

Cyber Security Solutions

Drilling Rigs and Facilities, on land and offshore, are increasingly at risk of cyber attack. Their integrated control systems are virtually unprotected and there is over confidence that the 'AIR GAP' provides sufficient protection. This naivety exists despite the system interconnection and increased use of satellite connectivity as demands for remote support and Big Data grow.

U.S. Executive Order 13636 "Improving Critical Infrastructure – Cyber Security" February 2013, presses the issue by indicating that the Duty Holder has an intrinsic responsibility to address this security concern.

Kingston Systems provides tangible and actionable solutions based on IADC and industry recommended standards, specifically **ISA 62443**.

Our solutions will:

- Assess & Build your current Security and Software MOC **Policy**
- Review Field **Application**
- On Site Physical **Zone and Conduit** Assessment
- Perform a **FMEA/HAZOP Risk Assessment** per ISA 62443-3-3 of the Integrated Control Network and field Data Network to effectively prioritize mitigating controls
- Work with you and your vendors to **Mitigate Identified Risks**
- Execute **Penetration Testing** by Certified Ethical Hackers
- **Post Incident** response and forensics



These Solutions apply to:

- All Rigs, Facilities and Platforms
- New builds, single asset or current fleet
- Dynamic Position Systems
- Blow Preventer Control
- Drilling Control Systems
- Process Control, etc.



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- Tangible ISA 62443-3-3 solutions
- Security Policy Assessment & Design
- On Site Physical Security Assessment
- Risk Vulnerability Workshop
- Threat & Risk Mitigation
- Black and White Box Penetration Testing
- Incident Response and Digital Forensics
- Software MOC Assessment, Design, Rollout
- Software Version Control Tools

Service Offerings

Holistic Cyber Security Assessment: A “big picture” review of your enterprise from a cyber security risk point of view. Review of documentation, processes, policies, asset types & ages, vendors & network mix, etc. This corporate to asset level review ensures that the organization is aligned with cyber security expectations.

Software Management of Change (SMOC) Consulting: We will assess your SMOC policies and their implementation on MODUs. We will help with design, implementation, training and rollout of SMOC on an asset or fleet.

Risk Assessment & Compliance Audits: Kingston Systems will execute a third-party independent assessment of your integrated control system from the perspective of an attacker. The aim is to identify at risk devices and exposed services. The assessment feeds directly to an audit against standards such as ISA 62443-3-2, and NIST. The audit is aimed to meet the requirements of the industry and US Coast Guard.

RIG/ Facility Vulnerability Study: Building on the Assessment we work to address devices with known vulnerabilities. We do these assessments via SL FMEA reviews and active systems scanning. We can perform a non-authenticated scan or authenticated scan using local or remote tools and manual methods. We will make recommendations to resolve or mitigate identified vulnerabilities.

Penetration Testing & Forensics: A penetration test exploits discovered vulnerabilities, enabling you to see your network from the view point of an attacker. A vulnerability assessment identifies and categorizes vulnerabilities, but the penetration test validates worst-case scenarios. Our forensics capabilities retrace the attackers steps.

Social Engineering & Training: How effective is your user awareness, education, and training? Are your users the highest security risk to your organization? We use tactics similar to attackers to test your personnel, such as phishing emails

We then offer training to improve their understanding of the risks and subsequent behavior.

SME Consulting and Staff Augmentation: Description: We offer Subject Matter Experts (SMEs) on an as-needed or routine basis for cyber security project support. We support projects ranging from the implementation of endpoint security using 802.1x to fine-tuning IDS alerts.

More about Kingston Systems, our services offerings, project successes, downloads and client references @

www.kingston-systems.com