  
P 1-281-877-6000 | F 1-281-877-5976  
AdvancedSolutions@eagle.org | www.eagle.org

© 2018 American Bureau of Shipping. All rights reserved.